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BUSINESS

IN TODAY'S WORLD

Charles Wankel
GENERAL EDITOR

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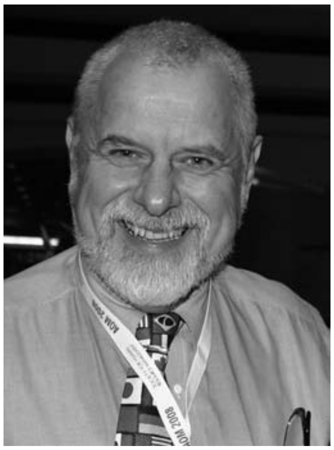

Charles Wankel, Associate Professor of Management at St. John's University, New York, holds a doctorate from New York University. His authored and edited books include *21st Century Management: A Reference Handbook*, *Reinventing Management Education for the 21st Century*, *Innovative Approaches to Global Sustainability*, *The Cutting Edge of International Management Education*, *Alleviating Poverty through Business Strategy*, *Global Sustainability Initiatives: New Models and New Approaches*, *University and Corporate Innovations in Lifetime Learning*, *Educating Managers with Tomorrow's Technologies*, *Educating Managers through Real World Projects, New Visions of Graduate Management Education, Innovative Approaches to Reducing Global Poverty*, *Being and Becoming a Management Education Scholar*, and the bestselling *Management*.

He is the founder and leader of eight scholarly virtual communities for management professors with 8,000 members in 90 nations. He is internationally prominent and has been a Fulbright Scholar and was sponsored by the United Nations Development Program and the Soros Open Society Fund in Lithuania. He has been a visiting professor lecturing around the world including at the Chiba University of Commerce in Japan, and was the 2004 Keynote Speaker at the Nippon Academy of Management Education; Distinguished Speaker at the Education without Borders Conference in Abu Dhabi, United Arab Emirates; and Keynote Speaker at the Association of MBAs Latin America Conference for Deans and Directors.

Dr. Wankel was awarded the Outstanding Service in Management Education and Development Award at the Academy of Management's 2004 meeting. Columbia University's American Assembly identified him as one of the nation's top experts on Total Quality Management. His *Fortune 50* consulting clients include McDonald's Corporation and IBM.

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Introduction

Business in today's world is one of increasing diversity. Undertaking commerce even by an individual can mean working globally through a welter of new media with opportunities of all sorts rapidly appearing. The boundaries, scope, content, structures, and processes of a business activity can morph into completely different ones in the course of a project. Contemporary businesses and certainly future businesses find it incumbent upon them to fit with the requirements of environmental and economic sustainability of the others who inhabit our world. Of course the practices, technologies, and tools of business are currently utilized by professional managers in government, education, arts organizations, not-for-profit organizations, political organizations, social service organizations, etc. That is, rather than having an opera company run by a former singer who charms its patrons, what is expected is a former singer who is a professional manager who is adept at grappling with the issues, requirements, and expectations associated with responsible business.

With about 1,000 entries written for this volume by experts from an incredible diversity of fields, this volume provides the opportunity for understanding the landmarks and their interrelationships in the wide domain of business. These volumes indeed enable a person to come to understand what the key issues of a business topic are, and then examine associated topics to emerge with an expanding understanding of any of many areas of business. Thus, users of this encyclopedia may use it as a GPS to navigate them into the language and ideas of the main conceptual terrain of business.

This encyclopedia is designed to include a vast range of different types of entries, including key companies, business policies, regions, countries, dimensions of globalization, economic factors, international agreements, financial instruments, accounting regulations and approaches, theories, legislation, management practices and approaches, ethical and social responsibility issues, legal and contractual structures, professional organizations, technologies, marketing and advertising topics, research and development practices, operations management, and logistics terms, with a global perspective. The wealth of topics included here reflects an integrated vision by the editor of a welter of functions, technologies, and environmental factors. In the past century most business topics were free-standing and mostly of interest to narrow specialists in related departments and organizations. However, the 21st century is one of cross-boundary actions. For example, Amazon incorporates the knowledge of prosumers' book and other product reviews as part of its service to customers. Wal-Mart has suppliers who are alerted by data fed to them by the scanning of RFID tags when the product levels of a particular shelf in a particular Wal-Mart store or in Wal-Mart stores of a particular region or country indicate that it is time to initiate the production packaging and shipping of their products to Wal-Mart. These vendors actually might better understand parts of Wal-Mart's inventory sales, promotions, and requirements better than Wal-Mart managers.

Such new types of partnering create new terms and topics that those wishing to successfully engage and utilize must understand. Increasingly used structural approaches such as outsourcing and offshoring transcend the still important and now classic conceptualization of international business through an understanding of intercultural issues, the political and economic environment of key countries around the world, home country and host country issues, joint ventures, multinational corporations, international negotiations.

Globalization is a by-word of the current business epoch. Today it is normal for a business in a developed country to employ clerks, technicians, salespeople, customer relations agents, and increasingly professionals such as managers, engineers, and researchers in emerging market nations such as India, China, and Vietnam. Increasingly, corporate teams work virtually with team members distributed around the world. New technologies provide interfaces that are coming to replicate and in some ways even improve on the kind of exchanges that traditionally were only available in face-to-face situations.

So, for example, it has been predicted that most people in companies will do part of their work by 2012 using three-dimensional augmented reality interfaces such as that provided by virtual worlds such as Second Life. The need for people in organizations to understand associated newly arising terms and topics such as crowdsourcing, avatars, and teleporting, therefore, is significant.

In the post-Enron, post-Bhopal, post–Three Mile Island, post–Exxon Valdez, and post-9/11 environment, business and society issues and topics refract off each other with new meanings. For example, what in the past might have just been a climate of corruption, bribery, ineptness, and lack of accountability, now in this or that far-flung place today might have global implications. So, the editor of this volume was engaged by Columbia University to teach cutting-edge human resource management (HRM) topics in a Russian oil company in Nizhny Vartovsk, Siberia, where just as in U.S. oil companies, the sharing of cutting-edge management technologies and approaches was proceeding at a rapid rate. Notions such as whistle-blowing, managing stakeholders, alleviating poverty through business strategy, and microfinance are increasingly important for those interested in understanding business to know.

Management information systems are a new universe of technologies, and the terms and topics that encompass them, from just 15 years ago. New applications and functions have proliferated, including e-commerce, the blogosphere, social networking (including Facebook and LinkedIn), digital dashboards, e-learning, executive support systems, internet, intranets, extranets, identity theft, moblogs, privacy, spam, transaction processing systems, virtualization, virtual companies, VoIP, business process reengineering, data warehouses, and customer relationship management (CRM).

Operations management is a field of business that is undergoing many structural and technological changes. The quality management revolution starting in Japan and developing in the mid-80s in the United States and Europe has been overtaken by new issues of global supply chain procurement and distribution. New approaches to designing services take on more import in a service economy. Service blueprinting, front office and back office activities, and servicescapes are among the new by-words. Location analysis, hybrid layout design, and process product and fixed position layouts are increasingly structured in their deployment. Enterprise resource planning (ERP) is increasingly sophisticated with new connectivity and integration issues.

Management strategy has been redefined in the United States by agency theory, the resource-based view of the firm, and such important accounting legislation as the Sarbanes-Oxley Act. New types of financial instruments and their deployment through a wider than traditional spectrum of organizational types resulted from deregulation. The looseness and oversight of this new environment resulted in a looseness in financial dealings. Financial institutions worldwide have been shaken by the great mortgage crisis of 2008. This followed the bailing out of Bear, Stearns, & Co. Inc., a leading global investment banking and securities trading firm, by the American federal government. The world economy is increasingly integrated. The European Union (EU) and NAFTA are just two of many such international structures that foster freer trade. The high price of oil in 2008 reflects the ongoing power of OPEC.

Marketing is no longer just a department in a company; rather it entails the collaboration of many departments, vendors, and even customers working together to market products and services. Today we find companies such as Dunkin' Donuts focusing on the quick provision of inexpensive cups of coffee to go and at the same time other companies such as Starbucks going beyond that to market an entire experience, lifestyle, variety of flavors, and even music to their target market.

We see lateral and vertical marketing, yet the classic mix of the 4Ps of product, price, place, and promotion still frame marketing decisions. Pricing decisions can spring from such varied strategies and focuses as penetration, competition's price, bundling, differential product line pricing across different price-points, psychological selection of price amounts, and premium pricing to exclusive target markets. Advertising nowadays at times includes subliminal or covert messages. Internet advertising is arising in many new varieties. Marketing has gone from international marketing to global marketing, where marketing decisions are made to apply across multiple countries.

This encyclopedia is current and packed with essential and up-to-date information on the state of business in our world. Not only does it reflect where business is, but also conveys the trajectory of business further into the 21st century. The current status of English as the new Esperanto is having a big impact on business around the world. Many business schools in all parts of the world are now offering courses and programs in English. This is creating a need for a reference that will explain English language topics and terms, in university, business, and public libraries. Coverage of the global has not been at the expense of the local. This encyclopedia provides insight into the development and current business situation in a wide spectrum of nations through articles on many individual countries.

Our hundreds of article authors, with their knowledge of a wide range of literatures, provide bibliographic recommendations for those seeking more specific information. Sometimes as in the case of the article on Austria, this might include a link to a Web site that might offer the ongoing updates of the nation's statistical data. The editor hopes that the *Encyclopedia of Business in Today's World* will provide clear overviews of the important business topics of our time.

Charles Wankel
General Editor

Reader's Guide

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Chronology of Business

Fourth Millennium (4000–3000) B.C.E.

The story of how business in today's world came to be begins at the dawn of history. Long before coins were developed, long before records were kept, we nevertheless find physical evidence for which trade is the most likely explanation. Seashells found in inland communities are one obvious example; whether they were used as a currency or bartered for (in addition to decoration, some shells could be used as scraping devices, building materials, and sources of dye), trade is the most likely reason they would wind up there. Other remnants can survive as well: the remains of animals not native to a region, foreign rocks and ores, and worked goods that bear the distinctive signs of other cultures.

During the third and fourth millennia B.C.E., we find these signs of trade among the first settled societies of the Fertile Crescent. Developed urban centers—which depend on trade to a greater extent than agricultural communities where each family could theoretically produce all that they need—appear throughout Mesopotamia, in Sumer, Ur, Susa, and Akkad. Trade always enjoyed a symbiotic relationship with urbanity: urban dwelling required, and trade thrived on and enabled, specialization of labor and production.

As early as 3100 B.C.E., Egyptian goods can be found in Byblos (Phoenicia; now Lebanon), and were likely part of trade of Egyptian grain for Phoenician timber. Around the same time, obsidian was being mined on the Greek island of Mylos, from which it was shipped by traders to various settlements. In this pre-metallurgical age, obsidian was the most reliable cutting tool, but its trade value diminished by the end of the fourth millennium B.C.E., when the alloying of copper with tin ushered in the Bronze Age in the Near East. (The Bronze Age is best thought of as a stage, as opposed to a specific year. The Near East entered it first, about a thousand years before Europe; China followed closely after Europe, with Korea entering the Bronze Age last, around 800 B.C.E.)

2500–2000 B.C.E.

Urban centers in southern Mesopotamia develop metallurgical industries based on copper from the northern Iranian plateau, hundreds of miles away. Other

Iranian imports to southern Mesopotamia include alabaster, marble, turquoise, and obsidian. Artifacts made in Mesopotamia of these Iranian materials are then traded again, and found all over the ancient world, from Syria to the Indus River Valley to Central Asia—travelling over 1,000 miles along ancient trade routes.

2000–1500 B.C.E.

Clearly trade had become vital in Mesopotamia. Just as builders and farmers had developed to answer needs of the community, a professional class of traders called tamkaru develops. Tamkaru combine trading, moneylending, and brokerage. More than just acting as middlemen, the tamkaru offer loans to fund trading expeditions, and local laws develop to deal with the outcome of those expeditions—the proper way to divide profits, to determine what happens if a ship is lost at sea, and so on.

The Code of Hammurabi, organized by the sixth and greatest king of Babylon, is written around 1760 B.C.E. as a code of laws set down in stone so that they would survive the life of any one king, and to divorce the permanence of the law from the transience of the whims of the powerful. Much of the Code is concerned with the Mesopotamian economy—it deals not only with what is and isn't legal, but with fines, inheritance, property, the prices of goods, and trade.

The state did not initiate international trade, but it profits from it through taxes and sets rules for the responsibilities of tamkaru. In addition to the worked goods using Iranian raw materials, Mesopotamia transports pottery, leather goods and textiles, and a wide variety of agricultural goods (fruit and vegetables, grains, fish, beer), taking advantage of the natural resources of the Fertile Crescent. The profit from these goods in turn fund the purchase of goods unavailable locally.

During this same period, trade expands in the eastern Mediterranean, where it is dominated by Minoans and Mycenaeans from Crete and southern Greece. Among the most valuable and most traded goods are timber, Cyprian copper, olives and their oil, grapes and wine, and wheat, a grain cultivated and commodified sometime around 2000 B.C.E. Their trade partners include Anatolia (Asia Minor) and Mesopotamia, but especially Egypt, which has gold from its mines, linen produced from flax, high-quality pottery, and papyrus, an early form of paper. Because it's a minimally processed plant product, papyrus is susceptible to mold in humid conditions, and so is less useful in climates radically different from Egypt's—but in the right climate, it is so practical and cheap to produce that it still thrives as a commodity. Much of Egypt's gold originates in Punt, acquired via trading expeditions along the Nile and the Red Sea. Caravan trading routes are established to Mesopotamia, Syria, and the Mediterranean Sea.

Unlike in Mesopotamia, in Egypt trade is not the province of private enterprise. The Pharaoh, seen as a divine ruler, controls the economy through a sort of theocratic socialism, and has a total monopoly on international trade, which he delegates to specific traders who work for the state.

1200 B.C.E.

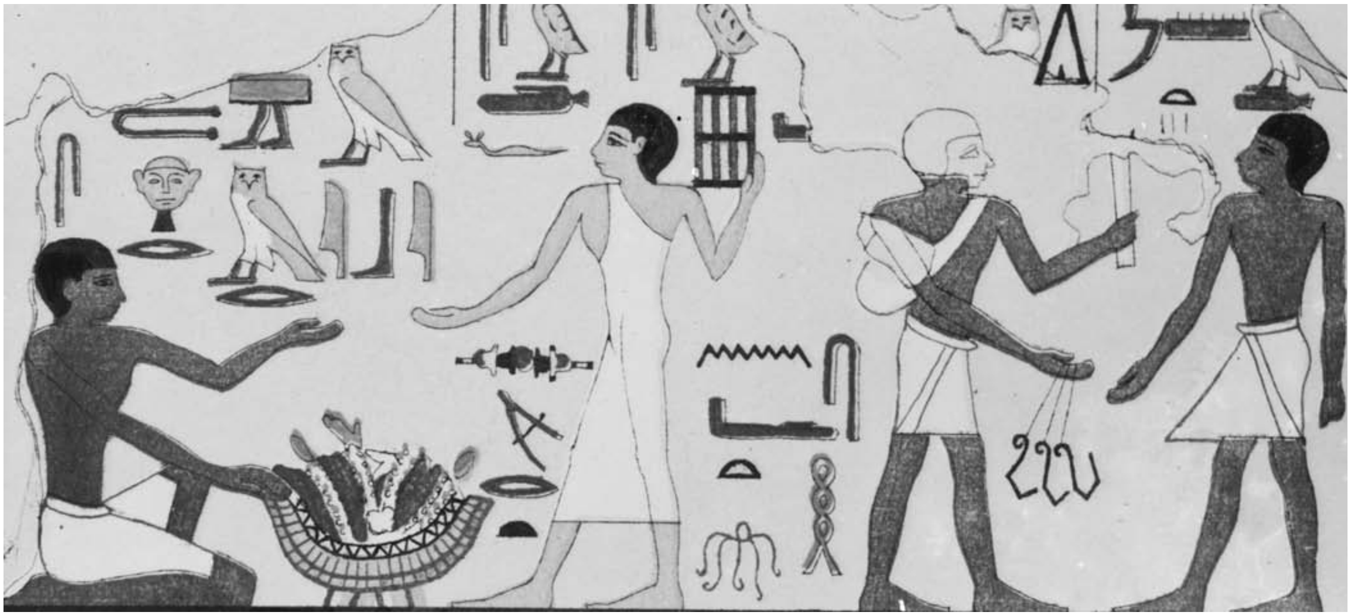
Trade throughout the Bronze Age world is disrupted by violence, as cultures grow large enough to come into prolonged conflict with each other, competing for land, territory, and resources. Greece and Anatolia are invaded by Indo-Europeans, the Hittites and Mycenaeans are wiped out entirely, and mighty Egypt is attacked by various groups they call the Sea Peoples.

There is still a great deal of mystery about who the Sea Peoples were; the Egyptians were never very good at referring to foreign cultures in ways that make it easy for us to identify them now, especially if they made no treaties with them. (Treaties leave us with the names of kings and other leaders, which of course is critical identifying information.) They could have included the Philistines better known from the Bible, the Minoans, or even the Mycenaeans fleeing their own invaders in Greece. Some historians suspect a connection between the Sea Peoples and the Phoenicians.

While trade does not come to a halt, the dropoff is certainly severe, especially relative to the steady growth of the previous centuries.

1000 B.C.E.

The Phoenicians fill the trade gap left by the wars of 200 years earlier. An ancient civilization related to the Canaanites who lived in pre-Hebrew Israel, they were a coastal people who organized in city-states, especially throughout modern-day Lebanon, Syria,



Drawings on the walls of an ancient Egyptian tomb depict the exchange of goods. Egypt had trade and commerce with states throughout the Mediterranean but was under the control of the pharaohs.

and Israel. Their alphabet would later be adopted and adapted by the Greeks, and thence by the Romans and the modern European world. There are many unanswered questions about the Phoenicians, who may have been a culture that included multiple ethnic groups, and who may or may not have seen themselves as distinct from the Canaanites.

From their first appearances in the historical record, they are associated with high-quality timber—the "cedar of Lebanon" which is highly spoken of by Egyptian traders a thousand years before the Phoenicians became the dominant traders of the region—and with sea travel.

It seems very possible that their rise to trade dominance is connected to the Sea Peoples to whom, according to many theories, they are related; they may have learned better shipbuilding or sailing techniques through contact with the Sea Peoples at the time of the Egyptian invasion, or the Phoenician culture of 1000 B.C.E. may in fact be a Sea People culture.

In any case, Phoenicians had been sailing and trading since 1550 B.C.E., and by 1000 B.C.E. they are the principal trade partners of Egypt and the Mesopotamian cultures. Other than timber, they have little in the way of native raw materials, but their trading activity brings them olive oil, wine, dyes, pottery, glass, metal, and textiles, from all over the Mediterranean coast, as well as fruit from Mesopotamia and gold and grain from Egypt.

Over the next four hundred years, Phoenician trade supremacy encompasses the Mediterranean, North Atlantic, and West Africa—Phoenician traders may have even circumnavigated the African continent. Phoenician colonies are established in Rhodes, Cyprus, Sardinia, Sicily, France, Malta, the Balearic Islands, North Africa, and Spain, in addition to Egyptian and Anatolian trading posts. Cyprian copper, Spanish silver, Anatolian iron, and Mediterranean wine are all part of the Phoenician commercial empire, and they sailed as far as Britain—modern-day Cornwall—to mine tin.

753 B.C.E.

The Kingdom of Rome is founded.

750 B.C.E.

The Phoenician trading empire begins to lose its dominance. Phoenician colonies Carthage (in North Africa), Motya (Sicily), Malta, and Cadiz (Spain) have become independent. Greece begins to emerge from its Dark Ages and establishes strong colonies throughout the Mediterranean.

734 B.C.E.
Greek colonists arrive in Italy from Sparta.

660 B.C.E.
Early coins, possibly the first, are stamped in Lydia, a kingdom in western Asia Minor. Lydian coins are made of electrum, a naturally occurring gold/silver alloy, and are stamped with the royal symbol of a lion's head. Greek historian Herodotus credits Lydia not only with the first coins but with the first retail stores (as opposed to temporary marketplaces and roaming traders). King Croessus of Lydia—whose name is still remembered in the phrase "wealthy as Croessus"—is responsible for one of the seven wonders of the ancient world, the Temple of Artemis at Ephesus, a 120-year project. India and China soon issue coins as well.

594 B.C.E.
Solon, leader of the Greek city-state of Athens, enacts reforms that become the foundation for Athenian democracy.

539 B.C.E.
Phoenicia is conquered by Cyrus the Great, the founder of the Persian Empire, and divided up into four kingdoms given to his loyal vassals. Many native Phoenicians who are able to do so flee to Carthage, which soon begins a long and significant history as a strong maritime power. Phoenician influence over foreign cultures, especially in the Mediterranean region, declines immediately after the Persian conquest. Alexander the Great conquers one of the four Phoenician kingdoms, Tyre, in 332 B.C.E., and distinctly Phoenician culture disappears shortly after, becoming absorbed into Greek culture.

509 B.C.E.
Rome becomes a Republic when its last king is ousted from power after his son rapes the wife of a senator (this, anyway, is the legend; the exact circumstances of the shift in power are unknown). Key to its government over the next five centuries will be its constitution, which establishes a state in which the legislative branch enjoys considerable power and is meant to represent the will of the people. While not a democracy, it is a remarkable leap toward modern governance, espousing ideals that much of Europe won't adopt for many centuries to come. The office of *pontifex maximus*—high priest—is soon established, and is notable primarily because when the Catholic Church mirrors much of the structure of the Roman Republic, the Pope takes the place of the *pontifex maximus*.

500 B.C.E.
Greek trading dominance extends throughout the Middle East and eastern Mediterranean to the Balkans and southern Russia, and Greek settlement has spread throughout the Black Sea. The trading network exports olives, wheat, and wine for grain from Egypt and Sicily; copper, tin, zinc, and iron from Italy; silver and salted fish from Spain; metals from Asia Minor; and timber from the Balkans. The trade with what is now southern Russia is especially strong, providing Greece with fish, gold, furs, honey, amber, wax, timber, and slaves, who were resold throughout the Mediterranean. Large ships of 1,000 tons and more are for the first time outfitted to sail the seas, and the Greeks' superior knowledge of navigation proves a critical trade advantage, as they can reliably reach ports other cultures would have trouble with.

Indian merchants travel to Ceylon, Indonesia, and Southeast Asia to exchange pearls, cotton, black pepper, and Indian manufactured goods for spices.

411 B.C.E.
After Athens's defeat by Sparta in the Peloponnesian War, and the city-state's resulting loss of maritime supremacy, the democratic government is temporarily overthrown by a coup that blames the defeat on several democratic politicians. Order is restored eight years later.

400 B.C.E.
Goods from India and goods picked from Southeast Asian merchants transported to lands bordering on the Arabian Sea, Persian Gulf, and Red Sea.

347 B.C.E.
Death of Plato, the Greek philosopher whose *Republic* would remain an influence on political philosophy.

336–323 B.C.E.
The conquests of Alexander the Great spread the Greek language from the eastern Mediterranean to the Indus Valley, encouraging its adoption as the lan-

guage of trade and commerce—and more broadly, the language of travelers throughout the ancient world.

323–146 B.C.E.
The Hellenistic period. The term *Hellenistic* is derived from Hellen, the ancient Greeks' name for themselves. Alexander the Great's conquests brought the known world into contact with Greece, its language and culture, and it enjoys an even greater influence on world culture than Phoenicia had. The Attic dialect of Greek becomes a universal language, with regional dialects becoming much less common, just as radically different English dialects are less common today, with most English speakers in the United States speaking an almost identical language to one another.

Ambitious Greeks migrate to the cities Alexander established in the vast areas between the Mediterranean and the Hindu Kush mountains and between the Arabian desert and the Caucasus mountains. Hellenistic groups establish wine vineyards and olive groves, as well as factories and workshops, and in many places are joined by groups of other ethnicities, especially Jews and Armenians. Hellenistic Greece in general is ethnically diverse, encompassing the many diverse peoples Alexander conquered as well as those who have relocated to do business with Greece and married locals.

322–185 B.C.E.
The Mauryan Empire is established in the Indian subcontinent, the largest empire to rule the region. Under its centralized administration, manufacturing of pottery, metal goods, and luxury goods is encouraged for the purposes of trade, and India begins to participate in the international economy to a greater degree than before.

268–232 B.C.E.
Roads ordered by Maurya's Emperor Asoka encourage trade through Hindu Kush mountains both west to Persia, Anatolia, and the Mediterranean basin and east through China through what eventually becomes the Silk Road. Building on routes previously established by Persian and Macedonian administrations in the previous two centuries, the Mauryan Empire joins those routes and establishes links to the west, and eventually to China. India exported cotton goods, pepper, and gems to China in return for silk.

211 B.C.E.
Rome issues the denarius, the silver coin that becomes the basis for their currency (having previously used cruder bronze coins, as well as the silver drachmae). The denarius is valued at 10 aeses (the aes was a bronze or copper coin). The gold aureus, worth 25 denarii, was rarely used.

Up to this point, the intrinsic value of a coin (the value of the metals it is made of) was the same as the face value. Roman coins have face values set by the state, greater than their intrinsic values—often twice as high, in fact, and sometimes higher, as the silver content of the denarius is eventually reduced in order to prevent shortages as Rome expands. Like letters of credit, a face value higher than an intrinsic value makes wealth more portable.

200 B.C.E.
The Han period begins in China, unifying this vast Asian region into one economic and political unit. The network of roads from the Han capital through Xian, the Tarim basin, Kashgar, and Central Asia becomes joined with the Persian and Indian land routes to become the Silk Road, and China is now part of the economic community that includes Europe and the Mediterranean, the Middle East and the Indian subcontinent, and North Africa. Though called the "Silk Road," the network of routes actually includes sea routes as well.

Chinese silk, lacquerware, ceramics, and paper—more expensive than papyrus but much more practical—soon become important trade goods throughout the west.

146 B.C.E.
The classical Greek heartlands are annexed by the Roman Republic; Hellenistic culture persists, but Greek political independence ends, signaling the dominance of Rome in the ancient world.

140 B.C.E.
The denarius is revalued at 16 aeses, a significant devaluation.

27 B.C.E.
After 500 years, the Roman Republic becomes the Roman Empire with the accession of Octavian, now called Augustus Caesar.

325 c.e.
The first Council of Nicaea establishes the Catholic Church as a unified body, providing Western Europe with a common religion.

400
Sea lanes are established via the South China Sea through the Straits of Malacca to the Bay of Bengal, the Arabian Sea, the Persian Gulf, and the Red Sea to the Mediterranean, expanding the Silk Road.

476
The long-weakened Roman Empire ends in the West when Romulus Augustus is deposed. A descendant of the Roman Empire persists in the East in the form of the Byzantine Empire. Western Europe develops in the shadow of Rome, united by closely related languages and culture, intermarriages, and the oversight of the Roman Catholic Church. As a result, though there is great diversity among European states and peoples, the continent remains more closely connected than it might be had it not been for the centuries during which Rome courted, conquered, and colonized it.

500–700
After the Roman Empire falls, Jewish and Christian communities continue the trading activity in the Indian Ocean. East Africans including Christians from Ethiopia and, after the 7th century, Muslims on the Somali and Swahili coasts from the Horn of Africa to central Mozambique participate in the trade. This trade occurs through the Arabian Sea to India. Indian traders (mostly Dravidians from Southeast Indian kingdoms) dominate commerce via the Kra peninsula opening in Southern Thailand and the straits of Malacca between Malaya and the Indonesian archipelago.

529–534
Justinian I, ruler of the Byzantine Empire, issues the Corpus Juris Civilis ("Body of Civil Law"). Centuries of imperial Roman law are compiled into three codices, which revive the use of Roman law throughout Europe, influencing civil law.

631
Mohammed, the founder of Islam, dies. By the time of his death, all of Arabia has converted to his faith. Muslims become a powerful economic and political force through the rest of the Middle Ages.

638
Jerusalem is captured by Muslims.

674–678
Muslim armies face their first serious defeat when they are driven back after a four-year siege of Constantinople, preventing the Islamification of Europe.

718
Muslims are again repelled from Constantinople.

754
Pepin, king of France and founder of the Carolingian dynasty, promises the lands of central Italy to the Pope—thus formalizing the Pope's temporal power as a political force in Europe.

800–1250
Islamic banks, founded to avoid the Koran's prohibitions of certain kinds of banking, offer a wide variety of services throughout the Muslim world, and are instrumental in funding Indian Ocean trade. Among the available services are moneylending, investment broking, and currency exchange.

Lines of credit known as "sakk" are available, from which term we derive the English word "check." Sakks allowed traders to draw letters of credit in one location and cash them in at another, so that the traders did not have to travel with large quantities of gold and silver.

Much of the supply of gold for Europe and the Middle East before the exploration of the Americas comes from various African empires, transported by Arab and European traders across the Sahara desert. Traders arrive by camel and caravan in West African communities, where they trade cloth, salt, metal, and glass for dye, ivory, and especially gold and slaves. Outsiders, emphasizing Arab involvement, sometimes refer to this trade activity as The Silent Trade of the Moors. Such traders leave their products on the riverbank near the mines (usually in the area of the modern-day Ghana and Ivory Coast), and if their trading partners are satisfied with the offering, they leave gold in its place the next morning. If the offering remains, the process is repeated until a trade is made.

The Mosque of Sultan Bayazid in Constantinople. The city was the apex of the Muslim effort to expand the Islamic religion into Europe and was under siege for four years from 674 to 678.

The African empires of Ghana, Mali, and Songhay derive much of their income from the tariffs enacted on these trades, and the routes themselves tend to reflect the dominance of particular states. Ghana is reached via a western trade route from Morocco and Algeria, but the route is abandoned when Muslims sack Ghana's capital; a route from Tunis arises in its place. Muslim traders favor joint ventures in order to avoid sole liability in trading ventures. They pool their resources in several investments in several cargoes on several ships, so that no one's financial well-being can "go down with the ship."

1000–1500
During the classic period of the Swahili city-states of the eastern African coast (where modern-day Kenya, Tanzania, and Mozambique are), there is a thriving market for Asian products such as Indian beads, Chinese porcelain, and Persian pottery, as well as for spices. Textile factories produce cloth both for local demand and export, and copper and gold are mined and traded. Adept shipbuilders, the Swahili conduct their own trade with the outside world until the arrival of the Portuguese in the early 16th century.

1054
The East-West Schism divides the Christian Church into Western Catholicism and Eastern Orthodoxy.

1099
The First Crusade seeks to liberate Jerusalem from Muslims.

1337
The Hundred Years War begins as England and France struggle for dominance of Western Europe.

1434
The Medici family rises to prominence in Florence. Throughout the Renaissance, powerful noble families will be important as patrons of artists and inventors; they and the Catholic Church essentially fund the Renaissance.

1440
The Portuguese establish plantations on São Tomé and the Cape Verde Islands.

1441–1800s
The European slave trade begins, starting with the Portuguese, with other nations soon following. The triangle or transatlantic trade is a symbol of the increasing global nature of trade and business as it ties together the eastern and western hemispheres in a three cornered interaction. The commercial connection can start anywhere. Merchants can carry clothing, guns, and wine south to Africa and trade these items for rhinoceros horn, ivory, grain of pepper, some gold, and especially slaves. The trade extends from Senegal to Angola.

Slaves are especially taken from Dahomey (now Benin) and southern Nigeria (Caribbean and West Indies) and Angola (Brazil). In Africa, this leg is called the firearms trade as merchants located at trading posts (factors) exchange guns for goods, including slaves. The collaborators then use the guns to hunt potential slaves in their "protectorates" and sell them to slavers in return for more guns. The product and human cargo cross the Atlantic in the infamous middle passage by which an estimated 15 million are transported and many die.

The cargo is traded for precious metals from South America and rum, molasses, and sugar from the West Indies and Brazil. The traders then sail up the coast of the Americas, collecting rice and tobacco and later cotton from the American South, wheat from the middle colonies, and naval stores (tar, turpentine, rope, lumber) from New England. The ships then sail back across the Atlantic. The ships could just as easily start from the western hemisphere or Africa. After the slave trade is abolished in the early 19th century, starting with the United States, Britain, and the Netherlands, this trade gradually diminishes.

1453
After the fall of Constantinople to Ottoman Turks, Europeans take to the sea to obtain many of the products available through the Silk Road, and the land routes associated with the Road decline quickly.

1492
Christopher Columbus, seeking a trade route to India, establishes a route to the West Indies instead, introducing Europe to the New World of the Americas. The Columbian Exchange that results from Columbus's repeated trips to the New World, and the trips of other explorers, refers not only to trade but to the exchange of food crops and other plants, animals, and diseases between the continents. Though world population more than doubles between 1500 and 1900, to 900 million people worldwide, the population of the New World is reduced by more than 100 million people in that same time.

1500
After 1500, western European countries facing the Atlantic adopt an economic policy called mercantilism, in which the nation is kept prosperous through government intervention in the private sector. The acquisition of wealth—and for Spain and Portugal, particularly the acquisition of precious metals—is mercantilism's main goal, because stores of such metals are equivalent to a nation's power.

The goal of trade, in essence, is to exchange exports for as much gold and silver as possible—and so Spanish colonialism is fueled in great part by the quest for gold in the New World. Colonies play a major role in mercantilism: they're meant to provide raw materials that their founding nations back in Europe lack, and to serve as captive markets. The English colonies, for instance, provide rum and timber while serving as reliable, predictable customers for English exports; the Dutch take the same approach to their own colonies. Just as those approaches eventually backfire, so too does the Spanish: the influx of precious metals from the New World devalues Spanish currency.

Coffee and sugar are introduced to the New World colonies from the eastern hemisphere, and become cash crops in Brazil, Costa Rica, and Louisiana.

1509
Systemic slave trade begins to the West Indies with Spanish plantations in Hispaniola.

1550
Antwerp (in Belgium) begins its “continuous fair” and becomes the site for the first permanent stock exchange, a meeting place for bankers, merchants, and businessmen. Though no one realizes it yet, this is the first blow to still-nascent mercantilism and a gesture towards modern economic practices, which favor and protect the private sector.

1570
The beginning of Dutch involvement in slave trade.

1577
The Muscovy Company, England’s first joint-stock company, is chartered. The joint-stock company, a precursor to the modern corporation, is the chosen instrument of mercantilism. A charter from the state grants the company with a monopoly in a specific region or over a specific trade good. Though trading companies had existed before, these charters came into full flower as mercantilism was adopted, and enable companies to trade all over the world. Many of the New World colonies were founded as joint-stock companies originally.

The Muscovy Company is specifically granted the right to import furs from Russia and the Baltic, and was founded by adventurers searching for a Northeast Passage to China.

1591
The Moroccan defeat of the Songhay Empire marks the end of the Sudanic empires and the decline of the Silent Trade of the Moors. By this time, the flow of specie coming from the Americas and West Atlantic trade had undermined the economic role of Sudanic states.

1600
The British East India Company is granted its charter by Queen Elizabeth I on December 31, 1600, with a 21-year monopoly on British trade in the East Indies (the company persists much longer than its monopoly does). Its main trade was in silk, indigo, opium, tea, and saltpeter, and it was chartered in the hopes of countering some of the Dutch trade superiority in the East Indies. Hostilities with the Dutch East Indies Company (founded 1602) and the Portuguese East Indies Company (founded 1628) are common and sometimes violent. The Dutch dominance in the spice trade is never disintegrated to the extent the crown would like, but inroads are made in the straits of Malacca, originally controlled by the Portuguese.

Its power and economic importance lead the East India Company to a position of political importance and influence, helping to shape history in the generations to come, and the company is the Crown’s agent in the British takeover of the Indian subcontinent.

17th Century
New species of animals are introduced into the Americas and Oceania by Europeans settlers and traders, including horses, pigs, sheep, cattle, chickens, cats, dogs, and goats. New industries are begun as a result, and the far more sparsely settled New World has the luxury of providing seemingly limitless grazing space for livestock, leading to thriving cattle (beef, leather, tallow, dairy) and sheep (mutton, wool) industries in the Americas. The horse population is so healthy and has so much room that there is a significant mustang (wild horse) population within generations.

The transmigration of grains and nuts as items of both export and consumption is even more pervasive. The peanut from the New World is introduced in Africa and becomes so important a cash crop that it’s instrumental as an excuse to end the slave trade (now arguably no longer the most profitable use for Africa). West Africa also begins to produce cacao, introduced from the Americas, as a cash crop, and the long-staple cotton of the New World replaces the short-staple cotton of Egypt and India as the dominant form of cotton. Manioc (also called cassava) is introduced to tropical Africa and southeast Asia, and is nutritious enough to support dense populations there with relative ease.

Chocolate and maize (corn) become important luxury items in the Old World, and other New World vegetables become so popular that it is difficult to imagine Old World cuisines without them—whether it’s the tomato in Italy, the potato in the British Isles and central Europe, the paprika critical to the national dishes of Hungary, or the chile peppers that catch on everywhere but France. Wheat, barley, millet, oats,

Illustration shows a portrait of Pocahantas as Mrs. John Rolfe, from a portrait painting done in London, England, 1616.

rice, and rye introduced from the Old World become important cash crops in the Americas, alongside textiles like flax and hemp.

1607

Jamestown is founded in the Virginia Colony, the first permanent English settlement in the modern-day United States, after the earlier failure of the Roanoke Colony. The original charter of the Virginia Company grants land from the 34th parallel (near Cape Fear, in what is now North Carolina) to the 48th parallel, thus encompassing much of what became New England and the Mid-Atlantic states in America. France and Spain both have claims in this region but are unsuccessful in preventing the English from gaining dominance.

After the death of Elizabeth, who had chartered the Virginia Company, her successor James I granted separate charters to two different branches of the company—the Plymouth and London Companies. War with Spain had financially taxed England at a time when money was sorely needed to fund expeditions to scout out critical trading routes and secure territory, and dividing Virginia between two companies was a way to raise more funds.

The competing Plymouth and London Companies sought to establish settlements as quickly as possible, though were forbidden from doing so within 100 miles of each other.

Plymouth establishes its colony far to the north, in what is now Maine—Popham Colony, which is abandoned a year later when its leader dies and his successor leaves for England upon inheriting an estate and noble title. The London Company establishes its colony further south, named for King James and located on a spot on the water chosen because of the ease of defending it against other European forces.

Unfortunately, the resulting swampiness makes hunting and agriculture infeasible, and the tidal river water is too salty to drink. The colony faces starvation and economic difficulty at every turn in its early years.

1608

The French establish their first settlements in what is now Canada. While the Spanish and Portuguese seek previous metals, the French seek instead to form a monopoly over the New World fur trade, to take advantage of the Little Ice Age that has held sway in Europe since 1400 (and persists until 1800), accounting for exceptionally cold winters.

1609

The first commercial bank is started in Amsterdam for transfer of payments in different currencies.

1612

John Rolfe, a colonist in Jamestown, Virginia, introduces a strain of tobacco that is exported to the Old World, where it is widely successful. The economic outlook of the colony of Virginia takes a quick upturn, and Rolfe marries Pocahontas, the daughter of the Powhatan Indian chief, two years later. When the Rolfes visit England, they are received as celebrities, as in the European mindset Pocahontas is a visiting princess. Their popularity helps to attract further investors to Jamestown's financial concerns.

1619
The first slaves are introduced to Virginia.

1694
The Bank of England opens. The English stock market begins business the following year.

18th Century
Various Navigation Acts passed by the British crown in the 18th century limit the trade its colonies can do with other countries, in order to protect its own economic interests and preserve the status of the colonies as captive markets. By this time, English dominance has been fairly well-established in much of North America, with France and Spain maintaining their respective holdings but the Dutch long gone from New Amsterdam (now New York). The colonies have grown enough that they are no longer happy being subservient to the Crown, but they have no real political power, no advocates in the king's court; the complaint about "no taxation without representation" begins long before anyone contemplates independence.

1720–1734
British "Bubble Acts" are passed to control excessive speculation, by forbidding the selling of stock that the seller does not own.

1764
James Hargreaves redresses the balance between weavers and spinners through the spinning jenny, which allows spinners to keep up with woven cloth.

The Currency Act enacted by the British government forbids American colonies from issuing paper money, and discouraged them from minting coins (in the meanwhile, Britain itself minted no copper or silver coins during this period). Prior to this time, the colonies had issued Colonial Scrip, though it was considered of little long-term value since it wasn't backed by gold or silver. The Act may have accidentally been caused by Benjamin Franklin, who had explained the benefits of the scrip system to the British government, only to be confronted with their horror at his recommendations. In retrospect, Franklin and many others blame the Currency Act for the American Revolution, as it points up a vast difference of economic philosophy between the two countries, and underscores the British government's determination to keep the colonies powerless.

The Sugar Act enacted around the same time taxes sugar and molasses. Although it is only a renewal of an existing act, and cuts the previous tax in half, that older tax was never successfully enforced in the colonies—and so this is in essence a new tax. The economic impact is severe, on an already depressed colonial economy, adding to dissatisfaction.

1765
The Stamp Act passed by the British government is the first such act to directly tax American colonists, by requiring a tax stamp on any document in order to legitimize it—not simply legal documents requiring the crown's involvement, but commercial contracts, wills, deeds, locally issued permits, even playing cards, pamphlets, and newspapers. The British have grown tired of the expense of their military presence in North America and decided the Americans should be accountable for its funding, even though British economic interests are the principal reason for those militias. Americans bristle at the tax and protest in the streets in many of the colonies, hanging or otherwise abusing effigies of public figures.

Delegates from nine of the 13 colonies (all but New Hampshire, Georgia, Virginia, and North Carolina) meet for the Stamp Act Congress to discuss what should be done. The meeting is held in secret, with no minutes recorded or records kept, and delegates later report that the issues discussed included not only taxation, but conflicts with the British over the right to trial by jury and the existence of the admiralty courts. It is at the Stamp Act Congress that the issue of "taxation without representation" becomes emblematic of the colonists' concerns with their British leaders—Americans are not represented in Parliament and many of them do not feel they should be taxed by it, but instead by local governments who have to live under the same conditions they do. The Declaration of Rights and Grievances produced by the Congress lists 14 points of contention with recent British acts, most of them economic, the rest dealing with human rights. It is delivered to Parliament, which—making matters worse—refuses to discuss the issue or acknowledge the Declaration.

James Watt builds his first working steam engine, pushing water through a cylinder to produce steam which, applied to a piston, turns a wheel. The resulting rotary motion converts a pump into a multiple engine, and by the end of the century, there are over 1,000 such steam engines in use. Human and animal power race toward obsolescence. The use of steam power is a prerequisite for the Industrial Revolution, enabling vast amounts of power to be used that previous methods simply could not have generated.

1767

The Townshend Acts enacted by the British government increase the tax on goods imported into the American colonies, and direct that those taxes be paid directly to the British government, instead of to the local town governments that would usually collect them and use them for their operating expenses. This is another attempt by the British government to collect money from the Americans to fund the British military presence in North America, and it again leads to protests and riots. Dissent is increasing, with less and less time between incidents to let tempers cool down.

1773

The Tea Act enacted by the British government restructures the tax on tea imported to the American colonies, in an attempt to break an American boycott on high-priced British tea. In response, a group of colonists—most likely Samuel Adams and the Sons of Liberty—dress up like Native Americans and destroy a shipment of tea, throwing 342 crates of just-arrived tea into Boston Harbor (the Boston Tea Party). The British government responds with a group of Acts the colonists call the Intolerable Acts, designed both to punish the colonists and to recoup the cost of the destroyed tea. The Boston Port Act, for instance, forcibly closes the port of Boston until the tea is paid for, drawing criticism that an entire city is punished for the acts of a few dozen men, without trial or discussion. The Massachusetts Government Act goes even further, restructuring the colonial government to provide more control to the British, and the Administration of Justice Act allows the British to relocate an officer accused of a crime to another colony—or back to Britain—if it seems that a fair trial cannot be had in Massachusetts. George Washington calls this act the "Murder Act," arguing that it provides extraordinary leeway for the actions of British officers who may feel free to mistreat locals, knowing they will not face local trials.

1776

The Continental Congress of the United States declares its independence from Britain, a year after war broke out in Lexington and Concord.

1780

Henry Cort invents the pudding furnace, an open-hearth process that cooks molten iron in a great vat. Improvements in the open hearth increase iron production and steel conversion, enabling the heavy industry, shipbuilding, and construction industries worldwide to live up to the promise of the coming Industrial Revolution.

1785

Edmund Cartwright's power loom is the final nail in the coffin of handicrafts, shifting power to industrial workers.

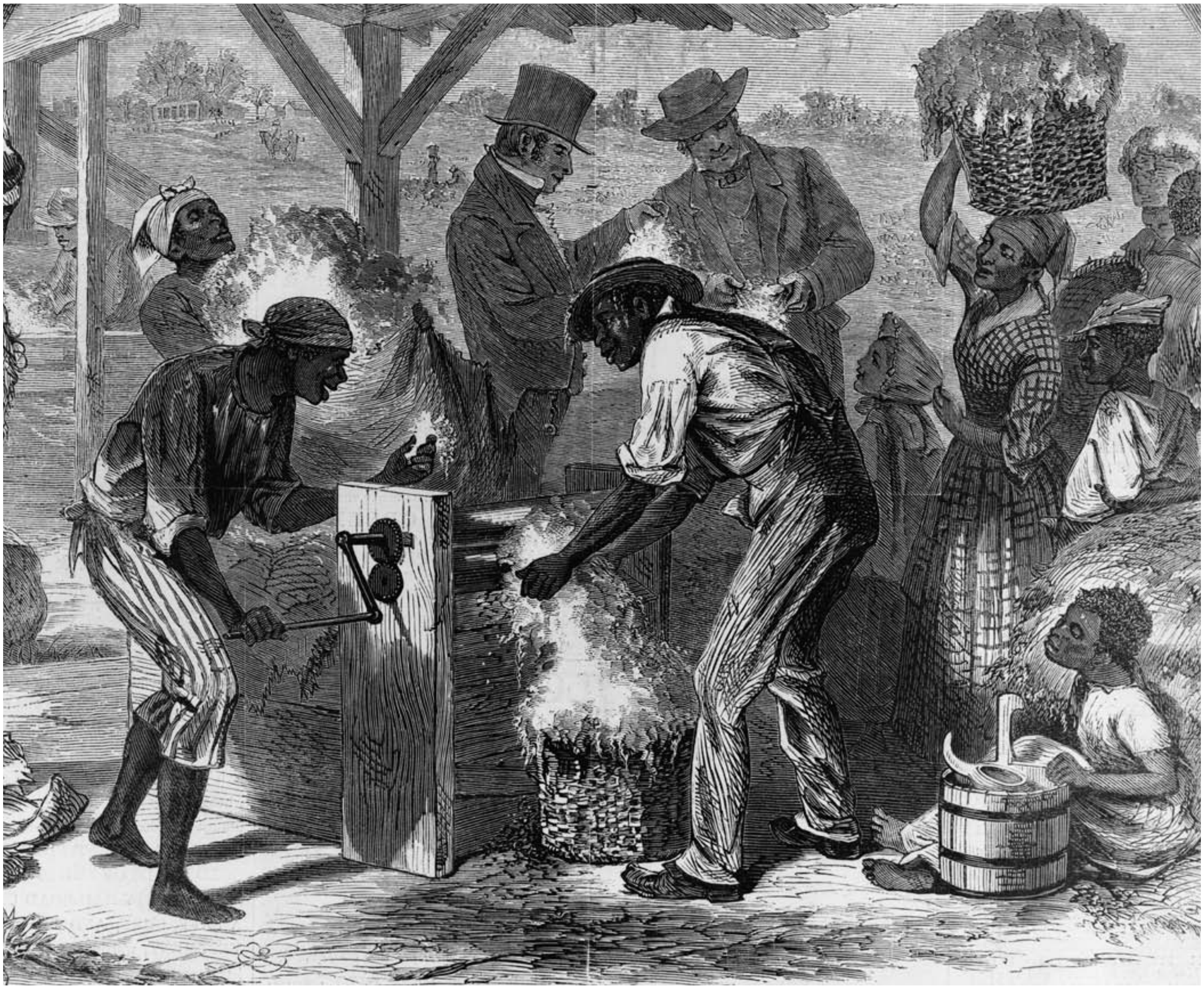
1789

The U.S. Constitution goes into effect, and Revolutionary War General George Washington is elected the first American president.

1793–1794

The Whiskey Rebellion is an insurrection against the new American government, over its tax laws. A tax proposed by Alexander Hamilton on distilled spirits is worded so as to affect small producers more than large ones (which include President Washington). Westerners are especially opposed to the tax since they use whiskey as a barter good, with no cash changing hands—introducing a large tax upsets the balance and its usefulness in barter. Like farming, distilling is not a business one enters into lightly—the start-up cost is significant, and no one wants to abandon it after finally paying off their initial expenses and learning the craft.

Dissatisfaction leads to armed conflict in western Pennsylvania—a disorganized, frustrated rebellion that robs the local mail, tars and feathers a tax collector, and interrupts court proceedings. There are no fatalities, though. Washington declares martial law, and a militia of over twelve thousand soldiers eventually rounds up some twenty prisoners, in a deliberate



"The First Cotton-Gin" drawn by William L. Sheppard depicts African-American slaves using the cotton gin invented by Eli Whitney in 1793. The machine revolutionized the production of cotton, but also enabled the persistence of slavery.

display of federal power. Only two are arrested, one of them dying in prison before his trial, and the other freed by Washington. The whiskey tax has one long-lasting effect on American history: small distillers thrive in Kentucky and Tennessee, which in the late 18th century constitute the American frontier, too wild and sparsely settled for tax collectors to ply their trade effectively. Today, Kentucky is home to most of the world's bourbon producers; Tennessee is the home of Jack Daniels. Both styles of whiskey descend directly from these 18th-century distillers.

Eli Whitney invents the cotton "gin" (engine, meaning simply "machine" at this time). Whitney's machine mechanizes the separation of cotton fiber from seedpods, a job that is difficult to do even for experienced workers. This makes cotton more profitable, and assists in making it the key cash crop of the antebellum American South—it also allows the slavery system to persist at a time when it might have died off due to unprofitability.

Whitney makes little money from his machine, because of poorly handled business practices, but popularizes interchangeable parts in the manufacture of muskets, an idea that is critical to the American system of manufacturing that predominates throughout the Industrial Revolution: interchangeable parts, division of labor, and powered machinery. The system is soon applied to clocks and sewing machines, making them simultaneously more affordable and prized commodities because of the resulting increase in dependability.

1803

The size of the United States is doubled when Thomas Jefferson purchases the Louisiana Territory from Napoleon, who is badly in need of money to fight his wars in Europe. This increases not only the country's territory but the number of its ports, and brings the economically invaluable Mississippi River into the country's territory.

1817–1825

First proposed in 1699, the Erie Canal is built, bolstering the economy of upstate New York (indeed, creating many of the communities there) as well as New York City (by making it easier to transport goods from port). A project considered by many fine minds over the 118 years, including the British government and George Washington, Jesse Hawley finally gets the project off the ground, hoping to turn upstate New York into a bread basket of grain fields which can sell their goods by ship. When Jefferson calls the project folly and refuses to fund it, New York governor DeWitt Clinton agrees to raise the funds, a decision widely considered unwise. It is years before the hundreds of miles of canal are finished, and over 1000 workers die of swamp fever along the way, because of the working conditions in some locations. Leaks develop immediately but are sealed with a new form of concrete that has serendipitously been introduced between the time that construction began and the time it is completed. The canal immediately exceeds the expectations of its builders, and enlargements and feeder canals are begun almost right away, and continue throughout the 19th century. The economy of New York state and city is transformed in a matter of years, inspiring cities like Philadelphia and Baltimore to pursue similar projects.

1819

The Panic of 1819 is the first major economic crisis in American history, though a depression in the 1780s had led to the establishment of the dollar as the American currency. Historians do not all agree on the causes of the Panic, which results in bank failures, record unemployment and foreclosures, and slumps in both agriculture and manufacturing despite the recent advances of the Industrial Revolution. Some economists paint the panic as part of a normal cycle of boom and bust; others blame the federal government's monetary policy after the debts of the War of 1812.

The Supreme Court case *Dartmouth College v. Woodward* rules in favor of the college, after the state of New Hampshire attempted to alter its charter and turn it into a public school instead of a private one. Renowned orator Daniel Webster speaks in Dartmouth's favor, reportedly bringing tears to the eyes of the justices. It was not a popular decision, because it limited the power of states—but it did so only by holding them accountable to live up to the contracts they made, which in the long run protected both businesses (including institutions like Dartmouth) and individuals. The Woodward in the case name is the secretary of the new board of trustees appointed by the state, though of course the case was really against the state itself.

1820

Textile mills in New England expand. Lowell, Massachusetts, becomes the center of the Industrial Revolution in America, a hub of textile production. In the coming years, industrial production is one factor spurring the construction of railroads for faster transport across the vast and still mostly unsettled continent.

1837

The Panic of 1837 results from rampant speculation on gold and silver, resulting in a five-year depression and the failure of more than a third of the nation's banks.

1857

The Panic of 1857 sees massive business failures when the prosperity of the Gold Rush and the Mexican-American War slows down. Though not as severe as other panics, the Civil War slows down recovery.

1859

The Comstock Lode is discovered in Nevada, on the eastern slope of Mount Davison. This is the first major deposit of silver ore found in the United States, and excavating it provides $400 million in silver and gold over the next 20 years. Not only is the lode instrumental in bolstering the economies of Nevada and California (which was beginning to slow down, a decade after its Gold Rush), but it creates a number of individual fortunes as well—including that of George Hearst, a California prospector who turns his mining interests into the country's largest mining firm and eventually runs for Senate. Hearst's son is William Randolph Hearst, whose family fortune made him the newspaper king and a force in early 20th century American politics.

1861–1865

The American Civil War is fought between an industrial north and an agricultural slave-state south.

1863

The National Bank Act of the United States establishes national charters for banks, basing currency on the bank holdings of U.S. Treasury securities.

1865

After George Pullman lends one of his luxury sleeper train cars for the transport of Abraham Lincoln's coffin, such cars become known as Pullman cars.

1867

The National Grange of the Order of the Patrons of Husbandry—or simply the Grange—is formed, a fraternal organization for American farmers that encourages them to band together cooperatively for their common good. Agriculture is on the decline in the United States; in another generation the country will be mostly urban-dwellers, and that change is already detectable in the air. The oldest agricultural organization in the United States, it remains the most important and powerful through at least the 1950s.

1868

Andrew Carnegie, one of the wealthiest men in history and one of the best-known tycoons in an age of them, founds Carnegie Steel.

1869

Construction of the Suez Canal in Egypt, allowing water passage between Europe and Asia without having to circumnavigate the African continent. There were canals in use here in ancient times, but the Suez Canal is a modern project excavated by the French. International response is skeptical; the British deride it, but also consider it a threat to their own economic interests. Few outside of France purchase shares in the Suez Canal Company.

But in fact, the effect of the Canal is extraordinary, allowing the world to be circumnavigated in times that would have been unthinkable only a year ago, a boon to trade as well as a factor in Europe's ongoing conquest of inland Africa. Only 20 years later, the British find themselves protecting it during an Egyptian civil war—because it is so necessary to their economic interests.

The first transcontinental railroad in North America is established by the Union Pacific and Central Pacific railroads. The last spike, a symbolic gold spike, is hammered into a special tie of polished laurel wood from California, in a ceremony at the Promontory Summit in Utah—and immediately removed so it could be replaced with a more practical iron spike. The railroad is a vital link for trade and westward travel, and ends the age of the covered Conestoga wagon and the famous searches for safe passage over the Rockies by would-be pioneers. Not coincidentally, a generation later—in 1890—the Census Bureau declares the frontier "closed," meaning that the population density of the United States has reached a point that there is no significant amount of space left unsettled.

Despite the name "transcontinental," the rail line does not traverse the entire continent—it simply makes it possible to traverse the continent by rail, by crossing the Rocky Mountains. The route spans some 1,800 miles, from Sacramento in the west to Council Bluffs, Iowa, in the east, more or less the same route taken by I-80 now.

The railroad made the west more profitable, not only by reducing loss of goods in transit but by shortening the time between production and sale. Westerners with more money to spend could now spend more of it on mail-order goods, which were of increasing popularity—this is the golden age of the Sears catalogue, when everything a person couldn't be expected to make at home, from a new Sunday dress to a crank-operated ice cream maker to snow shoes to shotguns to Franklin stoves, could be ordered through the mail.

1873
The Panic of 1873 leads to a four-year depression, following the crash of the Vienna Stock Exchange and the bankruptcy of the banking firm Jay Cooke & Company. One factor is the outbreak of equine flu, which brings the horse-driven rail industry to a halt, which in turn affects locomotives as coal cannot reach them. Many businesses are forced to have men pull wagons of cargo by hand, and ships stay in port with their cargo untouched, no one available to unload it. Fires rage in major cities with no one able to get to them in time to put them out.

In response to the Panic, the federal government moves to a gold standard, no longer minting silver coins or stocking silver. This reduces the money supply, greatly hurting anyone with a large debt load—which in practice means virtually every farmer in the country, farming being a business which all but the wealthiest men have to fund with loans.

1880s
If the first stage of industrialization emphasized factory production and the mass production of goods on a global basis, the second stage of industrialization emphasizes mass energy as applied to mass transportation and communication on a global basis as well as scientific research with global effects. The combination of steam and locomotion led to the railroads becoming the major form of transportation after 1860. The advance of electrical conversion leads to coal becoming the main fuel until 1900 as well as new mass forms of transportation in the growing urban areas.

The spread of the internal combustion and diesel engines leads to petroleum fuels replacing electricity. As a result, gas and oil ultimately replace coal in the transportation industry, beginning with land and air transport, followed by water transport.

1887
The Interstate Commerce Commission is established in the United States to regulate railroads and ensure fair prices.

1890
The Sherman Antitrust Act is passed to limit cartels and monopolies. The Industrial Revolution created opportunities for national companies to thrive in the United States, but they did so at the peril of smaller companies. The Sherman Antitrust Act actually encouraged businesses that operated in multiple states, by specifically prohibiting certain abusive practices in order to make it unnecessary to outlaw such operation altogether. The ultimate purpose is to encourage competition, keep the market healthy, and prohibit collusive practices between companies at the expense of the consumer, competitors, or the state. The act itself proves to be too vague, and it's refined with further acts and court decisions, but it remains an important statement of legal principle in federal law.

1893
The Panic of 1893 is in many ways a resumption of the 1873 panic, which had been temporarily salved by a speculation-driven expansion during the railroad boom. That speculation led to overextension, which in turn led to the bankruptcy of the Pennsylvania and Reading Railroad.

European investors, foreseeing the panic, accept payment only in gold, which weakens the federal gold reserve and thus the value of the dollar; such fears are justified when the reserve reaches its mandated minimum, at which point notes can no longer legally be exchanged for gold, for fear of bankrupting the federal government of hard currency. This, unsurprisingly, leads to bank failures and a drop in the value of silver, followed by a series of business failures and railroads going bankrupt. Frustrated men in various industries attempt strikes, to little improvement.

President Cleveland and his party, the Democrats, are blamed for the economic troubles, and the following election sees record Republican victories. The depression becomes a key talking point in the bimetallism debate between those who advocate gold and silver standards for currency, and that debate fuels the political careers of pro-silver William Jennings Bryan and (ultimately victorious) pro-gold William McKinley.

Out of frustration, many people seek new lives out west, where the frontier may no longer exist but new opportunities certainly do. From Seattle to Los Angeles, the western cities see significant growth as easterners and Midwesterners arrive seeking a fresh start, a blank slate, the old American promise of a day's wage for a day's work.

1905
The Industrial Workers of the World, or Wobblies, are founded in Chicago at a convention of radicals and socialists who oppose the American Federation of Labor (AFL), finding the AFL too conservative.

1906
The Pure Food and Drug Act is passed by the American government in response to public outcry over the quality of packaged foods and the potential poisonousness of patent medicines. The Meat Inspection Act, similarly, empowers the Department of Agriculture to inspect and destroy any meat found unfit for human consumption.

1911–1913
Henry Ford's Model "T" is the first wildly successful automobile, a product of his assembly line. Though they have been around for decades, after the Model "T" automobiles rapidly shift from luxury items to necessities.

1914
The Federal Trade Commission (FTC) is established in the United States as a further act of antitrust legislation, seeking to protect consumer interests. The FTC is charged with the creation of regulations that further the elimination of anti-competitive practices.

The Clayton Antitrust Act refines the Sherman Antitrust Act, prohibiting anti-competitive price discrimination, mergers and acquisitions that lessen or harm competition, many cases of exclusive dealings and tyings, and one person serving as director of more than one corporation in the same industry.

1929
The New York stock market crash of Black Tuesday on October 29 leads to a lengthy worldwide depression, underscoring the increasing interconnectedness of national economies. Ironically, optimism persists after the crash more than in some previous panics, with many people convinced that the days of severe banking panics are behind them; instead, the Great Depression is the worst depression of modern history, its effects persisting until World War II in the United States—and indeed helping to precipitate that war by making Germany more and more economically desperate.

A portrait of Henry Ford in 1919. He became an icon of the American manufacturing system.

1933–1936
President Franklin D. Roosevelt institutes his New Deal programs to deal with the Great Depression. The First New Deal, enacted in his first year of office, is a series of short-term fixes, emergency relief programs, and banking reforms. The Second New Deal, enacted in 1935 and 1936, more specifically targets the large corporations that the Roosevelt administration holds partially accountable for the Depression.

A number of New Deal programs still exist and have become integral to the federal government, including the Federal Deposit Insurance Corporation that backs banks, the Social Security Administration, and the Securities and Exchange Commission that oversees the securities and stock market.

1944
The United Nations Monetary and Financial Conference, often called the Bretton Woods conference, is held in Bretton Woods, New Hampshire, in the last

months of World War II. A group of 730 delegates arrive from all 45 Allied nations, preparing for a postwar world economy.

The conference seeks to accelerate postwar recovery and to preserve political stability by avoiding severe economic panic in any affected nation. An international currency exchange system is established that remains in use through the 1970s. The conference is notably pro-capitalist, and seeks to protect open markets, ending economic nationalism and the use of trade blocks to preserve national economic interests (an idea that remains controversial today).

Bretton Woods also establishes the International Monetary Fund (IMF), an organization that oversees the global economy to promote free trade and economic growth.

1947
When Bretton Woods fails to create its proposed International Trade Organization, the General Agreement on Tariffs and Trade (GATT) is adopted instead. GATT is a treaty that seeks to further the Bretton Woods ideal of ending economic nationalism by reducing or eliminating tariffs, allowing national economies to intermingle without such filters. There are eight rounds of such tariff reductions over the next 44 years, leading up to the establishment of the World Trade Organization.

Dwight D. Eisenhower addresses a North Atlantic Treaty Organization conference in the late 1950s.

1949
The North Atlantic Treaty Organization (NATO) is established with headquarters in Brussels, Belgium. At first a political association of anti-communist nations—Belgium, Luxembourg, the Netherlands, France, the United Kingdom, the United States, Canada, Portugal, Italy, Norway, Denmark, and Iceland—the organization is galvanized by the 1950 outbreak of the Korean War, because of the assumption that all communist nations are working together. NATO becomes a military force from then on, dealing with Cold War conflicts.

1951
The Treaty of Paris creates the European Coal and Steel Community (ECSC), a common market for coal and steel for France, West Germany, Italy, and the three Benelux states (Belgium, Luxembourg, the Netherlands). The goal is to prevent further war between France and Germany. Attempts to create similar European Defense and European Political communities fail.

1955
The Warsaw Pact, a treaty among communist nations, is established in Poland. A response to the formation of NATO, it is originally composed of Albania, Bulgaria, the Czechoslovak Soviet Republic, Hungary, Poland, Romania, and the Soviet Union; East Germany joins in the following year. Like NATO, the Warsaw Pact nations pledge to support each other if any member are attacked; during the next thirty-some years of the Cold War, the Warsaw Pact and NATO member states engage in a number of proxy wars, never fighting directly.

1957
The European Coal and Steel Community countries form the European Economic Community (EEC), also called the European Common Market, to integrate the economies of its member states, dissolving tariffs and other trade barriers.

Euratom, the European Atomic Energy Community, is formed at the same time. Early conflicts among the EEC revolve around the difficulties of establishing a unified agricultural policy and the worries of infringing on the sovereignty of Community member states.

1960

The Organization of Petroleum Exporting Countries (OPEC) is formed, bringing together Iran, Iraq, Kuwait, Qatar, Saudi Arabia, the United Arab Emirates, Libya, Algeria, Nigeria, Angola, Venezuela, and Ecuador, at Venezuela's instigation. Essentially a cartel, OPEC's influence on the oil market has alarmed onlookers from the moment of its inception, and it bears significant responsibility for the oil crises of the 1970s. Advocates point out that before OPEC, and especially before World War II, Western nations regularly exploited the oil-producing Middle East.

1967

The Association of the Southeast Asian Nations (ASEAN) is formed, composed of Thailand, Malaysia, Singapore, and the Philippines, with further involvement on the part of Brunei, Burma (now Myanmar), Laos, Cambodia, and Vietnam.

The ECSC, EEC, and Euratom merge to become the European Community (EC), the precursor to today's European Union.

1973

Denmark, Ireland, and the United Kingdom join the European Community.

1981

Greece joins the European Community.

1986

Portugal and Spain join the European Community.

1989

The Asia-Pacific Economic Cooperation (APEC) is formed as a forum for 21 Pacific Rim nations to discuss common economic and trade concerns. Member states account for nearly half of the world's population and more than half of its gross domestic product, and include Australia, Brunei, Canada, China, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, the United States, Hong Kong, Mexico, Papua New Guinea, Chile, Peru, Russia, and Vietnam.

The Revolutions of 1989 bring about the fall of the "iron curtain" in Eastern Europe, as many socialist states are dismantled. The Berlin Wall is taken down in October, leading in less than a year to the reunification of Germany after two generations. In December, the United States and the Soviet Union officially declare the Cold War to be over.

President Ronald Reagan (right) and Arizona Senator John McCain in 1987. Reagan favored "trickle down" economics.

1991

The Soviet Union collapses amid a resurgence of nationalist sentiment among citizens of its member states and the examples set by the revolutions of 1989.

1993

The North America Free Trade Agreement (NAFTA) is signed amid considerable controversy. NAFTA reduces trade and movement restrictions among the North American nations—Canada, the United States, and Mexico—and in the United States is criticized by both the left and the right wing, as it leads to a significant decline in American manufacturing employment (commonly ascribed to corporations closing American plants and opening Mexican ones with cheaper workers). Though free passage across the borders is foreseen as a second stage of NAFTA, the tightening of American borders after the 9/11 attack postpones this indefinitely.

The Maastricht Treaty goes into effect, forming the European Union (EU), formerly the European Community, which is now one of three pillars of the EU, alongside the Common Foreign and Security Policy and Justice and Home Affairs. Though the name reflects the fact that the EU is no longer a merely economic community, it is the economic effects that are the most profound in both the short- and long-term, as work begins to put the euro into circulation and member states ready themselves for the adjustments of economic unification.

1995

The World Trade Organization (WTO) supercedes GATT, which was perceived as ill-adapted for an increasingly global economy. GATT isn't dissolved, but is under the umbrella of the WTO now; the WTO thus supervises international trade, policing member states to ensure adherence to WTO trade agreements, enforces matters pertaining to intellectual property (a growing concern in an age of computer software and digital media), and so on. WTO member states must grant all other member states most-favored-nation status—or in other words, a member state can favor no other member state more than the others.

Austria, Finland, and Sweden join the European Union.

2001

China joins the World Trade Organization.

2002

The euro is adopted by members of the EU, replacing the national currencies of 12 countries.

2004

In the European Union's (EU) largest expansion—the Eastern bloc enlargement—Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia are admitted on May 1. Though the largest in countries, population, and landmass, this is the smallest enlargement in gross domestic product (GDP), and brings the per-capita GDP of the EU down severely.

2007

Bulgaria and Romania join the EU, having been unprepared to join as part of the Eastern bloc enlargement.

2008

The mortgage credit crisis in the United States reaches critical mass. The U.S. housing bubble that peaked in 2005 led to declining home values from 2006 on, followed by more and more borrowers becoming delinquent or defaulting. The first effects are confined to the banking and housing industries. Foreclosed properties sell for less than expected thanks to lack of demand, so much of the inflated demand of the bubble having been fueled by speculative purchasing. But the effects on the national and international economies are far more severe than in previous housing slumps. The crisis becomes the focal issue of the presidential election, and the George W. Bush administration and both candidates support an unpopular emergency bailout plan drawing on a $700 billion fund called the Troubled Assets Relief Program.

2009

In response to the ongoing worldwide financial crisis, recently inaugurated U.S. President Barack Obama signs into law the American Recovery and Reinvestment Act ("stimulus plan") on February 17. The largest chunk of the act's $787 billion in expenditures goes to federal programs, including assistance to those most in need (unemployment benefits, food stamp and Social Security increases, school lunch programs and Meals on Wheels, public and low-income housing), infrastructure improvements (including much-needed bridge repair programs and funding for public transportation), and improvements to the country's energy sector. Despite the size of the stimulus plan, it does not represent the whole of the spending expected by the Obama administration.

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ABN AMRO Holding

The parent company of the ABN AMRO consolidated group, ABN AMRO Holding N.V. provides global financial services. In its history of more than one and a half centuries, the company went through a number of mergers and acquisitions. Its origins can be traced back to the Netherlands on March 29, 1824, when Nederlandsche Handel-Maatschappij (Netherlands Trading Society, or NTS) was established. It worked for the Dutch government as a banking concern and also provided finances to industrial houses in the Netherlands and Dutch East Indies. From 1874, the NTS went into banking on a global scale.

In the Netherlands, ABN AMRO's branches increased significantly after World War II. It merged with Twentsche Bankvereeniging in October 1964 and came to be known as Algemene Bank Nederland (ABN). In the same year, there was a merger of the Amsterdamsche Bank with the Rotterdam Bank, with headquarters in Amsterdam. The new name was the Amsterdam-Rotterdam Bank (AMRO).

Talks began between ABN and AMRO about the expansion and strengthening of the two banks, whose capital bases were both strong. ABN AMRO Holding was set up on May 30, 1990, and the legal merger became effective on September 22, 1991. With headquarters in Amsterdam and a network of over 3,500 branches in 63 countries, ABN AMRO became a premier financial institution providing products, asset management, and a diversified array of commercial, investment, and retail banking services. From 1991 to 2007, ABN AMRO ranked among the largest banks, having total assets of $1.3 trillion at the end of 2006. It employed 102,556 persons and served approximately 20 million clients. Its main area of operations were the Netherlands, the U.S. midwest, and Brazil. ABN AMRO went on an acquiring spree and entered into joint ventures in all three areas.

ABN AMRO acquired the Cragin Federal Bank for Savings in Illinois in July 1993. It began to dominate in the American midwest banking sector after also taking over Michigan-based Standard Federal in 1996. After five years, the takeover of Michigan National Corporation strengthened ABN ARMO's position in the United States even further.

Although ABN AMRO had been making its presence felt in Brazil since 1917, the bank became a more active player after the acquisition of Banco Real in 1998, which was followed by Bandepe and Paraiban. The position was buttressed further after the 2003 takeover of Sudameris bank; ABN AMRO was then the fourth-largest bank in Brazil.

The bank's other international acquisitions included the London stockbroking firm of Hoare Govett (1992), the Scandinavian investment bank Alfred Berg (1995), and the German banks Delbruck and Co. (2002) and Bethmann Maffei (2003). It had also entered into joint ventures with N.M. Rothschild & Sons of London (1996) and Mellon Bank Corporation of Pennsylvania (1998). In 2006 it was able to hold a majority stake only of Italy's Banca Antonveneta.

ABN AMRO undertook an overhaul of its organizational structure and by 2006 it had seven Strategic Business Units (SBUs); two international and five regional. Global clients included rich individuals and about 550 multinationals. Regional clients of the SBUs were from the Netherlands, Europe, the Americas, and Asia. ABN AMRO pursued a very high standard of professionalism, and its business principles are to aim at excellence in its services to business partners and shareholders. ABN AMRO has also done considerable work in contributing to sporting events and projects such as the World Tennis Tournament, the Volvo Ocean Race, and Ajax Football.

RFS Holdings (a conglomerate of the Royal Bank of Scotland Group, Fortis, and Banco Santander) became the owner of ABN AMRO in October 2007. The Dutch government then purchased Fortis's interest in the company on October 3, 2008. It was interested in the SBUs of the Netherlands, private clients, and the International Diamond and Jewelry Group. On October 15, 2008, the finance ministry of the Dutch government appointed its nominee to the supervisory board of ABN AMRO. The Dutch state and the bank would work together for better performance from ABN AMRO. The interim financial report of ABN AMRO Holding ending in June 2008 noted various types of market risks relating to interest, foreign exchange, and equity price. It recorded a profit of about $3,750 million after tax, proving the soundness and vitality of the business. In the present scenario, ABN AMRO Holding has a bright future.

See Also: Acquisitions, Takeovers, and Mergers; Banco Santander Central Hispano Group; Fortis; Netherlands.

Bibliography. "ABN AMRO—Braveheart Two," *Economist* (v.8531/84); ABN AMRO, *The 2007 Guide to SEPA: Becoming a Reality* (Euromoney Publications PLC, 2007); ABN AMRO, www.abnamro.com (cited March 2009); "After ABN AMRO: Three Amigos, Only One Conquistador," *Economist* (v.8589/88); "Banking: ABN AMRO Aims to Be One of Asia's Big Three," *Far Eastern Economic Review* (June 18, 1998); Douglas G. Cogan, *Corporate Governance and Climate Change: The Banking Sector: A Ceres Report* (RiskMetrics Group Inc., 2008); Deborah Orr, "Dutch Colonizers—ABN AMRO's Expansion," *Forbes* (June 14, 1999).

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Absenteeism

Absenteeism can be defined as any failure on the part of the employee to report to work when scheduled to do so. This includes absences that occur for any reason, whether involuntary or voluntary. Here, involuntary absenteeism refers to unavoidable illnesses and injuries that prevent an employee from attending to their work obligations. Voluntary absenteeism, on the other hand, includes unplanned absences to look after sick dependents, but can also be the outcome of boredom and/or low job satisfaction.

Unauthorized absenteeism represents a major cost for organizations all over the globe. Although individual incidents of absenteeism are fairly innocuous, the cumulative impact can be substantial. The impact on the North American economy alone is estimated to be in excess of $60 million. The obvious costs are those associated with the absentees themselves and includes their regular pay and benefits. Beyond this are the costs related to replacement labor, overtime, and lost productivity. There are also several flow-on effects that impact other workers in the organization, including the increased workload and stress experienced by staff members who are required to compensate for the absent coworker. Understaffing or work overload may in turn increase the risk of workplace accidents and reduce the amount of output and the quality produced. There are also additional time and financial costs associated with extra supervision and training of temporary staff. Studies reveal that the costs of absenteeism may in fact be higher than the amount of work time lost due to industrial disputes.

The two key factors attributed to high levels of absenteeism are ability to attend and motivation to attend. The variables that affect an employee's ability to attend work are often beyond the control of organizations. An employee's motivation to attend work, on the other hand, includes variables such as employee morale and satisfaction—factors that are within the control of the organization. A number of studies have shown that organizations that experience high levels of absenteeism also tend to experience issues related to staff morale. Industrial disputes tend also to be greater, as well as the costs associated with workers compensation. Overall, there is an important link between absence and factors such as poor interpersonal communication, job boredom, and poor supervisory skills. Furthermore, there is significant evidence to suggest that a large proportion of absences are potentially avoidable.

A 2005 study on U.S. human resources executives found that personal illnesses accounted for only 35 percent of unscheduled absences from work. Most absences were due to other reasons, including family issues (21 percent), personal needs (18 percent), entitlement mentality (14 percent), and stress (12 percent). Studies also confirm that absenteeism is a low base rate behavior. In other words, absenteeism is most typically associated with a small number of people who are absent often.

Surveys conducted on absenteeism indicate that those on higher rates of pay and with longer length of service are less likely to be absent. Furthermore, absenteeism rates tend to grow as an organization grows. Other statistics relating to absenteeism suggest that women tend to be absent more frequently than men and younger employees are absent more frequently than older employees. When older employees are absent, it tends to be for longer periods of time than younger employees. Absenteeism rates also tend to be much higher in unionized workplaces.

Reduction Strategies

Due to the costs and associated flow-on effects, organizations have pursued many strategies to reduce absenteeism. Most of these measures have been designed to improve employees' quality of work life and levels of job satisfaction, because it is generally accepted that the control of absenteeism depends partly on successfully addressing the physical and emotional needs of employees. These measures are also based on the assumption that absenteeism is the result of employee withdrawal from dissatisfying aspects of the job. The implementation of a high-performance work culture has been one particular strategy utilized by organizations, with a particular emphasis on ensuring employees have an adequate "fit" in the organization.

Other organizations have pursued more flexible work practices that meet the needs of both the organization and its employees. Such measures are based on the assumption that absenteeism is due to the inadequacies associated with existing arrangements, and that the curbing of absences requires providing employees with greater control over when and where they work. The initiatives that have been found to be most successful in reducing levels of unscheduled absences are the implementation of alternative work arrangements, compressed work weeks, job sharing, and telecommuting.

Job redesign has also been the focus of many human resource initiatives aimed at combating absenteeism. Measures such as job enlargement, job rotation, and job enrichment have the impact of increasing the scope of jobs and the skills required to perform them, thus making a typically routine and mundane task more interesting and challenging. Organizations have also implemented more preventative occupational health and safety strategies in order to minimize absences related to workers compensation.

While absenteeism has historically been viewed as an indicator of the adjustment of employees to the workplace, there has been limited attention paid to the social context within which such adjustments occur. The last two decades, however, have been defined by an increased consciousness of the implications of social context on absence behaviors. The emphasis on the social approach has emerged through observations into absenteeism in organizations; in particular, the variations in absence rates across different units and social groups within departments, departments within organizations, and organizations within industries. This has led some researchers to suggest the presence of absence cultures in certain organizational contexts.

See Also: Employer–Employee Relations; Job Enrichment; Motivation.

Bibliography. M. Buschak, C. Cravem, and R. Ledman, "Managing Absenteeism for Great Productivity," *SAM Advanced Management Journal* (1996); R. Isherwood, "The Financial Effects of Absence from Work," *Bulletin of Industrial Psychology and Personnel Practice* (1952); R. M. Steers and S. R. Rhodes, "Major Influences on Employee Attendance: A Process Model," *Journal of Applied Psychology* (1978); J. C. Thomas and M. Hersen, *A Handbook of Mental Health in the Workplace* (Sage, 2002).

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On American farms, a ton of wheat can be produced with only one hour of labor, versus four hours in the rest of the world.

Absolute Advantage

The argument that countries differ in their ability to produce goods efficiently, and hence one country may have an advantage in the production of a product that is absolute over any other country in producing it is called absolute advantage. Efficiency is defined as producing with a minimum of waste, expense, or unnecessary effort, and therefore includes low cost, fewer resources, and fewer labor hours.

Writing about agricultural trade, Luther Tweeten argues that the United States has an absolute advantage in wheat production because only one hour of labor is required to produce a ton of wheat versus four hours to produce a ton of wheat in the rest of the world. In contrast, elsewhere in the world sugar production requires two hours of labor versus three in the United States to produce one ton of sugar. Because labor supply is limited and transferable between commodities but not between countries, wheat output (elsewhere in the world) is forgone to produce sugar. Similarly, the United States forgoes the expenditure of three hours of labor to produce one ton of sugar to produce three tons of wheat.

While the concept of absolute advantage is closely associated with David Ricardo, the concept actually originated with Adam Smith's 1776 book *The Wealth of Nations.* According to Smith, countries should specialize in the production of goods for which they have an absolute advantage and trade these goods for goods produced by other countries. Smith's argument is that a country should never produce goods at home that it can buy at a lower cost from other countries. Smith demonstrates that, by specializing in the production of goods in which each country has an absolute advantage, countries will benefit by engaging in trade.

Smith was attempting to explain the process by which markets and production actually operate in society. Absolute advantage is an extension of Smith's concept of the division of labor in the production process to a division of labor and specialized product across countries. As Smith observed the production processes of the early stages of the industrial revolution in England, he saw that fundamental changes were occurring. Whereas, in earlier days, a worker performed all stages of the production process, producing enough output for his own needs only, the factories of the industrializing world were separating production into distinct stages. Each stage would be performed exclusively by one individual, hence the division of labor. This specialization increased the production of workers and industries.

David Ricardo expanded Adam Smith's argument to consider the case of a country that has an absolute advantage in the production of all goods. In that case, would such a country derive any benefit from trade? In his *Principles of Political Economy,* Ricardo argued that it made sense for a country to produce those goods that it produces more efficiently and to buy from other countries those goods that it produces comparatively less efficiently. This is the concept of *comparative advantage*, with which Smith's absolute advantage is often confused.

While the industrialized world may have absolute advantage in the production of many commodities, much of the world's natural resources are to be found in developing countries, from which they are mined, quarried, or extracted and shipped overseas for refining and fabrication where high levels of infrastructure (particularly utilities and transportation), skilled labor, and capital are available. Mashaalah Rahnama-Moghadam and colleagues argue that the occurrence of natural resources in the less developed countries might suggest that economic growth had a base in those countries, but the lack of requisite economic resources has made these natural resources little more than export commodities.

Where absolute advantage derives from a unique natural resource, Raineesh Narula and other international trade and business scholars argue that current and future domestic and international investment activity will be focused on those industries related to the exploitation of this resource, often delaying the development of industry in such countries. Countries with an absolute advantage in scarce natural resources, like Norway and Australia, are likely to receive a larger amount of inward investment from home countries that need scarce resources as inputs to higher value production. Resource-poor countries would seek to acquire these resources through outward direct investment. Hence, absolute advantage dictates foreign direct investment strategy.

Vivek Suneya takes this thought further, considering capital itself a scarce resource. He argues that when capital is mobile it will seek its absolute advantage by migrating to countries where the environmental and social costs of enterprises are lowest and profits are highest. While greater productivity and efficiency are a strong argument for offshore outsourcing, Suneya would counter that unrestricted global capital mobility does not serve the needs of society, specifically the preservation of social cohesion and the avoidance of mass unemployment.

See Also: Comparative Advantage; Competitive Advantages of Nations; Economies of Scale; Free Trade.

Bibliography. Panos Angelopoulos and Panos Mourdoukoutas, *Banking Risk Management in a Globalizing Economy* (Quorum Books, 2001); Jeffry A. Frieden and David A. Lake, *International Political Economy: Perspectives on Global Power and Wealth* (Routledge, 2000); Bruce E. Moon, *Dilemma of International Trade* (Westview Press, 2000); Raineesh Narula, *Multinational Investment and Economic Structure: Globalisation and Competitiveness* (Routledge, 1996); Mashaalah Rahnama-Moghadam, Hedayeh Samavati, and David A Dilts, *Doing Business in Less Developed Countries: Financial Opportunities and Risks* (Quorum Books, 1995); Vivek Suneja, *Understanding Business: A Multidimensional Approach to the Market Economy* (Routledge, 2000); Luther Tweeten, *Agricultural Trade: Principles and Policies* (Westview Press, 1992); Alvin G. Wint, *Corporate Management in Developing Countries: The Challenge of International Competitiveness* (Quorum Books, 1995).

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Academy of International Business

The Academy of Education for International Business (AEIB) is a professional body that was created on November 17, 1958, and became operational in 1959 to foster "the creation and dissemination of knowledge about international business and policy issues." In 1974 the association was renamed the Academy of International Business (AIB).

Today, AIB has more than 3,000 members from 73 countries and is organized into 14 regional chapters geographically: six in Asia and southeast Asia (Australia–New Zealand, China [Beijing], Japan, Korea, Hong Kong, and India); six in North America (one in Canada and five in the United States [midwest, northwest, southwest, southeast, and west]); and two in Europe: Western Europe (Copenhagen) and United Kingdom–Ireland. The Academy is administered by the Dean of Fellows, elected every three years by the body of Fellows of AIB, and the Secretary-Treasurer who is appointed by the Dean "to assist in the affairs of the Fellows Group."

The stated objectives of the association according to its constitution are (1) to facilitate knowledge sharing; (2) to encourage and foster research activities, and bring together professionals from academia, business, and government; (3) to enhance education in international business and through international cooperation; and (4) to promote internationalization. These objectives are pursued through the organization of international and regional conferences and AIB publications that focus on the multicultural background of its participants and the interdisciplinary methodology of its research.

The AIB organizes yearly international conferences. From 1959 until 1985 the conferences were held in North America (two in Canada and 25 in the United States). However, since then, the location has varied significantly (nine in the United States, five in Europe, three in Asia and Canada, and one each in Australia, Mexico, and Puerto Rico). Each regional chapter holds yearly conferences and is responsible for the chapter's publications.

AIB publishes the *Journal of International Business Studies* (JIBS), a highly rated journal according to the Social Science Citation Index. In 2007 it was rated seventh out of 72 in the business category and 10th out of 81 in the management category.

The formation of the AIB Fellows was first brought up in April 1975 by Phillip Grub and Jean Boddewyn (AIB president and vice president at the time) and finally came into existence in 1978 with the appointment of the first president of the AIB Fellows by Richard Farmer, Lee Nehrt. The purposes of the Fellows are "to recognize outstanding contributions to the field of international business, and to provide a forum for discussion among its members," as it is stated in the constitution of the association voted in January 1978. Fellows "shall be international-business teachers, researchers, and administrators—who have significantly helped develop knowledge and practice in the field." The body of the AIB Fellows consists of all past presidents and executive secretaries, full-time teachers and researchers, members of the AIB and non-academic members, "entrepreneurs and managers of private and public organizations mainly devoted to international business." The members are elected by the majority of the Fellows group (since the 1992 amendment) for life.

The original constitution has been amended six times through 2008. These amendments concerned the number, requirements, election process, and structure of the body of Fellows. The most important amendments that are currently applicable to the group of AIB Fellows are two. First, in 1985, the purpose of the Fellows was broadened to include "the exercise of leadership in the field of International Business," and the initial requirement of one-fifth of the body to be nonacademic entrepreneurs and managers was dropped. Second, with the 1997 amendment the number of Fellows was set at 60 under the age of 66 (the number was initially 100, then in 1982 it was limited to 50, excluding the over-70 Fellows). In 2006–07 the maximum of AIB fellows that can be elected each year was (again) raised to five.

See Also: Management Education; Management Research; Management Science.

Bibliography. Academy of International Business, aib.msu.edu (cited June 2008); Jean Boddewyn, *International Business Scholarship AIB Fellows on the First 50 Years and Beyond* (JAI Press, 2008).

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Accountability

This concept comprises many alternative meanings and connotations. Although a typical definition would suggest the fundamental notion involved is one of responsibility to someone, or for some action (and both elements could be present simultaneously, of course), there is the added dimension of the need to actually render an account (i.e., of one's conduct) to a superior person or authority so that the adequacy of the level of performance might (retrospectively) be judged.

At a general level, accountability is the basis of agency theory, whereby an appointed agent needs to demonstrate that they have exercised due discretion in the execution of the principal's best interests—although academics for many years have pointed out the implicit encouragement, because of the existence of reward structures that benefit the agent, for that agent to falsify records of activities undertaken on their principal's behalf. The Parable of the Unjust Steward is a classic case here, in which the steward, likely to be dismissed because of his poor performance, encouraged his master's debtors to falsify the amounts owing so as to curry favor with them and thereby achieve the potential for future employment when dismissed from his present job.

At the more specific (i.e., corporate) level, the concept of accountability finds expression in organizational legitimacy theory. This suggests there is a social contract between businesses and the society in which they operate, and that this mandate to exist might be withdrawn should those businesses not be seen as doing things of which society approves. This makes businesses "accountable" and only by rendering an indication of that accountability (and "account" in this context should not be interpreted as necessarily a financial one) is satisfaction achieved.

Not surprisingly, therefore, a thesaurus will suggest "responsibility," "liability," "culpability," "answerability," and "chargeability" as accepted synonyms. Additionally, increasing concern in the early years of the 21st century that good governance should be practiced by governments and nonprofit organizations, as well as by commercial concerns, means that "transparency" is additionally becoming perceived as an essential ingredient in the process—although it has been suggested that while accountability allows for feedback regarding a decision or action only after the event, transparency enables such reporting during, or even before, the relevant event. This has resulted in greater pressure than ever before being put on businesses to be more accountable regarding their actions as they affect both society and the environment.

Many different forms of accountability have been identified, with no less than eight types presently in vogue: moral, administrative, political, managerial, market, legal/judicial, constituency relation, and professional. Although most of these variations on the accountability theme are relatively straightforward, "constituency relation" is potentially obscure. This type of accountability relates to members of agencies representing citizens' interests in a particular domain, and possessing political rights and (more specifically) a government's obligation to empower such members to run for election; or, alternatively, to appoint them to public sector positions such as to hold government accountable and ensure that all relevant constituencies are heard in the policy-making process.

In Britain (as elsewhere in the developed world) accountability has been formally enshrined as a crucial principle of national government since the mid-1990s, at which time it became accepted that holders of public office should perceive themselves as accountable for both their decisions and actions to their public. Additionally, politicians should be prepared to submit themselves to whatever level of scrutiny appears appropriate to the office they hold.

Outside government, business, and nonprofit organizations, accountability has found extension to such things as nongovernmental organizations (NGOs) with their development of the International Non-Governmental Organisations' Accountability Charter, so as to encourage signatory NGOs to work globally in the advancement of human rights, sustainable development, environmental protection, humanitarian response, and other "public goods"; and international aid agencies such as the World Bank and International Monetary Fund (IMF). This last development raises an interesting question regarding to whom a specific body might be considered accountable. While it is the developing nations who receive the beneficence of aid programs, it is the more wealthy nations in the world who provide the wherewithal. So are the World Bank and IMF accountable to the givers or to the receivers?

Various bodies have appeared to promote the accountability agenda, probably most significantly AccountAbility, which for example, produces an annual AccountAbility Rating that measures the extent to which companies put responsible practices at the heart of their business (with the 2007 "winner" being the British petroleum giant BP). AccountAbility is also concerned with specific countries' efforts to advance global competitiveness based on responsible business practices (in which endeavor it has recruited the expertise of Nobel laureate Al Gore). The intention is to provide a unique health check on responsible globalization, in addition to identifying major opportunities for more responsible marketing, taking into account factors such as climate change, human rights, anticorruption, and gender issues.

See Also: Corporate Governance; Corporate Social Responsibility; Corruption.

Bibliography. A. Schedler, "Conceptualizing Accountability," in A. Schedler, L. Diamond, and M. F. Plattner, *The Self-Restraining State: Power and Accountability in*

New Democracies (Lynne Rienner Publishers, 1999); D. G. Woodward, P. Edwards, and F. Birkin, "Organizational Legitimacy and Stakeholder Information Provision," *British Journal of Management* (v.7, 1996).

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Accounting Harmonization

Accounting harmonization is the process of minimizing the differences in financial reporting practices across national boundaries. Accounting is a social science, and accounting practice varies across countries due to differences in culture, religion, history, legal and taxation systems, financing and business ownership systems, and level of economic development.

In recent decades, the process of globalization has created the demand for accounting harmonization through investors' awareness that difference in accounting practice due to different rules discourages cross-border investments. Accounting harmonization is also beneficial for multinational corporations operating and raising capital in different countries. Further, accounting harmonization can provide significant cost savings in staff training, and offers mobility and flexibility for public accounting firms.

Attempts to harmonize accounting standards and accounting practice internationally were initiated by the London-based accounting body called the International Accounting Standards Committee (IASC). The IASC was established in June 1973 as a result of an agreement by accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland, and the United States. It was created with two key objectives: (1) to formulate and publish accounting standards for global acceptance and observance; and (2) to work for the improvement and harmonization of accounting regulation, standards, and reporting internationally. In the early years of the IASC, its standards were too broad and thus were ineffective in improving comparability of financial statements internationally.

In the late 1980s, the International Organization of Securities Commissions (IOSCO), a body comprising national securities regulators, had realized that having a single set of accounting standards internationally had the potential for significantly reducing the reporting costs for multinational companies wishing to raise capital across national boundaries. Subsequently, the IASC undertook a project to make its standards more restrictive and hence more acceptable to the IOSCO. By 1999 the IASC had revised its core standards, which were accepted by the IOSCO members with the exception of the U.S. Securities and Exchange Commission.

The IASC was superseded by the International Accounting Standards Board (IASB) in 2001. The IASB had adopted all of the IASC standards and embarked on issuing new standards under the name International Financial Reporting Standards (IFRS). The IFRS has since gained widespread acceptance among national regulators permitting or requiring publicly listed companies to comply with them in their financial reporting. As a result, in recent years, adoption of the IFRS has become the dominant trend rather than focusing on harmonization. One of the main obstacles for global adoption of IFRS is the United States's continuing reluctance to give up its own standards on the suspicion that IFRS are of lower quality and less comprehensive than the U.S. standards issued by the Financial Accounting Standards Board (FASB).

In recent years, however, the FASB and the IASB have launched several joint projects in order to minimize differences between the FASB standards and the IFRS. In 2002, at a meeting in Norwalk, Connecticut, the IASB and the FASB agreed to harmonize their agenda and reduce differences between the IFRS and the FASB standards. In 2006 a Memorandum of Understanding was issued by the two standard setters to work toward achieving convergence between the IFRS and the FASB standards. Some progress has been made in this direction, although slowly. For example, since October 2004, the IASB and the FASB have had an ongoing project to develop a common conceptual framework. As of June 2008, these two bodies have several joint projects to develop standards.

A recent development is the concession offered to foreign companies in the United States with regard to their financial reporting. Previously, foreign companies listed on the U.S. stock exchanges were required to issue their financial statements using either FASB standards or local accounting standards or IFRS and reconciling the IFRS- or local standards–based income to the FASB standards. Since 2008 foreign companies that are listed on U.S. stock exchanges and issue financial statements based on IFRS no longer are required to do this reconciliation.

See Also: Auditing Standards; Corporate Accounting; Disclosure Requirements; International Accounting Standards Board; International Financial Reporting Standards; Securities and Exchange Commission.

Bibliography. E. N. Emenyonu and S. J. Gray, "International Accounting Harmonization and the Major Developed Stock Market Countries: An Empirical Study," *The International Journal of Accounting* (1996); J. Fowler, "The Future Shape of Harmonization: The EU versus the IASC versus the SEC," *European Accounting Review* (1997); R. D. Nair and W. G. Frank, "The Harmonization of International Accounting Standards, 1973–1979," *The International Journal of Accounting* (1981); C. Nobes and R. Parker, *Comparative International Accounting* (Pearson Education, 2002).

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Accounting Information Systems

The field of accounting information systems (AIS) combines that of accounting with the much newer field of information systems, systems that include people, processes, procedures, and information technology in a flexible resource used to handle data. Specifically, accounting information systems are a subset of management information systems, systems designed to support and supplement the decision-making process at all levels of management. The field of AIS includes the use, design, and implementation of such systems, and their adherence to traditional accounting methods and contemporary standards in accounting practices.

On the technology front, AIS systems usually include computers—ranging from ordinary personal computers, to specialized workstations, to dedicated servers for processing large amounts of data—equipped with scanners (for data entry) and internet access, compatible with electronic data interchange (EDI), and set up to print out various financial reports. Applications generally cover procedures and reporting areas like budgeting, inventory, assets, purchasing, accounts payable, accounts receivable, and billing, as well as human resources applications like benefits and pension administration, payroll, and time sheets.

AIS systems can cover everything from complicated financial management planning that would take significant man hours to compute and double-check, to basic transaction processing. Generally speaking, everyday business transactions—buying, selling, and producing—will be recorded, summarized, and classified at the time of recording, making it easy to access data for new modules after the time of transaction. Depending on the nature of the business, cost accounting systems may be put in place in order to track production costs of goods or the efficiency of services—or analytical systems may track performance and highlight areas where resource allocation can be improved. Management is typically given greater access to this information than employees.

The development and needs-tailoring of an AIS is a five-stage process. As with all systems development, planning comes first, with the objectives and scope of the system made explicit. The analysis stage documents the processes in use, reviews the types of data generated or recorded by the business, and analyzes what can be automated, streamlined, or otherwise altered. Sometimes most significantly, the analysis stage also registers what sorts of decisions management employees make on a regular basis, often with the result of identifying areas in which AIS can be applied that were not foreseen in the planning stage. The analysis can take a long time, particularly if the nature of the business is such that it must be observed for a lengthy period of time in order to collect a full set of data (businesses subject to seasonal impacts, for instance, like restaurants facing crowds on Valentine's Day or resorts dealing with seasonal slumps, should ideally be monitored for the full year, or incorporate information from a model based on such a set of observations).

The third stage, design, develops elements of the proposed system based on the results of the analysis. Typically, flowcharts or other visual reports are used to present the designs of processes and some other elements. Part of the design stage involves identifying the reports that will be generated by the AIS, and the form they will take. Not all information collected should be present in standard reports, or the critical information will be lost to the casual glance; at the same time, reports should be tailored to their expected audience, not only in content but in presentation. Extensive software options are available to assist in the design stage.

The implementation stage involves the construction and delivery of the system, as well as the testing and security checks thereof. This may require a conversion sub-stage if the AIS is going to replace any processes or systems in use at the business. Finally, the support stage, which continues long after the AIS has been put into use, updates and maintains the AIS, confirms that it is performing as intended and expected, and reevaluates the business to see if further improvements can be made.

See Also: Accounting Software; Cost Accounting; Disclosure Requirements; Information Systems; Management Information Systems; Managerial Accounting.

Bibliography. Nancy A. Bagranoff, Mark G. Simkin, and Carolyn Strand Norman, *Core Concepts of Accounting Information Systems* (John Wiley & Sons, 2008); James A. Hall, *Accounting Information Systems* (South-Western College Publishing, 2008); Marshall B. Romney and Paul J. Steinbart, *Accounting Information Systems* (Prentice Hall, 2008).

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Accounting Software

Accounting software is a type of computer program that carries out accounting functions. This software has now largely replaced older paper accounting systems. The software may be in the form of packages or written specially to meet a business's unique requirements. Accounting modules include the general ledger, accounts receivable, accounts payable, payroll, inventory, and fixed assets, and integrated accounting software usually links a number of these modules together. Data from one module are transferred to another module; for example, updating accounts payable automatically updates the general ledger.

The general ledger module is central to the whole accounting system. A small business may find that a general ledger module is adequate. The general ledger module typically produces a chart of accounts, journals, trial balance, general ledger, and financial statements. An accounts receivable module is needed where there are significant amounts of sales transactions. The accounts receivable module assists cash flow and credit policy. Receivables from customers are tracked, reconciled, invoiced, and aged. An accounts payable module is needed only when numerous checks are written. The frequency of the system may be weekly, semi-monthly, or monthly, depending on the availability of cash discounts and the number of transactions. The accounts payable package makes out checks to vendors, assures the receipt of discounts and prepares an aging of payables.

Payroll software aids in determining the payroll deposit and offers needed payroll data at tax reporting time. A good fixed asset package could provide description and categorization of assets; number of assets accommodated; cost, life, and salvage value for fixed assets; allowance for different depreciation methods; pro-rata depreciation calculation and fixed asset cost center.

In purchasing accounting software, compatibility, efficiency, integration, and cost are considerations. It is better to purchase individual modules from one supplier. At the low end, commercial programs are available at around $100. Low-cost accounting software programs focus on cash flow and profitability functions, which small business owners are most concerned with. Two examples of inexpensive small business accounting software are *Quickbooks* by Intuit and *Peachtree* products. They are scalable products that may be upgraded as a business grows. Low-end accounting software can be a fairly good accounting information system solution for businesses with less than $10 million per year in revenues and fewer than 100 employees.

When transaction processing needs grow in volume and complexity, a mid-range software package may be a better solution. Some examples are Microsoft's *Dynamics GP* and Sage Software's *MAS 90, Everest,* and *Accpac*. With these programs, modules cost several hundred dollars each and are usually sold separately. Many international companies do their business globally and need software to handle transactions in multiple currencies. This software can convert transactions from one currency to another and can even write checks in foreign currencies. Another example of a specialized feature that may be included in higher-end accounting software is the ability to split commissions among multiple salespersons.

The number of transactions processed monthly is one important factor in the choice between low-end and high-end software. If a company processes only a few accounts receivable transactions daily, an inexpensive package should handle this processing satisfactory. Transferability is also important: Each time one changes software, employees may need to reenter all transaction data. Cost savings are great when the software vendor offers programs that allow data to be imported automatically into higher-end products.

See Also: Accounting Information Systems; Cost Accounting; International Accounting Standards Board; International Financial Reporting Standards; Managerial Accounting.

Bibliography. Nancy A. Bagranoff, Mark G. Simkin, and Carolyn Strand Norman, *Core Concepts of Accounting Information Systems* (John Wiley & Sons, 2008); James A. Hall, *Accounting Information Systems* (South-Western Cengage Learning, 2008).

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Account Settlement

Account settlement is a non-American term showing the summation of commercial activity of a business during its fiscal year. Companies will use the account settlement to paint a picture that investors use to determine whether they will invest in the company. Some of the key terms of an account settlement are defined below.

Net sales: Gross sales is the total amount in currency (such as euros) of goods sold during a particular period. Normally, this would be the company's fiscal year. This may or may not coincide with the country's calendar year. Net sales is the total amount of sales in currency minus any returns, deductions for damaged goods, or discounts.

Operating income: This figure shows the power of the company to earn money. Operating income is the total amount the company earns before deducting interest payments and taxes. Investors can use year-on-year comparisons to determine whether the company is improving or not improving. Some companies will simply state this as profit before taxation.

Ordinary income: Sometimes companies can beef up their income levels by selling property or other capital holdings. In order to see a "bottom line" of income from the companies' commercial activities, companies will publish their ordinary income, or income from things other than capital gains (selling land, factories, etc.).

Net income: Net income is the bottom line of whether a company is making money. Net income is a company's total revenue minus expenses needed to produce the revenue (salaries, materials, etc.), taxes, depreciation, and interest payments. This figure is one of the key figures (if not the key figure) investors use to determine whether they will invest in a company.

Operating margin: Companies express operating margins as percentages. Operating margin divides operating income by net sales. Operating margin seeks to take out variable costs so that investors can see how well the company can pay off fixed assets like debt or capital investments.

Earnings per share: Earnings per share is another figure used by investors to determine whether the company is profitable and worthy of more investment. While earnings per share can be slightly different depending on how it is defined, generally, earnings per share is income minus dividends of preferred stock (as opposed to an ordinary stock share which we are measuring here) divided by the number of outstanding shares. What makes this tricky is that the number of shares outstanding can fluctuate. Additionally, some overseas companies will remove "minority interests" income from their profit. Minority interests income is income from a company's investment in another company.

In addition to these key terms, the account settlement can be broken down by individual business units for large companies. For instance, if one were to look at British Petroleum's (BP's) account settlement, one would find account settlement for exploration and production, refining and marketing, and other small business units (alternative energy, shipping, treasury, aluminum asset, and other corporate activities) listed as Other Business and Corporate—Financial Statistics.

Finally, the account settlement will offer a narrative of future operations. Included in this narrative can also be a bridge between how recent acquisitions or operational expenses that may have weighed heavily in the current fiscal statement will bring about greater profit/income in future income statements. If a catastrophic event occurred (i.e., Hurricane Katrina), this impact may be mentioned here also.

See Also: Accounting Harmonization; Capital Account Balance; International Accounting Standards Board; Variable Costs.

Bibliography. British Petroleum, *Annual F&OI,* www.bp.com (cited March 2009); "Earnings Per Share," Moneyterms.co.uk (cited July 2008); "Operating Income/Net Sales/Operating Margin/Net Income," InvestorWords.com (cited March 2009).

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Acculturation

Acculturation refers to the adaptation process experienced by individuals or groups when settling into an unfamiliar culture. Whereas some migrating groups may seek to integrate with the host culture, others may choose to maintain their cultural roots and separate themselves from the "new" dominant culture. In a world where both temporary and permanent migration continue to increase it is vital to understand the challenges faced by such individuals and the strategies they employ to survive. Whereas previously migrating groups were not considered as viable segments to target with products and services, increasing immigrant numbers have alerted marketers to the potential profitability of these groups.

Since the term *acculturation* was first formally used by Robert E. Park in 1928 to describe the adaptation of immigrants, the earliest attempts at understanding the acculturation process were conducted in the fields of anthropology and sociology. However, since the 1980s business researchers have shown greater interest in the concept in light of the increasing market value of various immigrant groups. As many of the most prominent acculturation researchers were located in North America, empirical work concentrated on the large numbers of Hispanic immigrants who sought to settle in the United States. Today, the emphasis of most research is still on groups moving away from lesser-developed nations, though researchers have broadened their focus to encapsulate a wider array of migrating groups, including Chinese workers moving to Australasia, Eastern Europeans fleeing their home nations due to civil war, and Italians migrating to Canada.

In the early 1900s the U.S. Immigration Commission was established in response to growing public fears that U.S. culture was under threat from the increasing number and variety of immigrant groups. This uncertainty as to the role of immigrants in U.S. society led to the "melting pot model" (discussed below), which ensured that all immigrants relinquished their previous cultural traits and instead assimilated into everyday U.S. life. This policy led to the term *assimilation* becoming the commonly used term instead of acculturation. Indeed, terms such as *cultural interpenetration* and *ethnic identity* have also been used in studies to address the same process. This myriad of terms that essentially cover similar issues have been thought to have slowed down researchers' attempts to truly understand the process.

The Process

Acculturation typically occurs when two or more cultures are brought into continuous, firsthand contact (be it on an enforced or voluntary basis). The triggers for such cross-cultural interaction have included political unrest between nations, invasion, or even enslavement. More recently, acculturation has also been triggered by international trade agreements, educational or missionary activity, and transnational media. Acculturating groups face a number of obstacles in adapting to a new way of life and these can be particularly challenging in the early stages of their acculturation. Depending on the migrating group, these problems can include language difficulties, financial hardship, homesickness, loneliness, discrimination, and in some cases outright racial abuse. Historically, acculturation has been seen to be a four-step process that includes both positive and negative emotions for an immigrant:

- Honeymoon: Soon after migration, the immigrant enjoys a fascination with the host culture, where there is little firsthand contact or conflict.
- Rejection: In time, the immigrant may feel some homesickness and start to unfavorably compare the host culture with their previous life. This can result in negative and aggressive attitudes to their new home.
- Tolerance: In time, the intensity of these emotions will lessen and the immigrant will begin to acquire the skills and knowledge needed to survive in the new environment.
- Integration: The immigrant develops a confidence in the new culture, conflict decreases, and the new home becomes "another way of life."

Although each individual's experiences will vary, the above process does provide insight into the sorts of emotions experienced by immigrants upon arrival in an unfamiliar culture. The following discussion focuses on two models that describe strategies employed by immigrants to deal with the process.

The Melting Pot Model

Particularly in Western societies, initial reactions to immigrant groups have been very cautious. It was often unclear why such groups had moved to another society and, as a result, they were considered a threat not only by senior politicians but also the general population. In order to ensure that the cultural values of the dominant society were maintained, immigrants were often given no choice but to assimilate into society and lose all connections with their home country. This process became widely known as assimilation or the melting pot model, and was the dominant school of acculturative thought until as recently as the 1960s.

Although such an approach provided security for the host culture, it also meant that immigrants were not contributing to the cultural profile of the country. Immigrants were often considered the underclass of that particular society, and were largely confined to lower-grade employment and ignored by permanent residents. Immigrants were given no formal assistance in how to assimilate, and those who attempted to "integrate" by combining their previous cultural traits with those of the dominant society were deemed to be marginal and faced further sanctions from society.

A common outcome of the assimilation process was "overshooting": in their desperation to become members of the dominant culture, immigrants adopt extreme, overt behaviors they have observed from permanent residents. However, such behaviors were often perceived as artificial and failed to earn the acceptance of the host population.

Given the ethnocentric nature of the melting pot model, it is not surprising that social scientists began to criticize this approach from the 1960s. It has been suggested that as migrating groups became a more common phenomenon, assimilation became a less likely outcome of the acculturation process. Instead, immigrants started to show an increased willingness to retain some if not all of their original culture, particularly in countries such as Canada that are known for their culturally pluralist policies.

The Bi-Dimensional Model

In response to the growing criticism of the melting pot model, social scientists began to search for an alternative acculturation framework that accepted that assimilation was not the only strategy available to immigrants. In 1980 John W. Berry suggested that the choice of an immigrant's acculturation strategy or style could be determined by two questions: first, does the immigrant wish to retain elements of their original culture, and second, are relationships with the host culture to be developed? The answers to these questions led to the development of four acculturation styles that are widely regarded as the most comprehensive means of understanding the acculturation process:

- Assimilation: The traditional acculturation view that immigrants must relinquish their original cultural traits is now regarded as one potential option available to immigrants. This may remain a common outcome of the acculturation process in more mono-cultural societies.
- Integration: Whereas previously immigrants who attempted to combine cultures were regarded as marginal, this bicultural approach to acculturation is now regarded as the most suitable way for an immigrant to adapt. This is characterized by an attempt to forge friendships with members of various cultures, and may result in traits of the immigrant group becoming part of the dominant society's culture.

- Separation: The polar opposite of the assimilation outcome is when the immigrant shows no desire to become part of the host culture and instead retains all elements of their previous culture. This can lead to the development of separate cultural communities and a degree of distance being maintained from the dominant culture, which may result in conflict between various cultural groups.
- Marginalization: A previously ignored outcome of the acculturation process is when individuals become alienated by the whole experience, fail to integrate with the dominant society, and at the same time lose all links with their original culture. This is regarded as the most psychologically damaging acculturation outcome and may be the result of a failed attempt to integrate or assimilate.

This bi-dimensional model offers a number of potential acculturation outcomes and accepts that immigrants may not wish to simply assimilate. More recent research has identified integration as the best outcome in terms of lower stress levels; however, separation has become a particularly common strategy for immigrants in the United Kingdom and the United States.

A number of determinants are relevant in which of the above acculturation strategies are adopted by immigrants. In terms of demographic factors, it has been shown that second-generation immigrants are most likely to integrate: they will be encouraged to maintain their cultural heritage by family at home, but will have regular contact with the host culture through school and friendship networks. In general, later generations are more likely to become involved with the host culture, although this may be a source of intrafamily conflict with older generations. In addition, it is expected that younger, better-educated immigrants will show a greater propensity to integrate into dominant society, largely because they will have greater opportunities to interact with members of other cultures.

Another key issue in acculturation is the language ability of the immigrant. As communication is the primary means by which different cultures interact, those with stronger language skills will find it easier to forge new relationships. An inability to speak the host culture language can result in difficulties in finding employment, being a consumer, and even dealing with the country's welfare system.

The triggers of the acculturation process are also of particular relevance here; if the immigrants have been forced into a new environment because of war or political unrest, this will reduce their desire to assimilate or integrate. However, for those who are moving to another culture for personal reasons (for example, career or educational advancement) this may result in a heightened desire to understand and become involved with the host culture.

The level of cultural distance between the two cultures in question can also be significant in the acculturation process. For example, Chinese immigrants moving to the United Kingdom are more likely to struggle moving from a collectivist to an individualist culture. In some situations, the presence of racial prejudice may also act as a barrier to acculturation: The bi-dimensional model discussed above assumes that the host culture allows the immigrant to choose their preferred acculturation strategy. In reality, the host culture may well impose integration (in the case of a pluralist nation) or even separation if a significant level of discrimination exists.

As well as posing obvious challenges for the migrating groups, acculturation can also put pressures on various elements of the host culture: A substantial number of immigrants can place pressure on public services such as schools, hospitals, and other local amenities. Also, local authorities can face difficulties housing immigrants, and a lack of skills means that many struggle to find employment and depend on the welfare state. National governments have to find a delicate balance between welcoming a culturally diverse society while at the same time implementing measures to ensure such immigration does not cause unrest among the general population.

See Also: Cross-Border Migrations; Culture Shock; Ethnocentrism; Expatriate; Reentry.

Bibliography. W. Flannery, S. Reise, and J. Yu, "An Empirical Comparison of Acculturation Models," *Personality and Social Psychology Bulletin*, (v.27, 8, 2001); R. Maldonado and P. Tansuhaj, "Transition Challenges in Consumer Acculturation: Role Destabilisation and Changes in Symbolic Consumption," *Advances in Consumer Research*, (v.26/1, 1999); M. Novas, M. Garcia, J. Sanchez, A. Rojas, P. Pumares, and J. Fernandez, "Relative Acculturation Extended Model (RAEM): New Contributions with Regards to the Study of Acculturation," *International Journal of Intercultural Relations* (v.29, 2005); A. M. Padilla, ed., *Acculturation: Theory, Models and Some New Findings* (Westview Press, 1980).

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Achieved Status/ Ascribed Status

Dutch anthropologist Fons Trompenaars and English business professor Charles Hampden-Turner developed seven dimensions of culture that give key insights into successful international trade negotiations. The two researchers studied how people in specific countries resolve dilemmas, and based on an examination of thousands of respondents in over 100 countries, they identified seven basic dimensions for culture. International businesspeople use these dimensions when they design business strategies for different cultures, a task that is particularly important for dealing with emerging markets. One of the dimensions is achieved status versus ascribed status, which is defined below. Applications of the dimension then follow.

The concept of achieved versus ascribed status stems from the work of Talcott Parsons in his studies of social stratification, which Parsons defined as the "differential ranking of human individuals who compose a given social system and their treatment as superior or inferior relative to one another in certain socially important respects." Parsons defines ascribed status as that which results from birth or biological hereditary qualities, such as sex, age, or inherited socioeconomic status. At the other end of the spectrum, Parsons proposes that achieved status results from personal actions, such as that accomplished through talent and hard work.

Achievement Cultures

Trompenaars and Hampden-Turner adapt Parsons' thinking on ascribed versus achieved status to the study of cross-cultural management. Thus, Trompenaars and Hampden-Turner propose that an "achievement culture" is one in which people are accorded status based on how well they perform their functions, while an "ascription culture" is one in which status is attributed based on who or what a person is. Achievement cultures give high status to high achievers, such as the company's top salesperson or the drug researcher who finds a new treatment for controlling blood sugar. In an achievement-oriented culture, the first question someone may ask is "What do you do?" or "What have you done?", thus putting an emphasis on accomplishments.

In achievement cultures, social status can be changed through social mobility, the change of position within the stratification system. Changes in status can be upward or downward. Social mobility is more frequent in societies where achievement rather than ascription accounts for one's social status. Historically, social mobility has been typical of the United States.

Ascription Cultures

Ascription cultures accord status based on age, gender, schools attended, or social connections. Perhaps the most extreme form of ascribed status was the caste system in traditional society in India. Each person's caste group was determined at birth, as children joined their parents' caste group. Moving out of one's caste was virtually impossible as each caste could only perform certain jobs. Unskilled and low-paying jobs were reserved for lower castes, while highly skilled occupations were reserved for other castes.

In organizations in an ascription culture, the person who is part of the "old boys' network" may rise faster in an organization than someone who does not interact with the network. Similarly, an organizational member who has been with the company for 25 years may be listened to more often because of the respect that others have for the person's age and tenure with the firm. Thus, in an ascription-oriented culture, the first question someone might ask is "Where are you from?" or "Who is your family?", focusing on inherent characteristics.

For example, though this is slowly changing, in U.S. culture, males, particularly white males, have a high ascribed status and females have a lower ascribed status. The high ascribed status of males can outweigh many other status and power factors, including high achieved status and high-dominant personality traits in a woman. To counteract the initial ascribed status differences based on sex, research on leadership

Businesspeople from achievement cultures need to be aware of the weight of seniority in contacts with ascription cultures. When Japanese, Koreans, and Singaporeans were polled, 60 percent of respondents felt age alone should confer additional status.

demonstrates that to reduce the power disadvantage experienced by females because of their low ascribed status, women had to be made to appear more competent than men in order to attain the same level within an organization.

To illustrate the influence of achieved status versus ascribed status, Trompenaars and Hampden-Turner asked respondents from different countries whether status should be based on age (an ascribed status). Over 60 percent of American, Australian, British, Canadian, and Swedish respondents disagreed that age should be given special consideration. By contrast, over 60 percent of Japanese, Korean, and Singaporean respondents agreed that age should be given additional status.

Among the ascription cultures are Belgium, Brazil, China, France, Indonesia, Italy, Japan, Singapore, and Venezuela. By contrast, achievement cultures include the United States, the United Kingdom, Argentina, Austria, Germany, Mexico, and Spain. Trompenaars further found that nations' cultural values tend to cluster together. He identified five such clusters—an Anglo cluster, an Asian cluster, a Latin American cluster, a Latin European cluster, and a Germanic cluster. While countries within each culture do not share every dimension in common, there are far more similarities with the clusters than there are differences.

Applications

In achievement cultures, an organizational member's title is only used when it is relevant. In addition, superiors earn respect through job performance. Organizations in achievement cultures often have a diversity of age, gender, and race/ethnicity in management positions.

In ascription cultures, the use of titles is expected as a sign of respect. Furthermore, whether or not the superior has earned his or her position through job performance, respect for the superior is integral to showing commitment to the organization. Finally, managers are often chosen based on their background (such as did they graduate from the "right schools") and age.

Trompenaars and Hampden-Turner recommend that when individuals from achievement cultures do business in ascription cultures, they should be aware that such cultures emphasize seniority in the chain of command. Consequently, individuals from achievement cultures make sure that their group has older, senior, and formal position-holders who can impress the other side, especially by respecting the status and influence of their counterparts in the other group. On the other hand, Trompenaars and Hampden-Turner recommend that when individuals from ascription cultures do business in achievement cultures, they need to be aware that firms emphasize rewards and respect based on skills and accomplishments.

In addition, it is common that managers defer to those who possess expertise in certain technical and functional areas of the company. Thus, businesspeople going into achievement cultures should make sure that their group has the resources (such as data, technical advisers, and additional experts) to convince the other group that they respect the knowledge and information of their counterparts in the other company.

See Also: Culture-Specific Values; Hofstedes Five Dimensions of Culture; Individualism/Collectivism; Universalism/Particularism.

Bibliography. Talcott Parsons, "An Analytical Approach to the Theory of Social Stratification," *American Journal of Sociology* (v.45, 1940); Larry Samovar, Richard Porter, and Edwin McDaniel, *Intercultural Communication: A Reader*, 11th ed. (Thomson Wadsworth, 2005); Fons Trompenaars, *Riding the Waves of Culture* (Irwin, 1994); Fons Trompenaars and Charles Hampden-Turner, *Riding the Waves of Culture: Understanding Diversity in Global Business* (McGraw-Hill, 1997).

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Acquisitions, Takeovers, and Mergers

Acquisitions, which include mergers and takeovers, are a part of business strategy involving the combination of two or more businesses, with or without the cooperation of all parties. Once a rare occurrence, these maneuvers became a typical part of doing business on a large scale in the 20th century (though the peak came earlier, in the 19th century's Great Merger Movement). Mergers and acquisitions advisory firms have even developed—sometimes calling themselves transition advisors—although most such guidance is still provided by traditional investment banks.

Mergers and acquisitions (or M&A) are more often referred to collectively than not, but are not synonymous. They simply involve many of the same complications and concerns. Further, many mergers are in actuality acquisitions, but termed mergers in order for the acquired company to save face, a condition frequently included in the written agreement. On the other hand, a hostile takeover, when the purchased company resists being acquired, is never called a merger. At least half of acquisition attempts fail, though companies may try repeatedly, and failed attempts can still leave the attempted acquisitor with significant control of the target company. When NASDAQ abandoned its efforts to acquire the London Stock Exchange (LSE), it sold off the shares of stock it had acquired—nearly a third of the LSE—to the Borse Dubai, a stock exchange holding company of the United Arab Emirates.

Advisory

When a financial adviser says he is "in mergers and acquisitions," he usually means he is in corporate advisory, either with an investment bank or with a specialty advisory firm. M&A is the bread and butter of corporate advisory, but the field includes other maneuvers and transactions, such as the privatization of a public company, the spin-off of a portion of a company into a new business, and the management of joint ventures between businesses. The advisers included in such transactions include legal advisers and financial advisers retained by both sides and looking out for the best interests of their respective clients; financiers who arrange funding and attend to other financial concerns of the transaction; and third-party experts, such as consultants specializing in the industry, intellectual property valuation advisors, public relations firms, and so on. The larger the companies involved, the more advisers will generally be called upon, but at a minimum each company will retain legal services, and nearly always at least one financial adviser.

Investment banks like JPMorgan, Goldman Sachs, Morgan Stanley, and Deutsche Bank offer corporate advisory services around the world, and dozens of other investment banks operate regionally or nationally. The strength of an investment bank is its tendency to have fingers in so many pies, a sort of department store of corporate financial services, and although the 2007–08 economic crisis has demonstrated the way in which this becomes a vulnerability, it renders an investment bank's M&A advice no less useful. But since the end of the 20th century, more and more firms have launched offering corporate advisory services exclusively, and have especially been engaged by businesses concerned about investment banks' potential conflicts of interest. Most such firms are run by senior executives who have left investment banks and have considerable experience, networking contacts, and professional relationships in the financial industry. They are sometimes hired to supplement the advice of an investment bank rather than to substitute for it.

Corporate advisory firms tend to be smaller, and to operate in a smaller area, than investment banks; in Europe they are in a sense the descendants of the merchant banks like Lazard and Rothschild (both of which continue to offer corporate advisory services). Major corporate advisory firms operating multinationally include Evercore Partners (which advised AT&T on its BellSouth acquisition and managed the separation of Viacom and CBS Corporation) and Greenhill & Co. (in the aftermath of the 2008 credit crisis, one of the few remaining independent investment banks operating on Wall Street), both of them based in New York with operations in Europe and Tokyo.

Valuation

One of the services offered by advisory firms and investment banks, engaged when considering an acquisition, is business valuation. There are various ways to value a business, and particular methods or information may be more or less valuable in different industries. "Value" itself is not always a straightforward thing, and can be talked about in terms of fair market value (the price an asset would sell for between informed parties on the current market), fair value (largely similar, a term especially used in Generally Accepted Accounting Principles and legal contexts), an intrinsic value, a more subjective measurement that implicitly perceives a flaw or temporariness in the fair market value.

Public companies are in general easier to value than private ones, because the law and their accountability to shareholders has required them to keep financial records that adhere to a certain standard and are audited regularly. Even well-managed private companies may not do so, particularly smaller ones. Further, while it is in the best interest of public companies to emphasize their profits, it is in the best interest of private companies to minimize them to some degree, for the sake of taxes, and financial records will reflect this. Assets of both companies will probably have their original cost and value recorded, rather than their current market values, and valuing the company will thus require reexamining those assets.

The discounted cash flows method of business valuation values assets not according to their cost or their resale value, but their projected cash flows, discounted to the present value. An immature bond that will be worth $20 when it matures is in the present worth less than that, for instance, but nevertheless more than its original cost. The amount by which that future cash flow value is discounted is the discount rate, expressed as a percentage. The example of the bond is a more clear-cut case than most of those faced by the advisors valuing a business: the risk and predictability of return of a bond is very simple compared to that of a restaurant, for instance, or a patent, or a piece of real estate. Two different advisors may come to different conclusions about the discounted cash flow value of an asset, and presenting their reasoning to the prospective buyer is part of the process of considering an acquisition, especially if the acquisition itself will in any way impact that cash flow.

The guideline companies method of business valuation is a benchmark-based method similar to determining the value of an asset like a car or house: the company is compared to other similar companies that have been acquired, with multiples calculated based on differences in areas like price-to-earnings ratio. This has become a more useful method as acquisitions have themselves become more common, as the number of available benchmarks has increased, in some industries more than others.

Intellectual property, like patents and proprietary processes, are especially difficult to value objectively. Various models have been developed, and there are firms that specialize in the valuation of intellectual property, a specialty that has developed principally since the 1990s. In the United States, the most prominent firms in this subfield are Crais Management Group in New Orleans, Ocean Tomo in Chicago, and Intellectual Ventures in Seattle, all of which have supported the treatment of intellectual property as a security-like class of asset, one that could be bought and sold on an exchange, which would strengthen the reliability of intellectual property valuation thanks to the efficiency of the bid/ask system.

Valuing a business generally requires that business's cooperation, especially if it is a privately-owned company. It is standard for both parties to sign a non-disclosure agreement, though the targeted business could still be at a competitive disadvantage should the other business opt not to go ahead with the acquisition. The valuation report includes an account of the current economic conditions at the time of the valuation date, generally derived from the Federal Reserve's Beige Book and state and industry publications, followed by a detailed financial analysis that discusses both the current situation and past trends of growth and decline. Data is reported in such a way as to make comparison to other businesses in the industry as easy and accurate as possible, and certain other adjustments are made to the report as circumstances demand: non-operating assets (which are assumed to be excluded from the hypothetical sale, such as excess cash) are eliminated from the balance sheet, non-recurring items are adjusted so as not to skew the results of the analysis, and the data of private companies is sometimes adjusted to make it comparable to that of public companies. Executives of private companies often earn a higher salary than those of public companies, for instance.

There are three major business valuation societies in the United States: the American Society of Appraisers, the Institute of Business Appraisers, and the National Association of Certified Valuation Analysts. Each publishes a set of Business Valuation Standards for its accredited members to follow. Common among them are certain minimum requirements for the scope and contents of business valuation reports; the proscription against the appraiser's fee being contingent on the value of the business appraised; and a requirement of full disclosure of the institutions and individuals participating in the valuation report.

Financing

Financing an acquisition is another consideration. If called simply "an acquisition," the transaction was probably financed with cash, the simple purchase of a smaller company by a larger one; because businesses do not like to restrict their cash flow if they can help it, this is most common when the size discrepancy between the two companies is greatest, i.e., a global corporation acquiring a local independent business and bringing it into the fold. Money can also be raised through bonds or loans from a bank, and it is common to finance an acquisition through some combination of these things.

Leveraged Buyouts

A leveraged buyout (LBO) is a special type of acquisition, differentiated by the way it is financed. The acquisition—buyout—of another company is financed by loans (leverage), using the assets of the target company as the collateral. The prevalence of junk bonds in the 1980s was due to the number of high-risk leveraged buyouts financed by bond issuance. Over the course of that decade, over $250 billion of leveraged buyouts were made by "corporate raiders" who acquired a total of 2,000 companies.

An early famous example was the Gibson Greetings acquisition, in which a greeting card company was acquired in 1982 for $80 million, only $1 million of which was contributed by the acquiring group; the other $79 million was easily paid back 16 months later when the company went public with an initial public offering (IPO) of $290 million. It was the sort of success story that launched a thousand ships, at the start of a decade that would soon become known for its bottom-line attitude and glorification of greed. The raider label was as likely to be used by businessmen as the media, as these investors would often—or often enough to feed the perception—embark on a hostile takeover of a company, strip its assets, lay off its employees, and restructure the remains, as much like a virus or group of convert-or-die missionaries as like the Vikings and pirates the label invoked.

The 1987 Oliver Stone movie *Wall Street* combines aspects of investors like Carl Icahn and Michael Milken into the corporate raider Gordon Gekko, played by Michael Douglas; his "greed is good" speech, in turn, was inspired by an address by arbitrageur Ivan Boesky, whose defense of greed in 1986 summarized and polarized much of the decade. Gekko's plans to acquire an airline he promises to restructure, but intends only to liquidate by selling it off piecemeal, are likewise emblematic of much of the corporate raiding activity of the time, even to the choice of an airline as his target. Icahn was best known for his 1985 hostile takeover of Trans World Airlines (TWA) and subsequent reduction of wages and benefits, liquidation of assets, and sale of profitable gates to other competing airlines, while relocating the corporate offices to a building he owned in Westchester County.

The LBO boom peaked with the takeover of RJR Nabisco in 1989, a buyout that cost $31.1 billion—$109 a share, after a prolonged bidding war involving (in one capacity or another) Morgan Stanley, Goldman Sachs, Salomon Brothers, and Merrill Lynch, the most prominent investment banks of the era. When adjusted for inflation, no buyout has been larger, and it was the last of its kind for the era; buyouts slowed, and even the RJR Nabisco deal had to be recapitalized a year later. Milken's firm, Drexel Burnham Lambert, had raised the largest amount of money for the decade's flurry of buyouts, leading the way in the securitization of high-yield debt, for which Milken was called "the junk bond king."

The era symbolically ended shortly after the RJR Nabisco deal, when the firm pleaded no contest to six federal felony charges related to stock manipulation and misdeeds, paying a $650 million fine, the largest ever paid for securities violations. Milken left the firm when he was indicted individually on 98 charges of racketeering and securities fraud (insider trading), for which he was eventually sentenced to ten years in prison. Drexel Burnham Lambert declared bankruptcy less than a year later.

The 21st century saw a rebirth of leveraged buyouts, as lending standards became lax, interest rates declined, and the Sarbanes-Oxley Act altered the regulations affecting public companies. Though no buyout equaled RJR Nabisco's when adjusted for inflation, there were more multibillion-dollar buyouts, totalling significantly more money, in the first decade of the 21st century than in the 1980s. 2006 alone saw 654 companies bought for $375 billion.

The high-yield-debt market enabling this was affected by the subprime mortgage crisis that rippled across the other sectors of the economy in 2007–08; no bankruptcy or indictment was needed to end the boom this time, just general economic malaise and its attendant risk aversion. Many of the buyouts of this recent wave were funded with "cov-lite" loans—covenant light loans, loans with fewer clauses in their agreements protecting the rights of the lender, something more and more banks offered at a time when it was a borrowers' market and lenders had to compete for attention.

Management Buyouts

It is a mistake to conflate leveraged buyouts with the corporate raiding associated with the 1980s; even most buyouts in that decade did not result in negligent handling or opportunistic dismantling of the acquired companies. Management buyouts (MBOs), for instance, are leveraged buyouts instigated by the management of a company, when those managers want to take control of the company—usually, but not always, in order to take the company private. The reasons for this vary, but often management may have a plan for the company that is not going to return a profit to the shareholders quickly, or involves a risk shareholders are not willing to take.

The problem with MBOs when they become a common corporate maneuver is the temptation that is presented for mismanagement: Corporate officers planning an MBO will have to raise less money to buy out the company if they can reduce its worth first.

Takeovers

The 1980s made *hostile takeover* such a common phrase that it can be easy to forget there is any other sort. While it is true that a friendly takeover is more likely to be referred to as an *acquisition*, this is simply a matter of labeling.

A hostile takeover is any acquisition performed without the cooperation of the company—which can mean that the company actively resisted the acquisition (by rejecting initial offers) or can simply mean that its cooperation was not sought. There are different strategies of hostile takeovers, from gathering up enough stock to own a controlling stake in the company to persuading existing shareholders to vote the current management out in favor of managers who will approve the takeover. Hostile takeovers are riskier, insofar as without the cooperation of the targeted company, the business valuation will be less well-informed, and potentially inaccurate.

A reverse takeover is one in which a private company acquires a public company without taking it private—in other words, the private company bypasses the usual process of going public by buying and merging with a public company, which can turn it public in weeks rather than the year or more that a standard IPO usually takes. US Airways, for instance, was acquired by America West Airlines, putting the company in the hands of US Airways' creditors, with the goal of rescuing it from bankruptcy.

Mergers

In a merger, two companies join to form a larger company. There is usually a new name and brand identity for the resulting company, but not always. Mergers may be horizontal—involving companies that produce similar products in an industry, such as Pepsi and Coca-Cola—or vertical, involving two companies involved with different stages of production of the same good or service, like a movie studio and a television network. Conglomerate mergers involve companies from completely separate industries.

Mergers can raise a lot of antitrust red flags, and the busiest period of merger activity in the United States contributed to the speed with which antitrust legislation was adopted. The "great merger movement" took place from 1895 to 1905, a period during which there was a significant national trend toward moving operations and consciousness from the regional level to the national level. For instance, during this same Progressive Era—which historian Robert Wiebe has called the organizational period—the country's major nationwide professional guilds (such as the American Medical Association and American Legal Association) developed, as did its national labor unions, several of its religious organizations, and a great many of its media organizations. There was a general and pronounced trend since the end of the Civil War to treat institutions in the United States as American institutions first, Alabaman and Iowan and Pennsylvanian institutions second, an attitude adopted so successfully that it is taken for granted a century later.

In business, the effect of this trend was for more companies to want to operate nationally rather than in a single state or region. State laws sometimes made this difficult, and trusts were created in order to create legal entities which could then own or merge with smaller regional entities, which would then all be operated uniformly. Hardware stores in 30 states, for instance, could merge into a nationwide hardware chain.

That is not to say that the motivation of the great merger movement was simply to participate in the spirit of cultural change that presided over the day. Economic concerns were foremost. The Panic of 1893 had driven demand and prices down, and mergers allowed costs to come down in order to keep profits stable, or on the increase. When those costs came down because of vertical or horizontal integration, all was well. But when the mergers resembled a form of collusion, with companies joining together in order to keep prices high by removing the need to compete, that is when antitrust legislation had to be enacted in order to limit the circumstances in which mergers could occur, and set out the sorts of companies that, in plain English, are not allowed to exist under American law—companies that represent such a large part of their industry that the industry is rendered noncompetitive.

As an illustration of just how much merging was occurring, in 1900—right in the middle of this period—the value of firms involved in mergers that year was equal to 20 percent of the country's gross domestic product. By contrast, in an ordinary year, it is closer to 5 percent or less.

See Also: Antitrust Laws; AT&T; Economies of Scale; Hostile Takeovers; Investment Banks; Mark-to-Market Valuation; Sarbanes-Oxley.

Bibliography: Bryan Burrough and John Helyar, *Barbarians at the Gate: The Fall of RJR Nabisco* (Harper & Row, 1990); Susan Cartwright and Richard Schoenberg, "Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities," *British Journal of Management* (v.17, 2006); Donald DePamphilis, *Mergers, Acquisitions, and Other Restructuring Activities* (Elsevier Academic Press, 2008); Robert F. Reilly and Robert P. Schweihs, *The Handbook of Advanced Business Valuation* (McGraw-Hill Professional, 1999); Thomas Straub, *Reasons For Frequent Failure in Mergers and Acquisitions: A Comprehensive Analysis* (Deutscher Universitatsverlag, 2007).

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Ad Valorem Duties

Ad valorem duties are duties that are a fixed percentage of the price of the imported good. While conceptually straightforward, the administration of ad valorem duties may be complex, reflecting the practical difficulties in establishing the value of imported goods.

An ad valorem duty, or tariff, is in contrast to the specific tariff, which is a flat rate tariff that is independent of the value of the import. Ad valorem duties, unlike specific tariffs, are flexible and adjust to changes in the price or the value of the import good. If the ad valorem tariff rate is 5 percent and the import price is $100, the tariff revenue would be $5. If the import price increases to $150, then the per unit tariff revenue would be $7.50. With an initial specific tariff of $5 and an import price of $100, the ad valorem tariff and the specific tariff are equivalent. However, once the import price increases to $150, the specific tariff of $5 translates into a tariff rate of 3.3 percent. This reduces the level of protection that domestic producers receive from the tariff structure.

The ad valorem duty regime not only maintains the level of protection that domestic producers receive, it also increases the per unit import tariff revenue that the government receives when import prices are increasing. Ad valorem tariffs are therefore preferable to specific tariffs because they better achieve two of the primary aims of tariffs—namely, protecting domestic firms and rising tariff revenues.

Administration of ad valorem tariffs requires two factors: the first is the ad valorem tariff rate and the second is the value of the import good. Key to answering the first question is the appropriate tariff classification for the import. Tariff classification may be critical as a change in classification may either lower or raise the ad valorem tariff rate. This is the first step in the customs valuation process. The second step in this process is determining the value of the import good.

The value of the import good may be affected by the method used to determine the value of import goods. There are three import valuation methods that are frequently used: Free Along Price (FAS)—the price in the foreign market; Free on Board (FOB)—the price in the foreign market plus the cost of loading the good onto transportation at its port of origin; and Cost, Insurance, and Freight (CIF)—the cost in the foreign market plus insurance and freight costs incurred in delivering the good to its final destination port. In applying ad valorem tariff rates, the United States has traditionally used FOB valuations while European countries have traditionally used CIF valuations.

Determining the import valuation basis does not fully resolve the question of correct import valuation. One further difficulty is that the price of the import good in the foreign market, which affects import prices independently of the valuation method used, may constantly change. This variability in the foreign market price complicates the task of establishing the value of the import good.

With ad valorem tariffs, the tariff rate and import value jointly determine the import duties that are payable. Companies, therefore, have an incentive to shop custom classifications in order to reduce the tariff rate, and to under-invoice their imports in order to reduce the tariff rate. These incentives further complicate the process of administering ad valorem tariffs.

See Also: Duty; Import; International Commercial Terms (Incoterms); Tariff.

Bibliography. Mohamed Hedi Bchir, Sebastien Jean, and David Laborde, "Binding Overhang and Tariff-Cutting Formulas," *Review of World Economics* (v.142/2, July

2006); Robert J. Carbaugh, *International Economics*, 11th ed. (Thomson Southwestern, 2007); W. Charles Sawyer and Richard L. Sprinkle, *International Economics*, 3rd ed. (Pearson Prentice-Hall, 2009).

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Advanced Pricing Agreement

An advanced pricing agreement (APA) represents a binding agreement between a multinational corporation and a country's tax authority as to the transfer price for a specified cross-border transaction known as the covered transaction. A typical APA will specify the covered transaction, the agreed transfer price, and an effective time period. Unlike transfer prices that are set in the normal course of business, transfer prices reached under an APA are not subject to further adjustment by either party and as a result avoid the risks of transfer pricing adjustments and associated penalties. In so doing, an APA provides pricing certainty to multinationals.

A transfer price is the price associated with related party transactions, i.e., transactions that take place within a corporation. As per many countries' tax regulations, cross-border transfer prices must satisfy the arm's length standard. This standard requires that related party transactions reflect the price that would have been charged if the parties were independent, i.e., separate companies, and trading at arm's length. Tax legislation details the methods that may be used to determine appropriate transfer prices. Most of these methods rely on the existence of comparable transactions that serve as benchmarks for related party transactions.

Many internal transactions lack satisfactory third-party benchmarks. These internal transactions might be appropriate candidates for APAs. Additional criteria may include the underlying complexity and size of the transaction. One potential complexity is the inability to separate a single transaction into simpler transactions that may be more easily priced. Eligibility criteria for APAs often reflect the demands that they place on the resources of the relevant tax authorities, as every single APA requires review and approval by the tax authority, and the time commitment to a single APA can be significant. Consequently, not all internal transactions are appropriate candidates for APAs.

APAs may be unilateral, bilateral, or multilateral in scope. Unilateral APAs involve a single tax authority and the multinational corporation. Such APAs protect the multinational from transfer pricing penalties and adjustment in the jurisdiction in which it was negotiated, but confers no transfer pricing risk mitigation in the corresponding jurisdiction where the other end of the transaction takes place. Bilateral APAs involve two taxing authorities and are, by definition, more complex as they require the agreement of multiple taxing authorities with an inherent conflict as to how the associated income from a transaction should be shared between the two countries. Bilateral APAs, as do their unilateral counterparts, require review and approval by the tax authorities and consequently place significant demands on the resources of the relevant tax authorities. Bilateral APAs confer a further advantage to the multinational, however, as bilateral APAs provide transfer pricing certainty in both countries.

Whether unilateral, bilateral, or multilateral in scope, APAs are voluntary and are initiated at the request of taxpayers with a petition to the relevant tax authorities. Taxpayers may petition for an APA for any transaction that falls within the purview of the transfer pricing legislation. Approval for APAs is not always granted, and if they are, the petitioning firm must provide documentation that establishes the arm's length standard of the proposed transactions. APAs are ideally suited to setting transfer prices in advance of transactions. They may also be used to set transfer prices on a concurrent basis.

See Also: Multinational Corporation; Pricing; Taxes; Transfer Pricing.

Bibliography. Internal Revenue Service, "Announcement and Reporting Concerning Advanced Pricing Agreements," March 2008, www.irs.gov (cited March 2009); Organization of Economic Cooperation and Development, "OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrators" (OECD, 1995).

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Advertising

Advertising is one of the four primary forms of promotional (or integrated marketing communications) activity employed by marketing organizations to informatively and/or persuasively communicate with consumers and other targeted audiences. Advertising differs from other major forms of promotional activity (i.e., personal selling, sales promotion, and public relations) in that it is a paid, non-personal form of communication typically transmitted through mass media (e.g., television, the internet, radio, newspapers, magazines, and billboards). It is "paid" in that when a marketer, for example, places a full-page ad in *BusinessWeek* or runs a 30-second television ad during a broadcast of *60 Minutes*, the sponsor/marketer pays the media organization for the space or time used to promote itself or its products. Advertising is "non-personal" in that it is not, like personal selling, customized according to the needs, wants, and expectations of individual message recipients. Instead, advertising is typically standardized in that the vast majority of persons seeing and/or hearing any one advertisement receive the exact same message.

When most people think of advertising, what usually first comes to mind are celebrity endorsers, music, and highly creative, attention-grabbing imagery and catchphrases. However, successful advertising entails far more than this. Marketers wishing to effectively—and efficiently—communicate through advertising must first know their target audience and then, typically with the assistance of advertising agencies, carefully choose which media types and vehicles to employ. They, along with their ad agencies, then create messages that not only grab the attention of the target audience but, eventually, inform and/or persuade them in some desired manner. This is never easy.

For the international marketer, performing these challenging tasks is further complicated by the fact that cultural and legal environments often vary significantly from nation to nation. As a result, advertising that works spectacularly in one country may be perceived by the target audience in another nation as irrelevant, ridiculous, and/or offensive. When the latter occurs, not only have international advertisers made themselves look bad; they have, in most cases, also spent a lot of money to do so.

Advantages

The international marketer should be aware that advertising possesses both strengths and weaknesses relative to other forms of promotion. Arguably advertising's main advantage over other forms of promotion is its ability to cost-effectively reach a very large, geographically dispersed target audience. Let us say that a large, global consumer products firm like Colgate-Palmolive is planning on introducing a new brand of toothpaste worldwide. A good way to cost effectively promote the new product to the target audience would be to advertise in a general interest news magazine sold and read in many regions and countries of the world, such as *Time*. This media vehicle is produced in several editions each week—with each edition created for and distributed in a specific region of the world.

Advertisers can, as Colgate-Palmolive would likely want to do with its new toothpaste, purchase advertisements in each edition of *Time*. Running a half-page ad in each edition for three weeks—say one week prior to and two weeks after product introduction—would cost the company a total of approximately US$740,000. Given *Time*'s worldwide (weekly) circulation of nearly 4.4 million people and the fact that roughly three people can, on average, be expected to view each magazine circulated, a total of 39.6 million people—and potential consumers of the new toothpaste—will at least have the opportunity to see and be influenced by Colgate-Palmolive's advertisements.

The US$740,000 may seem like a lot of money to spend on advertising but global companies with large, globally dispersed target audiences—and large ad budgets—like Colgate-Palmolive are more concerned about the cost of reaching each potential buyer (and the return on this investment in advertising). In this case, the cost of reaching each of the nearly 39.6 million consumers with the firm's advertisements in *Time* is approximately US$.02. If only 5 percent—one out of every 20—of the 39.6 million persons seeing the advertisements in *Time* buy the new toothpaste just one time—priced, say, at US$2.00—the $740,000 has been well spent, with a revenue of nearly US$4 million generated.

Related to advertising's ability to cost effectively reach a large, geographically dispersed audience is its ability to also reach a narrowly targeted/niche target audience with minimal waste circulation. A "narrowly targeted" or "niche" audience means a very specific group of people with particular, shared interests or organizations in a specific industry (or group of related industries). "Waste circulation" implies that advertising—particularly when done through magazines and Web pages—can cost-effectively get the marketer's promotional message out to the niche audience with very few people or organizations outside the targeted group also seeing the message. The minimization of waste circulation is very important to marketers because paying to communicate with persons or organizations outside the target market is a waste of money (in that those outside the target market are not very likely to be interested in the message and/or the advertised product).

A good example of a media vehicle that allows advertisers to cost effectively reach a large, geographically dispersed, niche target audience with minimal waste circulation is *The Journal of Commerce* (JOC). The JOC, which began publication in 1827, is a weekly magazine containing content of interest to high-level international trade, transportation, and logistics executives around the globe. Marketers wishing to promote their goods or services to these—and pretty much exclusively these—executive decision makers can run advertisements in the JOC in a variety of sizes up to 52 times per year. For example, international marketers with a relatively small budget could run six quarter-page, black-and-white advertisements over the course of the year in the JOC at a total cost of approximately US$13,620. The advertising would, in this case, be reaching a total of roughly 150,000 readers highly likely to be interested in its message (with a cost-per-reader of slightly over US$.09). An international marketer with a larger ad budget could, for example, place and run 26 of the same quarter-page ads in the JOC (i.e., one every other week over the course of a year) at a total cost of approximately US$44,400. These ads—and the precisely targeted promotional messages they contain—would be reaching a total of about 650,000 readers (with a cost-per-reader of approximately US$.068).

While the cost-per-reader associated with advertising in the JOC is much higher than the previous example of US$.02 to reach consumers worldwide by advertising in *Time* magazine, it should be kept in mind that the JOC is targeted at a very specific and specialized group of organizational managers in many different countries. It is likely well worth the extra per-reader cost to advertise in the JOC if doing so allows you to reach your target audience—and only your target audience.

Suggested in the latter part of the JOC example above is another strength of advertising. With advertising, the marketer can repeat the message as many times as their budget will allow them to do so. An advertiser could, for example, run ads in the JOC each week it is published (i.e., 52 times in a year). The same marketer could also run dozens of 30-second radio or television advertisements in local markets where their target market members are located. This ability to repeat the message is important because seldom will any one promotional message—run just one time—have the informative and/or persuasive impact desired by the marketer. And, luckily for international marketers with large ad budgets, buying ads in volume typically translates into: (1) lower per-ad cost, and (2) lower per-reader cost.

Finally, advertising, relative to other forms of promotional activity, is also good at both creating a prestige image for the marketer as well as appealing to the target audience in multisensory fashion. With regard to prestige, it enhances the image of the marketer—especially when the marketer is relatively unknown—to be seen advertising: (1) in well-known, well-respected magazines and newspapers, and (2) on major television networks or radio stations. Prestige can also be created or enhanced via the employment of well-known, respected celebrities in advertisements. With regard to the multisensory nature of advertising, television and Web page advertising offer the marketer unmatched potential to grab the attention and inform and/or persuade target audiences through the simultaneous and synergistic use of both sight and sound. Even radio advertising, limited only to sound, offers the creatively inclined international marketer much potential to appeal to the senses of the listener. Radio has been, in this regard, referred to as "the theater of the mind."

Disadvantages

While advertising has some significant advantages over other forms of promotional activity it also has some distinct disadvantages. One primary disadvantage of advertising is its high absolute cost. Earlier, in the context of demonstrating the relative cost-

A roadside fruit peddler waits beneath a large Marlboro billboard on a road into a war-damaged city in Lebanon in 1992. This famous series of ads using images of American cowboys made the Philip Morris (and now Altria) brand a global success.

effectiveness of advertising when communicating with large, geographically dispersed target audiences, a hypothetical example was provided wherein Colgate-Palmolive could possibly generate US$4 million in sales as the result of a US$740,000 investment in advertising. This is, indeed, a good return on investment. However, if a marketer does not have $740,000 to invest in advertising then there is no opportunity to realize this kind of return. While large global firms like Colgate-Palmolive have budgets allowing such large expenditures on advertising many other—particularly smaller—firms do not. Simply put, advertising can be a great investment but the absolute dollar volume required to create and run advertisements on a global—even national or regional or local—scale can be great.

Another relative weakness of advertising is its inability to provide the marketer with timely feedback with regard to how effective it is (or has been). This weakness is particularly strong when comparing advertising to personal selling (i.e., using salespeople to promote the company or its products). For example, when a salesperson is making a sales presentation to a client, he or she can assess in real time the extent to which their promotional message is: (1) being paid attention to, and (2) having the hoped-for informational and/or persuasive effect. With advertising, due to the fact that the marketer is not present when the message is being received and the fact that multiple exposures to an advertisement are necessary for it to have any impact, it may take weeks or even months to know how effective promotional efforts have been—and it may take a significant investment in marketing research to make this (belated) determination.

Related to the issue of slow feedback on effectiveness is another relative weakness of advertising.

Not only does it take considerable time to judge the effectiveness of advertising, it is also relatively difficult to accurately measure the informational and/or persuasive impact of advertising. Think back again to our hypothetical example of Colgate-Palmolive possibly generating US$4 million in sales as the result of a US$740,000 investment in advertising. Saying that advertising caused this level of sales is not, in practice, easy to do (at least with a great deal of confidence). This is because so many other factors in addition to advertising can effect the sales—and, to an even greater extent, the profits—of an organization. Thus: (1) in order to determine what has caused sales (or profits) all factors having an impact on it must be taken into consideration, and (2) one cannot accurately say to what extent advertising has caused sales (or profits) unless the causal impact of all these other factors has been taken into account. Web page advertising is somewhat an exception here, as far more precise measurement of impact on sales can be discerned (e.g., through tracking how many viewers clicked on links in advertising and then purchased the advertised products).

Finally, it is relatively impractical—if not impossible—to customize promotional messages with advertising. Personal selling, for example, allows the marketer the opportunity to customize each message transmitted to the exact needs, wants, and expectations of every targeted person. Although major magazines do allow some level of customization due to the publication of specialized regional or national editions every one of perhaps hundreds of thousands of persons receiving any one edition of the magazine sees the exact same advertisement. With major broadcast media such as radio and television individualized customization is essentially impossible—even if it were possible it would be very expensive.

The Global Advertising Industry

Advertising's scope is increasingly global. Business organizations large and small and in virtually all industries and countries are using advertising—and increasingly more of it—to promote themselves and their products to prospective and existing consumers. Thus suggested is that the strengths of advertising discussed above generally outweigh its weaknesses—with the latter just placing limits on what can be done with advertising.

According to *Advertising Age*, the preeminent authority on virtually all matters related to advertising, the world's top 100 marketers alone spent nearly US$98 billion on advertising in 2006 (the latest year for which complete data is readily available). For the sixth year in a row, U.S.-based consumer products giant Procter & Gamble—marketer of brands such as Bounty, Camay, Charmin, Gillette, Head & Shoulders, Ivory, Luvs, Max Factor, Mr. Clean, Noxzema, Pampers, Pepto-Bismol, Scope, Tide, and Vicks—topped the list of global advertisers. Rounding out the list of the top five advertisers in the world in 2006 were Unilever, General Motors, L'Oréal, and Toyota. Automotive firms in *Advertising Age*'s Global Top 100 for 2006 spent more on advertising than companies in any other industry and accounted for almost 23 percent of all advertising expenditures by the top 100.

With respect to advertising expenditures by the top 100 global advertisers by region of the world in 2006, the U.S. tops the list with US$46.02 billion. This is followed by Europe (US$31.12 billion), Asia and Pacific (US$14.92 billion), Latin America (US$2.48 billion), Canada (US$2.09 billion), Africa (US$711 million), and the Middle East (US$422 million). The region of the world exhibiting the greatest increase in ad spending was Latin America, with 2006 spending up 12.7 percent from 2005.

Overall, the nearly US$98 billion in global ad expenditures in 2006 represents a 1.1 percent increase over 2005 spending. Interestingly, this growth is in spite of the fact that U.S. marketers ranking among *Advertising Age*'s Global Top 100 cut ad spending by 2.2 percent in 2006. Some of the largest U.S. advertisers were those showing the greatest percentage decrease in expenditures. General Motors tops the list with a 17.4 percent decline, followed by Time Warner (down 13.8 percent) and Johnson & Johnson (down 13.2 percent). This decline in U.S. ad spending was offset by significant increases in advertising by non-U.S. marketers such as Sharp Corporation (Japan), Fiat (Italy), Moët Hennessy Louis Vuitton (France), LG Group (South Korea), and Aldi Group (Germany).

Finally, the large global marketers/advertisers such as those discussed above are not the only "major players" in the global advertising industry. Also heavily involved—albeit not as conspicuously as advertisers—are the media firms that, by virtue of producing magazines, newspapers, and Web sites and running radio and television stations as well as billboard advertising companies, provide advertisers the vehicles through which to reach target audiences worldwide.

A third "major player" in global advertising that is even more "behind the scenes" than media firms are the advertising agencies that provide media planning/buying and creative and production services to marketers/advertisers. It is common, in this regard, for large, international marketers to work with multiple advertising agencies. According to an *Advertising Age* report published in November 2007, the world's largest global advertiser, Procter & Gamble, employs the services of 10 different ad agencies to help it plan for, create, and run advertisements. According to this same report, the three advertising agencies with the largest number of Global Top 100 clients/assignments are: (1) Euro RSCG Worldwide (42 clients), (2) McCann Erickson Worldwide (40 clients), and (3) Ogilvy & Mather Worldwide (35 clients). Euro RSCG Worldwide, the largest ad agency in the world in terms of "global assignments" (i.e., major clients served), is based in New York and has a total of more than 230 offices in 75 countries. Euro RSCG Worldwide, by virtue of working with 10 of the top 20 and 42 of the top 100 global advertisers, exemplifies the global advertising agency.

Cross-Cultural Considerations

It is often said that strategic marketing decisions involving advertising are those most likely to be significantly impacted by cultural variation between nations. It should be of little surprise, then, that failure to carefully consider the appropriateness and likely acceptance of an advertisement through the cultural lens of the targeted audience puts marketers at high risk of—at a minimum—considerable embarrassment. Consider, in this regard, a few "classic blunders" of international advertisers. The United States Dairy Association's successful "Got Milk" advertising campaign was introduced in Mexico. The association was later informed that the Spanish translation used for "Got Milk" could be taken to mean "Are you lactating?" Pepsi's "Come Alive With the Pepsi Generation" advertising slogan translated into "Pepsi Brings Your Ancestors Back From the Grave" in China. And in the United States, Scandinavian vacuum manufacturer Electrolux used the—well-rhymed albeit ill-advised—slogan "Nothing sucks like an Electrolux."

While the validity of several of these "classic blunders" has been debated, they clearly illustrate, at the very least, what can potentially happen when just one cross-cultural factor—language—is ignored or misunderstood by international advertisers. Creating and running just one high-quality television or magazine advertisement can cost an organization hundreds of thousands—perhaps even millions—of dollars. Spending this magnitude of money to make oneself look silly in the eyes of and/or offend members of the target audience—including one's potential and existing customers—is, to say the least, not good strategy.

Language Considerations

Language is, as demonstrated in the "classic blunders" listed above, a particularly perilous cross-cultural domain for international advertisers. In this regard, it is far from enough to have translations be done in literal/"dictionary" fashion by persons who are not fluent in the language of the targeted audience—and, most importantly, the language as actually spoken by the target audience. This is due largely to the fact that literal translations found in most dictionaries fail to adequately account for regional variations, slang, and symbolic meaning in language as spoken by persons in a given country (or region thereof). Further, superficial knowledge of a given foreign language may be more dangerous than no knowledge at all for the international advertiser.

To avoid potentially embarrassing and costly mistakes due to the often subtle yet critical intricacies of cross-cultural language variation, international marketers must take the task of translating what it wants to say in one language into its advertising in another language very, very seriously. At a minimum, translations should be done by persons highly fluent in both focal languages—wherein "highly fluent" with regard to the language of the targeted audience means knowing how the language is actually spoken by members of the audience in their local environments.

In addition, just one translation done by one person is often not sufficient. In this regard, what are known as *back translations* are commonly done. In the process of back translation, advertising content is translated by one bilingual person from one language (e.g., Spanish as spoken in Mexico) into the language of the target audience (e.g., Portuguese as spoken in Brazil) and then translated back—from Brazilian Portuguese to Mexican Spanish—by another competent, bilingual translator. The results of the two translations are then compared to ensure consistency and, ultimately, effective communication through advertising. If, for example, the second translation comes back saying exactly what was meant to be said in the first place—in the same language—then the marketer knows they are on the right track. If, however, the second translation is significantly different than what was originally meant to be said, then the marketer still has much work in translation to be done.

Cultural Considerations

Language is, however, but just one of many potentially arduous cross-cultural hurdles frequently encountered by international advertisers. Indeed, being "culturally fluent" entails far more than being fluent only in the language of a given foreign country or group of people. One prime example of a non-language, culture-based factor that international advertisers must be cognizant of involves what are called *cultural values* (i.e., what is considered appropriate versus not appropriate by persons in a given nation or group of people).

Variation in *cultural values* between one nation and another creates a host of potentially important considerations for marketers wishing to effectively advertise in multiple countries. Take, for example, the appropriateness of certain words used to identify people in two nations that speak the same language—say the United States and Australia. It would, in this regard, generally be acceptable for a U.S. firm to tout itself in domestic—particularly regional or local—advertising as employing "native" persons. This would likely be taken by most recipients of the message to imply that the sponsor of the advertising creates jobs locally and that their employees are not only from the area but are also highly similar to other local persons in many ways (i.e., by virtue of being from the same approximate place and having similar values). Using the word *native* in this manner in advertising in Australia would carry a different meaning. In Australia, *native* usually implies indigenous/Aboriginal persons. This is a mistake that could easily be made by persons working in advertising for foreign firms from countries with less contentious histories with regard to the plight of indigenous persons. Required in this instance is guidance from Australian locals—including but not limited to Aboriginal persons—well versed in Australian cultural values.

Another potentially critical cross-cultural, value-based consideration for international advertisers involves the use of humor. Simply put, what is considered humorous by members of one target audience in one country may be seen—even if adequately translated—as meaningless, ridiculous, and/or offensive by persons in another country (or region thereof). Again, as with language translations and word appropriateness, successfully using humor across cultures requires the input of persons fluent in the local culture of the targeted audience. Effective international advertising thus requires that the foreign marketer employ persons from the local culture at least as agents or consultants—if not as full-time managerial employees responsible for making key advertising decisions.

Legal Considerations

Just as international advertisers should expect to encounter cross-cultural obstacles so too should they assume that variations in laws across nations may significantly impact their ability to effectively communicate with targeted audiences. Generally, when doing business in foreign countries, the marketer: (1) should not assume that the laws of their home country are applicable abroad, and (2) should be familiar with and abide by the law of the host nation—particularly those laws which impact the ability of the foreign firm to market its specific type of product. These general points reign very true in the context of advertising. The international advertiser should never assume either that: (1) home-country advertising-related law applies abroad, or (2) they will be able to advertise their product in the exact same manner abroad as they do domestically.

A good example of not being legally able to advertise products in a foreign country in the same manner as done in the domestic marketplace is comparative advertising. In this form of advertising, the sponsor directly—and favorably—compares its products to those of a competitor. Comparative advertising law differs significantly from nation to nation. In the United States, it is not only legal to compare your products to those of a competitor but also legal to name the competitor in the advertisement (as long as the comparative statements in the ad can be objectively substantiated). In some Western European nations (e.g., Ireland, Spain, the United Kingdom, and Portugal) comparisons can be legally made but only as long as the comparison is implicit and does not specifically name the competitor. Comparative advertising is illegal, however, in other Western European countries (e.g., Germany, Belgium, and Luxembourg). Comparative advertising is also heavily regulated in other regions of the world. As a result, marketers that commonly (and legally) employ this form of advertising in their home countries must be very careful about using it abroad.

Sometimes an international marketer will find that it cannot advertise its products at all in a given foreign nation. For example, toy, tobacco, liquor, and pharmaceutical drug ads are banned or at least heavily restricted in many nations of the world while advertising these products is perfectly legal in others. Marketers of a product that cannot be legally advertised in a given nation in which the marketer wishes to sell the product must find an alternative means of promotional communication.

At other times, international marketers may discover that they cannot legally advertise via a certain type of media in some countries. Advertising on television, for example, is regulated in many nations. In Kuwait, for instance, only 32 minutes of television advertising per day is allowed on the government-controlled television network. In China, the government has only in the last several years begun to ease some regulations significantly restricting the use of TV advertising. However, the Chinese government has, at the same time, also increased regulation of other aspects of TV advertising (e.g., the required provision of proof of claims made in ads). The bottom line for the international advertiser is to know the law relevant to the marketing of your product in the given country in which you are doing business and to: (1) abide by it, and (2) adapt your advertising efforts accordingly.

See Also: Back Translation; Branding; Buying Motive/Behavior; Consumer Behavior; Consumer Needs and Wants; Cross-Cultural Research; Culture-Specific Values; Global Brand Strategy; Integrated Marketing Communications; International Marketing Research; Marketing; Market Research; Media; Media and Direct Marketing; Promotions.

Bibliography. *Advertising Age*, adage.com/datacenter (cited March 2009); Philip Cateora and John Graham, *International Marketing,* 13th ed. (McGraw-Hill/Irwin, 2007); Ian Dow, "Your Ad Is a Tad Mad!: It's a Marketing Chief's Worst Nightmare When the Catchy Slogan for the Expensive Ad Campaign Translates to Mean Something Hilarious for Foreign Shoppers," *Daily Record* (October 5, 2002); Nadeem Firoz and Taghi Ramin, "Understanding Cultural Variables Is Critical to Success in International Business," *International Journal of Management* (v.21/3, 2004); Ali Kanso and Richard Nelson, "Multinational Corporations and the Challenge of Global Advertising: What Do U.S. Headquarters Consider Important in Making Media-Selection Decisions?," *International Marketing Review* (v.24/5, 2007); Yih Hwai Lee and Elison Ai Ching Lim, "What's Funny and What's Not: The Moderating Role of Cultural Orientation in Ad Humor," *Journal of Advertising* (v.37/2, 2008).

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Aegon

Aegon (Aegon N.V.) is one of the biggest insurance companies in the world. As a holding company, its main activities include various financial products such as life insurance, non-life insurance, savings, pensions, and investments. Aegon is a Netherlands-based company that was incorporated in 1983 and now employs around 30,000 people (as of January 1, 2008). Its headquarters is located at The Hague, the Netherlands. Aegon owns 17 offices located throughout the United States. Its principal offices are located in Baltimore, Maryland; Cedar Rapids, Iowa; Louisville, Kentucky; Los Angeles, California; Frazer, Pennsylvania; St. Petersburg, Florida; Plano, Texas; Kansas City, Missouri; Purchase, New York; and Charlotte, North Carolina. Aegon is traded on the New York Stock Exchange with the ticker symbol AEG. Aegon has approximately 27,000 shareholders (as of January 1, 2008).

In addition to the Netherlands (13 percent of the 2007 revenues), Aegon operates in the United States and Canada (73 percent of the 2007 revenues), United Kingdom (9 percent of the 2007 revenues), and Slovakia, Czech Republic, Poland, Hungary, Taiwan, and

China (all comprise 5 percent of the 2007 revenues). The core business of Aegon is premium income (69 percent of the 2007 revenues). The second biggest revenue generator is investment income (27 percent of the 2007 revenues), and the commission and fee income makes 5 percent of total revenues in 2007.

Aegon operates in various product segments. These are life for account of policyholders, traditional life, accident and health insurance, fixed annuities, reinsurance, institutional guaranteed products, fee-off balance sheet products, variable annuities, general insurance, banking activities, and holding and other activities. More specifically, Aegon's products and services include permanent and term life insurance, fixed annuities, guaranteed investment contracts, variable universal life insurance, universal life insurance, unit-linked products, variable annuities, accidental death insurance, disability insurance, dismemberment insurance, critical illness insurance, cancer treatment insurance, hospital indemnity insurance, short-term disability policies, automobile insurance, liability insurance, household and fire insurance, investment products, and savings products.

Aegon is the name of the group of companies. It has numerous subsidiary companies. Among them are Aegon USA (agency, direct marketing services, financial markets, institutional products and services, and pension); Aegon Nederlands (both the life and non-life insurance businesses and banking, financial and asset management services); and Aegon UK (manufacturer, fund manager, and distributor of pension, protection and investment products).

Aegon was formed in 1983 as a result of the merger of two Dutch insurance companies, namely AGO Holding N.V. and Ennia N.V., both of which were successors to insurance companies formed in the 1800s. In 1985, the company traded on NASDAQ National Market. Also, its shares were opened to trade at the Amsterdam, London, Basel, Geneva, and Zurich stock exchanges. In the early 1990s, Aegon increased its operations in the United States by acquiring Monumental Corporation and Western Reserve Life. Following these transactions, Aegon started to be listed on the New York Stock Exchange. Since then, Aegon continues its presence in international financial and insurance markets.

The executive team of Aegon comprises Donald J. Shepard (Chief Executive Officer), Jan Nooitgedag (Chief Financial Officer), Alexander R. Wynaendts (Chief Operating Officer). Aegon's board of directors includes Patrick S. Baird, Otto Thoresen, Johan G. van der Werf, Dudley G. Eustace, O. John Olcay, Irving W. Bailey, Rene Dahan, Shemaya Levy, Toni Rembe, Willem F. C. Stevens, Kees J. Storm, and Leo M. Van Wijk.

Aegon's success comes from its strong market position in various countries, which reflects its power in the insurance and pension business. It is one of the biggest insurance companies in the Netherlands and in other European countries and has a substantial presence in the United States. Another reason for its success is the growth performance in new businesses. Moreover, by engaging in new emerging markets, new businesses are expected to increase further, which in return will boost overall financial performance. Third, with its diversified business, Aegon limits its risks and manages stable revenues. By investing in different operations and in different countries, Aegon secures itself as independent of any single market. Its revenues are spread over several product segments; no single business line generates the bulk of revenues.

However, one of Aegon's major weaknesses is that its revenues are declining in the Netherlands, which would adversely affect the performance of the company. Besides, because of higher operating expenses, Aegon faces reduced profits on its investments. Another important setback for Aegon may be its underperformed banking solutions. The company's banking products are sold only in the Netherlands, which combined with market slowdown in the Netherlands, results in fewer earnings.

While Aegon is based in the Netherlands, 73 percent of its revenues came from its North American operations in 2007.

See Also: Company Profiles: Western Europe; Netherlands.

Bibliography. Aegon, www.aegon.com (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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AEON

AEON (or ÆON Co. Ltd.) is a well-known general retail company. AEON is the parent company of a group of companies. The company operates general merchandise stores, supermarkets, specialty stores, drug stores, and convenience stores. AEON is a Japan-based company incorporated in 1926 that now employs around 70,000 people (as of January 1, 2008). Its headquarters is located at 1-5-1 Nakase, Mihama-ku, Chiba, 261 8515, Japan. AEON is traded on the Tokyo Stock Exchange, with the ticker symbol AONN-Y. AEON has 183,000 shareholders (as of January 1, 2008).

AEON generates its revenues through general merchandise and other retail stores (73 percent of its 2007 revenues); service and other operations (13 percent of its 2007 revenues), specialty store operations (12 percent of its 2007 revenues, and other operations (2 percent of its 2007 revenues). The company has operations in Japan, Asia, and North America. Japan is AEON's largest market (89 percent of its 2007 revenues). Asia is the second-largest market for AEON (6 percent of its 2007 revenues). North America is the remaining market and accounted for 5 percent of the total revenues in fiscal year 2007.

In its various stores, AEON offers general merchandise, food and drink, medical care products, and electrical appliances. The division owns Topvalu, the company's private branded range of apparel, food items, leisure goods, and home products. The company operates around 4,200 retail facilities in this division. The company operates 471 general merchandise stores, 765 supermarkets, 2,974 convenience stores, and 197 other stores, which include home centers, discount stores, and department stores.

AEON engages in four business segments: general merchandise stores; specialty stores; shopping center development; and service and other activities. General merchandise stores are operated under the name Jusco, supermarkets under the name Maxvalu, and discount and convenience stores under the name Ministop. AEON operates specialty stores under the names Talbots, Blue Grass, and Sports Authority for women's apparel, family casual fashions, health and beauty-care products, footwear, and other specialty retail activities. Moreover, AEON develops shopping centers and also engages in the leasing and management of these commercial facilities. AEON also engages in the financing of retailing stores, food service, store maintenance, wholesale and other service activities, along with the operation of certain restaurants and amusement parks, namely AEON Fantasy Outlets and AEON Cinemas.

AEON was established in Mie, Japan, on September 21, 1926, as Okadaya Gofukuten Co., Ltd. Its name was changed to its current form in 2001. Some of the biggest events in AEON's history include its 1988 acquisition of Talbots, Inc., of the United States through a subsidiary. In 2005 AEON acquired Carrefour Japan and changed its name to AEON Marche. Also, in 2006, AEON through its subsidiary Talbots, Inc., acquired J. Jill Group, Inc., of the United States.

In January 2009, at the World Economic Forum held in Davos, Switzerland, AEON has been listed in the Global 100 Most Sustainable Corporations in the World.

AEON has a diversified business portfolio. It operates in different forms and also provides several support services. Other than its core business, AEON also provides service and other supportive operations, mainly credit financing. AEON's diversified business portfolio enhances its revenue generating capacity. Also, AEON increased its strength with well-established supermarket operations. The company's decision to focus on private label brand products especially improved the profit margins. Moreover, AEON's financing services enhanced its profits significantly. The opening of new shopping centers contributed to the rise. The credit services operations were another growth-driver for AEON.

The major weaknesses of AEON may be regarded as its geographic concentration. AEON is mainly dependent on the Japanese market. Considering market forecasts with the projection that Japanese

AEON operates around 765 supermarkets and 2,974 convenience and discount stores in Japan under the names Maxvalu and Ministop. Its general merchandise and other stores accounted for 73 percent of 2007 revenues, but they face fierce competition.

buying power will lessen in the near future drives a gloomy overall picture in the coming years. Moreover, AEON's concentration on financing strongly decreases its flexibility for required financial liquidity. That is, whereas AEON enjoys new business growth by offering accessible credit, its debt management causes problems for itself. However, strong geographic diversification gives the rivals of AEON competitive advantage in sourcing and distribution of their operations. Because of intense competition, AEON needs to allocate large quantities of resources to maintain its market share.

AEON's main competitors in Japan include: Takashimaya, UNY, Seiyu, Hankyu Department Stores, and Marui. Its rivals in North America include Wal-Mart Stores, Costco Wholesale, Target, Sears Holdings, BJ's Wholesale Club, Pantry, Family Dollar Stores, Foot Locker, Big Lots, and Dollar Tree.

See Also: Costco Wholesale; Japan; Retail Sector; Sears Holdings; Target; Wal-Mart Stores.

Bibliography. AEON, www.aeon.info (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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AEX General Index (Amsterdam)

The desirability of tracking the performance of elite stocks led nations in Eurasia, North and South America, Africa, and Australia to establish stock exchanges in the 20th century. Dating to 1983, the Amsterdam Stock Exchange Index, today the AEX Index, has listed as many as 25 of the most traded Dutch stocks. As an aid to traders the AEX Index posts current data on the performance of its stocks as well as data on the Internet with a 20-minute lag. Several instruments, for example, index reports, serve the AEX Index in its task of sharing with investors the minutia of stock performance. The AEX Index includes Dutch companies that trade on the Euronext Amsterdam.

On January 3, 1983, the AEX-Optiebeurs began compiling the AEX Index. The original 13 stocks totaled 100 points. The AEX Index calculated the value of stocks by multiplying the price of each stock by its weighted factor, 15 percent of a stock's value, summing these amounts and then dividing the aggregate by 100, establishing the value of the index. Among the original 13 companies were the brewer Heineken and the energy company Royal Dutch Shell, both of which have remained on the index to the present. In 1987 investors began trading options and in 1988, futures. To these original 13 companies, the index added five companies, the largest single addition to date, in 1989. The index began on February 18, 1994, to review its composition of stocks, reserving the right to delete stocks from its roster. The AEX Index removed from its list companies whose capital fell below the 25 most capitalized companies in the Netherlands. Subsequently the index established two review dates: March 1 and September 1 of each year.

The index bases its review on the closing price of stocks on the last day of trading in January and June. When the index deletes a company from its roster, it leaves the slot vacant until the next review date, whether in March or September, when it may invite a new company to join. This new company must score in the top 25 in capitalization. If a company has more than one class of stock traded on the Euronext, the AEX Index will accept only the more actively traded class of stock. In addition, in the March and September reviews, the index adjusts the weight of each company, which rises and falls with a company's performance. Following its March and September reviews, the index makes effective any changes in its composition on the next trading day.

On January 4, 1999, the AEX Index began calculating the value of its stocks in Euros. The index's 100 points equals just over €45. Among the index's current holdings is a mix of companies. Banks, life insurance companies, and real estate developers, all of them represented on the index, were the tools for amassing wealth in the 20th century. With the rise of energy prices in the 21st century, companies that process, deliver, and provide equipment for the extraction and distribution of energy have prospered on the index. The petroleum and natural gas supplier Royal Dutch Shell and the petroleum equipment manufacturer Single Buoy Moorings (SBM) Offshore, both of them on the index, have surged in 2008. Also on the index are telecommunications equipment supplier Tom Tom, electronics manufacturer Philips, and semiconductor manufacturer ASML.

Worldwide economic fluctuations affect the index. The frenzied selling of stocks on Black Monday in 1987 sent the AEX Index into decline; conversely, the enthusiastic buying of internet companies in the early 21st century resulted in a bubble. The AEX Index peaked at 703.18 on September 5, 2000, at the height of the bubble. The end of speculation in internet company stocks more than halved the index's value between late 2001 and 2003. During 2007–08 the AEX Index ranged between 374.09 and 559.43, with the lower value only 53 percent of the peak and the higher value 79.5 percent of the peak.

Investors may buy stocks on the index as well as funds that index the AEX Index. Comprising large cap stocks, the index relies increasingly for the value of its portfolio on technology and energy companies. The index balances technology and energy, important as they are, with publishers and the processors of food. The result is a diversity of companies. This diversity hedges against steep losses and rapid ascents, for technology, energy, publishing, food processing, banking, and other classes of companies, whose stocks are not likely all to be up or down on a given day. Rather, gains in one sector offset losses in another. Investors, buying and selling stocks as the opportunity arises, will point the index toward the future. Savvy as they are, investors and pundits are unlikely to pinpoint the future course of the index.

See Also: Netherlands; Stock Exchanges.

Bibliography. NYSE Euronext, www.nyse.com/aex (cited March 2009); H. C. S. Warendorf and R. L. Thomas, *The Netherlands Securities Trading Act and Official Commentary* (Kluwer Law and Taxation, 1986).

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Africa

The African continent remains by and large marginalized in the world economy, with over half of the population living on under US$1 a day per person. Its share of worldwide exports has fallen from 6.1 percent in 1960 to 2.4 percent in 2006. The portion of worldwide foreign direct investment inflows to Africa has also declined, from 9.4 percent in 1970 to 2.7 percent in 2006. The continent's labor force was about 370 million strong in 2006.

The continent has struggled to overcome widespread legacies of slavery, colonialism, ethnic tension, and war. Africa became a symbol of Third World underdevelopment as soon as its nations began gaining political independence. Recently, African countries have also been confronted by the challenges of globalization, raising the question of whether some of them could join the ranks of "emerging countries" and create a regional basis of development.

Some have questioned African adaptability to "modern business." First, historians argue that the massive slave trade (more than 10 million people transported abroad from the 1600s to the 1830s in sub-Saharan Africa, but till the 1920s northward to Morocco or the Persian Gulf) deprived Africa of a demographic reserve and, in the long term, of a "normal" evolution of potential elites. Second, numerous northern academics and politicians have considered that the African way of life hindered "modern development." The statutes of ground property remained vague because of collective or religious ownership of land, thus blocking individual intensive investment like in other areas; the social framework that privileged large family networks gave priority to immediate redistribution of income instead of savings that would favor accumulation of capital; the respective position of women and men may have fostered gender gaps; and ethnic and caste considerations added obstacles to social mobility. African wholesale traders seemed unable to rise from short- or middle-term commercial incomes to long-term industrial investments.

Recurrent ethnic tensions and civil war weakened African societies. Geography and demography were involved too, the first because of the influence of climate on development (either drought and deserts, or tropical and subtropical or Mediterranean floods), the second because lack of population or overpopulation conflicted as explanations of economic tensions. Analyses of the evolution of African business continue to stir endless arguments about the causes and duration of African underdevelopment.

Colonial Legacies

Africa's lagging economies have roots deep in the colonial period. One of the more lasting legacies has been the weakness of educational policies. Islands of training comprised mainly Christian missionary schools (Madagascar, Togo, Dahomey/Benin, Liberia) or Islamic schools (northern Africa), but no real comprehensive strategy of mass education took shape during the period. This led to a relatively low level of primary and professional education for Africans, with exceptions in local universities (such as in Egypt, Tunisia, Algeria, and South Africa) or abroad in Europe.

Another long-term policy shaped the framework for the evolution of Africa's economy: Europeans conceived of Africa as a potential reserve for commodities and enticed rural people to develop exports for Europe. That was the case in sub-Saharan Africa for groundnuts, oil palm, gum arabic, rubber trees, coffee, cocoa, and (in the Niger loop and in the Sahel) cotton. Native peasants and plantations owned by European companies became committed to such an expansion. The Lever group (Unilever since 1930) exemplified this approach as the owner of plantations and as an important transformer of commodities in its European manufactures.

This type of "modern" business system involved wholesale trading houses complemented by hundreds of smaller companies and by thousands of African suppliers and transporters. Networks of trading posts collected raw commodities in exchange for European goods, such as clothes, household goods, and agricultural equipment. Warehouses, wharves, and chains of shipping lines facilitated sea transport.

An efficient economy took shape from the 1880s till the 1960s, with the leading big businesses from European countries such as France, the United Kingdom (UK), Switzerland, and Belgium. All over Africa native planters invested their time and skills into commercial agriculture rather than developing more intensively their subsistence crops.

Despite vast programs of modernization, African infrastructure still lagged behind. Colonies generally had to self-finance their investments until World War II or had to borrow in Europe, which slowed the completion of projects. Not until the 1940s and 1950s did construction gather momentum, but it did, leaving several countries with railway networks, ports (such as in Lagos, Abidjan, and Casablanca), dams and hydroelectric power plants (in Algeria and Morocco, and on the Niger River). But this infrastructure was intended mainly for the support of trade with Europe, without enough internal networks of transport through northern Africa or the Sahel. Huge gaps still predominated in the infrastructure programs, thus causing large discrepancies between territories.

Inequity prevailed because European business took hold of wealth almost everywhere. Trade was controlled by big companies or many small ones. Lebanese (sub-Saharan Africa), Chinese (Central Africa), and Indian (South Africa) people were active in the middle ranks of retail trading. Mining was controlled by state entities (in Morocco for phosphates) or big businesses. Africa was perceived as a supplier of raw resources, such as coal, gold, and diamonds (Austral Africa); copper (the Belgian Congo, the British Rhodesias); and phosphates (French North Africa).

In some territories, African natives were deprived of developed agriculture because Europeans had confiscated the richest land, for instance in Austral Africa or in Algeria. This contributed to a phenomenon of "pauperization," with a large reservoir of labor for day-to-day hand tasks, either in agriculture or in transportation. This was sometimes forced labor, which was abolished in French colonies only in 1946, with a Labor Code implemented later in the mid-1950s.

The end of slavery (within Africa itself), "pacification" and military rule on one side, and important healthcare programs on the other side, prompted growth in the African population. Beginning in the 1940s, a rapid growth of towns began, often on the coasts, around harbors, or around economic centers in Central or South Africa. Large numbers of poor people now clustered in shanty towns (called *bidonvilles* in French colonies). In the 1980s and 1990s this trend would begin to reverse as AIDS began crippling several southern African countries.

Dependence

Even after independence, African states were dominated by industrialized countries that influenced technologies, money for investment, and the prices of commodities and ores exported by Africa. Independent states also had to take into account the imbalance of power in favor of ex-colonial countries. Special agreements determined by geopolitical strategies helped ex-colonial states keep privileged positions throughout Africa.

French companies continued to play a key part in the ex-French empire. For example, the French state oil firm Elf-Aquitaine held sway in Central Africa (Gabon, Cameroon, and the Congo), and the UK also had influence, with Shell in Nigeria. The Belgian group Société générale de Belgique was still a force in the Congo, then Zaire, through its dense array of assets in mining, transportation, industry, trading, shipping, and finance. In South Africa under apartheid, big Western industrial groups extended their control over mining.

Socialism and "Mixed Economies"

Some African states wanted to get control over their economies through the nationalization of big business. A turning point came in July 1956 when Gamal Abdel Nasser of Egypt nationalized the Suez Canal, arguing that the revenues of transit should finance the building of the huge Aswan dam and power plant and the modernization of the economy, itself heavily controlled by the state until the mid-1970s. The "socialist model" prevailed in several key countries that nationalized their main resources. In Algeria, the FLN and President Houari Boumédienne nationalized oil assets at the start of the 1970s under the state-owned Sonatrach oil and gas monopoly. Muammar Qadhafi's Libya followed the example, and a few states adopted state-led policies (such as Tunisia, Zambia, Madagascar, Benin, Ghana, and Guinea), with more or less public interventionism and property.

Socialist-minded leaders intended to attain economic take-off with a large accumulation of capital, with revenues from agriculture oriented toward heavy industrialization schemes (as in Algeria) or toward middle-sized industries for consuming goods and light equipment (in Egypt and Tunisia). Subsidies and protectionism countered low productivity or a lack of skilled labor and executives.

All over Africa, pockets of state interventionism were constituted to manage the income of commodities. Marketing boards collected agricultural products, sold them abroad (to multinational trade companies), and shared the revenues between peasants and investments in dams with energy and irrigation schemes, in transportation (ports, roads), or in some forms of welfare state. In these cases, a "mixed economy" prevailed because the state allowed action by private investors, either local or international, thus creating pockets of industrialization (textile, metalworking, car assembly), generally under the umbrella of protectionist customs taxes.

Nigeria and the Ivory Coast were beacons of such policies, and emerged as "rich countries" because of their size, population, natural resources, and, for Nigeria, oil. But a few other experiences of socialist-state countries ended in turmoil because of a paralysis of entrepreneurship (in Ghana and Guinea) and even of foreign direct investment.

Small enterprises, such as this salon advertised on a billboard in Cameroon, have proliferated in Africa, but their impact is slight.

Weak States

Throughout Africa, the results of those various paths were shown to be uncertain in the 1980s. The key issue seems to have been the inability of the state in a majority of countries to fix a guidance framework because of its very weakness. While Western economic administrations were built for decades and through hard political contests ("revolutions," in Britain, the United States, and France), suddenly meager African elites had to steer large areas without administrative tradition, means, or commonly admitted law.

Some states reached some balance between clan interests and general interests, especially where elites were stronger, in northern Africa or in a few sub-Saharan countries, like the Ivory Coast or Senegal. However, a large majority were subject to the rule of ethnic or political groups that used state treasuries as leverage for corruption. Businesses had to face uncertainty of law completion, commonplace extortion forms (at customs posts or through fiscal rackets), and bribery. In a few "kleptocracies," such corruption grew tremendously. Mobutu's Zaire in the 1970s and 1980s was imitated by several oil countries (Nigeria, Gabon, the Congo, and Cameroon, the latter being ranked among the most corrupt countries in the world). All of them benefited from the tolerant support of Western countries because of the Cold War environment and growing business interests.

Military dictatorships (such as in Uganda and Nigeria) provided one explanation, but habits of clan power were also developed in semi-democratic countries (such as Kenya) or socialist ones (Algeria from the 1980s). Meanwhile, the weakness of administrations could also be explained by flawed tax systems and the prevalence of an "informal economy." Lack of budgetary transparency could explain lagging public investments in transportation, education, or health systems, hindering economic growth.

Emerging Entrepreneurship

Several forces helped Africa begin to overcome some of its previous economic challenges. First, international cooperation drove Africans to become conscious of the issues. United Nations (UN) organizations such as the UN Conference on Trade Development (UNCTAD) and the Food and Agriculture Organization (FAO) insisted on investments in agriculture and in manpower training. The World Bank financed infrastructure and was imitated by the African Bank for Development, which was established in 1963. Hundreds of conferences began to forge a shared outlook in favor of "a new economic order," taking into account general interests and the need for infrastructure in rural areas. Many nongovernmental organizations became involved as well. Even business law was cleaned up by more transparent and stable states, or, in about 16 French-speaking countries, thanks to the Organization for the Harmonization of Business Law in Africa (OHADA), created in 1993.

Elites were trained either in African universities or abroad, which, despite the "brain drain" toward developed countries, contributed to creating management executives in economic administrations, local enterprises, or foreign affiliates. The long-term growth and the relative distribution of wealth and income fostered emerging middle classes in a majority of countries (but not in those with lasting civil war).

What was at stake was the emergence of entrepreneurship, mixing traditional African values and capitalist values. Despite water shortages, millions of planters were committed to a "modern" agriculture, either for exports or for local use. The cotton revolution in the Sahel belt from Chad to Mali now involves 15–20 million peasants. Cocoa and coffee, paddy rice, cereals, spices, and vegetables for household consumption have also helped raise standards of living and promote trade.

Huge investments by states into dams and irrigation networks sustained such development (in north Africa, with, for example, the Moroccan program of 1967; and in the Niger loop). The withdrawal of European retail firms eased the growth of native shopkeepers, from petty ones to more specialized ones, while the legacy of commercial cultures benefited ethnic groups, which reinforced their grip in several areas (the Bamileke in Central Africa, Fulas in Sierra Leone, and Ibos in Nigeria, for example).

Middle-sized trade, services, and facilities management houses took shape all over African cities, despite competition, and professional schooling and trading helped sustain the move in the long term. Throughout African or foreign service or industrial firms, middle-class layers of accountants, managers, technicians, and even engineers (for example, at Algerian Sonatrach) were constituted in the 1970s.

The key issue lies in industrialization: Was African entrepreneurship and capital able to fuel initiatives? The transfer of foreign firms to African investors has been a reality in several countries where the law required such reshuffling, for instance, in Nigeria in the 1970s. In South Africa, foreign or local companies from the time of apartheid started following a law in the 1990s imposing buyouts of equity by black investors. But the transfer of manufacturing to private African capital remained hard to achieve because of the trend toward less protectionist rules. These rules were imposed by the General Agreement on Tariffs and Trade (GATT) or by the International Monetary Fund (IMF) in the 1980s and 1990s under the name of "structural adjustment programs." They weakened numerous industries, such as textile production, metalworking, and leather, which, along with gaps in transportation and energy supplies, put the brakes on an industrial emergence. However, tourism and hotel businesses (and real estate linked to them) did emerge in several countries, fostering layers of native mid-sized enterprises.

Globalization

In parallel with the issues of African entrepreneurship, the other issue of the exploitation of resources has been at stake. Could African countries balance their political independence and the call for foreign investors through avoiding "neo-imperialism"? In fact, a new "scramble for Africa" commenced: Big European and American businesses invested massively to develop timber production in tropical Africa, risking overexploitation. They also invested in oil and Africa reached a 12 percent share of world production in 2005. Other investments were in nonferrous metals (such as manganese in Gabon), uranium, diamonds and gold, and phosphates. The United States became a partner to Africa, especially in phosphates or metals—but, in the 21st century, China and India commenced establishing footholds because of their need for ores and energy.

Industrial firms kept momentum up for car assembly plants, light industries, first transformation of commodities (groundnuts, palm oil, and cacao butter), oil refineries, and cement. They did this even though they could not count on a "global African market" because of the lack of integrated transportation systems and because of protectionist positions. In fact, Africa still suffered from a lack of a competitive edge: an untrained workforce; instability in some areas, in particular in Nigeria and the Democratic Republic of the Congo; lack of energy (despite dams in several countries); lack of transparency in governance; and corruption. Such obstacles spurred imports from abroad at the expense of local production.

One key issue remains the use by the state of its income from oil and commodities. Countries benefiting from the oil allowance (100 percent of gross national product for the Republic of the Congo in 2005, 89 percent for Angola and Libya, 64 percent for Chad and Algeria, 52 percent for Nigeria) seemed to insufficiently master its use in favor of general equipment and development, with some even lacking oil refineries and having gas shortages.

Development

Strong pockets of development have increased purchasing power all over the African coasts. Urbanization has contributed to growth, with real estate developments, public works, the engineering of ports, management of energy and healthcare, and even new technologies of information. But the state of capitalist entrepreneurship is still questionable. What is lacking in a majority of countries is a network of complementary industrial and service activities; they are found only in South Africa and perhaps in Algeria. The transformation of primary commodities is still insufficient.

Middle-sized enterprises are fragile because of exposure to recessions, despite the support of national or international "banks of development." Predominant micro and small enterprises employ very few if any people and generate little or no income for the owners, even with the recent support of micro-credit institutions and practices beyond traditional "tontine" uses. States remain a key force in development and investment.

Self-help is another avenue to growth. The New Partnership for Africa's Development (NEPAD) took shape in 2001 to define a strategic framework under the guidance of five advanced countries (Algeria, Egypt, Nigeria, Senegal, and South Africa) within the United Africa Organization. The Southern Africa Development Community arose in 1981 to mobilize capital from rapidly emerging South Africa.

Despite these efforts, if the major UN Millennium Development Goal of reducing poverty by half by the year 2015 is to be achieved in Africa, a major policy shift is required, both at the national and international levels, to help boost growth and development.

See Also: African Development Bank; Algeria; Angola; Botswana; Cameroon; Côte d'Ivoire; Egypt; Ghana; Kenya; Libya; Millennium Development Goals; Morocco; Nigeria; South Africa; Sudan; Suez; Tanzania; Tunisia; World Bank, The; Zimbabwe.

Bibliography. W. M. Adams, *Wasting the Rain: Rivers, People and Planning in Africa* (University of Minnesota Press, 1992); R. Austen, *African Economic History: Internal Development and External Dependency* (J. Currey, 1987); C. Boone, *Merchant Capital and the Roots of State Power in Senegal, 1930–1985* (Cambridge University Press, 1992); W. G. Clarence-Smith, ed., *Cocoa Pioneer Fronts since 1800: The Role of Smallholders, Planters and Merchants* (MacMillan Press, 1996); D. Fick, *Entrepreneurship in Africa. A Study of Successes* (Quorum Books, 2002; D. K. Fieldhouse, *Unilever Overseas* (Croom Helm, 1978); A. G. Hopkins, *An Economic History of West Africa* (Longman, 1973); A. Jalloh and T. Galola, eds., *Black Business and Economic Power* (Rochester University Press, 2002); P. Kennedy, *African Capitalism: The Struggle for Ascendency* (Cambridge University Press, 1990); P. Kibly, *Industrialisation in an Open Economy: Nigeria, 1945–1966* (Cambridge University Press, 1969); M. Lynn, *Commerce and Economic Change in West Africa: The Palm Oil Trade in the Nineteenth Century* (Cambridge University Press, 1997); Gabriël Oosthuizen, *The Southern African Development Community: The Organisation, Its History, Policies and Prospects* (Institute for Global Dialogue, 2006); D. Pallister, S. Stewart, and I. Lepper, *South Africa Inc.: The Oppenheimer Empire* (Yale University Press, 1988); F. Pedler, *The Lion and the Unicorn in Africa. A History of the Origins of the United Africa Company, 1787–1931* (Heinemann, 1974); A. Spring and B. McDade, eds., *African Entrepreneurship: Theory and Reality* (University Press of Florida, 1998); Will Swearingen, *Moroccan Mirages: Agrarian Dreams and Deceptions, 1912–1986* (Princeton University Press, 1987); R. B. Winder, *The Lebanese in West Africa* (Mouton, 1962).

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African Development Bank

Established in 1964 by 23 African governments, the African Development Bank Group manages the African Development Bank, the African Development Fund, and the Nigeria Trust Fund, to the end of social and economic improvements throughout Africa. Operations began in 1966 from an Abidjan, Côte d'Ivoire, headquarters, which has since been relocated to Tunis.

Current member nations of the African Development Bank, which the African Development Bank Group divides according to region, are: in Central

Africa, Cameroon, the Central African Republic, Chad, Congo, the Democratic Republic of the Congo, Equatorial Guinea, and Gabon; in East Africa, Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Seychelles, Somalia, Sudan, Tanzania, and Uganda; in North Africa, Algeria, Egypt, Libya, Mauritania, Morocco, and Tunisia; in Southern Africa, Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe; in West Africa, Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, and Togo; and the nonbeneficiary member countries, Argentina, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, India, Italy, Japan, Korea, Kuwait, Netherlands, Norway, Portugal, Saudi Arabia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Shareholders thus include 53 African countries, called Regional Member Countries (RMCs) and 24 non-African countries. The Board of Executive Directors that governs the African Development Bank Group is composed of representatives from different member states, with RMC representatives collectively retaining a steady 60 percent of the vote.

The list of RMCs in the African Development Bank Group is almost identical to the member nations of the African Union, and the history of the two entities is intertwined, having emerged in the climate of pan-Africanism that developed in the wake of European imperialism—and amidst strong desire to turn pan-African institutions into Cold War institutions. The African Union, established in 2002, is the successor to the Organization of African Unity founded in 1963, and the spiritual successor to other attempts at African political and economic union. Foreign and economic policy, in particular, are coordinated jointly among the nations of the African Union, which include all of Africa except for Morocco (Guinea and Mauritania are currently suspended in the wake of the 2008 coups d'état). While the Organization of African Unity ostensibly protected African human rights and collective voice in the aftermath of colonialism, the African Union's long-term goals parallel the developments of the European Union, and include an eventual central bank and common currency, as well as a region-wide investment bank and monetary fund.

The African Development Bank employs about 1,000 people, and has funded about 3,000 projects over the last four decades, with a special emphasis on the intersection of social and economic improvement, such as educational funding and attempts to improve and modernize the role of women in the African world. Many of the African Development Bank's loans and grants go to infrastructure projects,

Development Funds

The African Development Fund began operating in 1974, ten years after the founding of the African Development Bank, and provides special interest-free loans to RMCs unable to qualify for African Development Bank loans, usually for projects that will help move those RMCs into a position of economic health that will qualify them for African Development Bank loans in the future. The African Development Fund is a joint operation between the African Development Bank and the governments of its members, and operates from a pool of funds contributed by non-RMC member states, which are generally replenished periodically.

With the Nigerian government, the African Development Bank Group also operates the Nigerian Trust Fund, which has fewer resources than the other African Development Bank Group entities but focuses them solely on the poorest RMCs, where many citizens live on less than a dollar a day.

See Also: Africa; Company Profiles: Africa; Development Assistance.

Bibliography. John Akokpari, Angela Ndinga-Muvumba, and Tim Murithi, eds., *The African Union and Its Institutions* (Jacana Media, 2009); Paul Collier, *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It* (Oxford University Press, 2008); K. D. Fordwor, *African Development Bank* (Elsevier, 1981); Samuel Makinda, *The African Union: Challenges of Globalization, Security, and Governance* (Routledge, 2007); Tim Murithi, *The African Union: Pan-Africanism, Peacebuilding, and Development* (Ashgate Publishing, 2005).

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Agents

Agents are the intermediaries who help to develop and maintain the channels of distribution. Agents arrange for sales between two parties and get paid usually in commission. An agent's duty is to understand the marketer's business model and market objectives so that they can help the marketer to find the suitable partners and routes to the market. They are expected to obtain the best possible deal for the marketer by negotiating with the distributor. The agent's firm may provide different types of mediatory services as necessary for a particular business.

To make a product accessible to the foreign target market is a critical and challenging process for an international marketer. Each foreign market contains unique distribution networks with many channels. Sometimes it is difficult to penetrate the multilayered, complex, and inefficient distribution structure in a new market. The distribution process in any country consists of three main components: the physical handling and distribution of goods, the passage of ownership (title), and, most important from the standpoint of marketing strategy, the buying and selling negotiation between the producers and agents (or middlemen) and the agents and customers. In a distribution structure, the goods pass from producers to the users through the agents whose customary functions, activities, and services reflect existing competition, market characteristics, tradition, and economic development. Distribution structure varies from one country to another. For example, the distribution structure for Japan is very different from the United States or European countries in terms of the density of agents. In Japan, the commodities often pass through three or four intermediaries or agents before reaching customers.

Agents may have different names and functions in foreign countries. It is important for international marketers to thoroughly understand the titles and the type of services the agents provide. The same agent or firm may provide different types of services depending on the job requirement. For example, the functions of a variety of agents namely, a stockist, an exporter, or an importer are different in the markets of England.

The marketer has to be aware of the intent of the agent to maximize his own profit with the least amount of work. Hence, agents sometimes take orders from manufacturers whose products and brands are in demand to avoid any real selling effort to market a new product or a new manufacturer. Frequently, the manufacturer with a new product or a product with a limited market share is forced to bypass the agents until they establish a reasonable market share for their product. Often the manufacturers have to provide adequate inducement to agents to convince the disinterested agents to promote and sell their products.

The services provided by agents are critical to the success of the marketers. Hence the marketers should carefully research the target market in a foreign country while choosing an agent or an agent's firm. The two most important qualities of a successful agent are his personal commitment to the marketer and his product and his superior performance. One way to achieve success in the international market is to work closely with the agent. The manufacturer or marketer has to terminate the agent's contract promptly in case of poor performance, so performance and termination clauses should be clearly documented. Many international businesses have achieved success based on their willingness to terminate all underperforming agents. However, sometimes if unaware of local legalities, the companies may face legal consequences. Sometimes local corruption creates legal adversity. Hence, the agent and the marketer both should understand clearly the rights and the obligations under the agreement.

Agents help marketers eliminate the difficulties involving language, physical distribution, communications, and financing in a foreign country, and their cooperation is crucial to the success of an international marketer.

See Also: Channels; Direct Export; Distribution; Foreign Sales Corporation; Franchising; Gray Market; Indirect Export; Sales; Supply Chain Management; Subsidiary; Vertically Integrated Chain.

Bibliography. Daniel C. Bello and Ritu Lohtia, "Export Channel Design: The Use of Foreign Distributors and Agents," *Journal of the Academy of Marketing Science* (v.23/2, 1995); Philip R. Cateora and John L. Graham, *International Marketing* (McGraw-Hill Irwin, 2007); Warren J. Keegan, *Global Marketing Management* (Prentice Hall, 2006).

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Agreement on Trade-Related Aspects of Intellectual Property Rights

Intellectual Property Rights (IPR) are the rights given to persons over the creation of their minds. Intellectual property includes copyright (for example, the rights of authors of literary and artistic works) as well as industrial property (for example, trademarks and patents). The need to protect IPR was discussed at the Uruguay Round (1986–94) as part of the General Agreement on Tariffs and Trade (GATT). For the first time in the history of GATT, the Uruguay Round established the minimum standards of protection to be accorded to IPR. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) came into force in January 1995.

Before the TRIPS Agreement, considerable variation existed between countries in the protection of IPR. These differences became a source for concern among developed industrial countries during the 1970s, because of rapid growth in research and development expenditures and trade in products with a high IPR content (for example, pharmaceuticals, electronics, and computer software). The basic aims of the TRIPS Agreement were to promote protection of IPR and to ensure that international trade was not constrained by the measures that individual countries enforced to protect IPR.

The TRIPS Agreement covers five major issues: the applicability of the basic principles of GATT and relevant international intellectual property agreements; the provision of adequate standards governing the use of trade-related IPR; the provision of effective measures for the enforcement of trade-related IPR; the provision of robust procedures for the settlement of disputes between governments; and the introduction of transitional arrangements during the period when the Agreement was being introduced.

In order to obtain international cohesion in the standards of IPR protection, the agreement built upon the obligations that already existed. For example, in the case of patents and industrial designs, the main international agreement was provided by the Paris Convention for the Protection of Industrial Property. This Convention was held in 1883 and has been subsequently revised. In the case of copyright, the Berne Convention for the Protection of Literary and Artistic Works, 1886, provided the principal protocol on these matters.

A council, which is answerable to the World Trade Organization, was established to oversee the operation of the TRIPS Agreement. Since 1995, the council has reviewed legislation on a wide range of IPR, including, for example: electronic commerce; a multilateral system of notification and registration of geographical indications for wines and spirits; technology transfer; integrated circuits; anticompetitive practices in contractual licenses; and undisclosed information and trade secrets.

Underlying the TRIPS Agreement were a number of general provisions that defined the minimum standards of intellectual property protection: for example, members are not obliged to provide statutory protection beyond that required by the Agreement. Provision was made whereby member countries would treat their own nationals and foreigners equally. It was also stipulated that nothing in the Agreement would absolve members from the existing obligations they had to each other under the various International Conventions for the Protection of Industrial Property. Most-favored-nation treatment was also ruled out; specifically, in the context of the protection of IPR, advantages or privileges granted by a member to the nationals of any other country would immediately and unconditionally be accorded to the nationals of all other members.

A further important principle was that the protection of IPR should contribute to innovation and technology transfer. Finally, public interest considerations were recognized: Members were permitted to exclude from patentability medical treatments for animals and humans.

In addition to these general provisions, the Agreement also provided for the protection of specific IPR. As regards copyright, the Agreement protected computer programs; international copyright rules were expanded to cover rental rights. For example, authors of computer programs had the right to prohibit the commercial rental of such works to the public. Additionally, performers had the right to prevent unauthorized recording and transmission of live performances for up to 50 years. In the case of geographical indications (GIs) of origin, the Agreement was an innovation for many countries. GIs are used to identify the place where a product is made. They are important because a particular product obtains its essential characteristics precisely because it is produced in a particular locality. Classic examples of this are "Burgundy," "Champagne," and "Scotch" in alcoholic beverages. Specific legal provision was also provided whereby interested parties could prevent use of a GI to identify wines if these wines had not originated in the place located by the GI.

Turning to patents, the Agreement provided that protection must be available for inventions for at least 20 years. In the specific case of pharmaceutical products, innovations such as compulsory licensing were introduced to ensure that countries unable to produce pharmaceuticals domestically could import patented drugs.

One of the key factors motivating GATT's interest in the protection of IPR was concern about trade in pirated goods. Accordingly, a further innovation of the Agreement was to strengthen the power of the customs authorities to seize and detain fraudulently marked goods. This led to the creation of the World Customs Organization (formerly Customs Coordination Council) to promulgate customs legislation designed to facilitate the implementation of the Agreement.

See Also: General Agreement on Tariffs and Trade; Intellectual Property Theft; World Trade Organization.

Bibliography. M. Blakeney, *Trade Related Aspects of Intellectual Property Rights: A Concise Guide to the TRIPS Agreement* (Sweet and Maxwell, 1996); C. M. Correa, *Intellectual Property Rights, the WTO and Developing Countries* (Zed Books, 2000).

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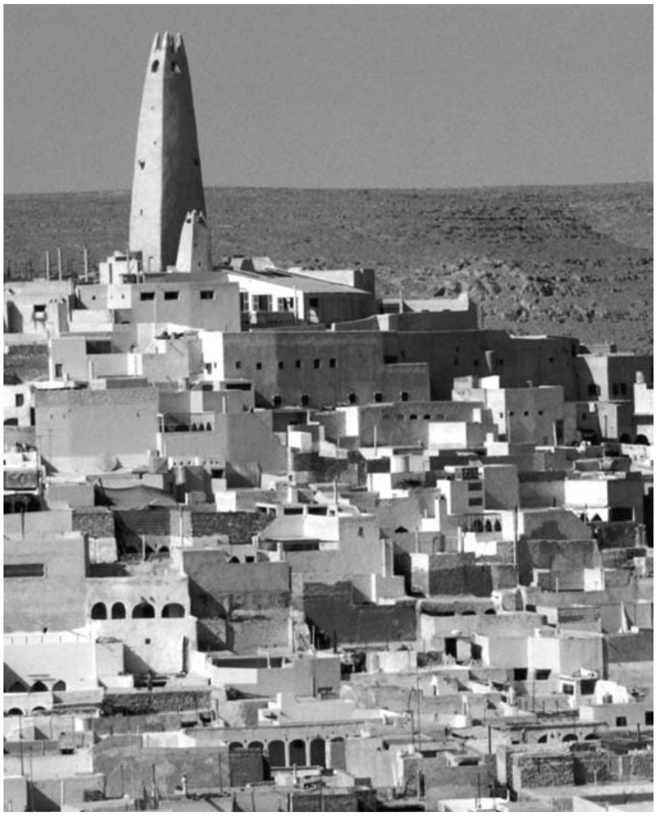
Algeria

The People's Democratic Republic of Algeria (population 33,769,669 in 2008, GDP $225 billion in 2007) is an industrialized and predominantly Muslim country in North Africa. The largest country on the Mediterranean coast, it is also the second-largest in Africa, and a member of the United Nations, the African Union, OPEC, and the Arab League.

Settled by Berbers thousands of years ago and invaded by both Carthage and Rome in antiquity, Algeria was conquered by Muslims in the Middle Ages, and in 1517 became part of the Ottoman Empire. The Algerian city of Algiers was one of the main ports of operation for the famed Barbary pirates of the 16th through 19th centuries, whose attacks on American ships precipitated the First and Second Barbary Wars. Thousands of European ships were lost to the pirates over the centuries, making them the terror of the north African coast, a reputation that may have contributed to the violence of the French invasion in 1830, when over one million Algerians were killed (a third of the population, under a policy of extermination to prevent revolt). Despite this, it took the rest of the 19th century for the French rulers to stamp out the last of Algerian resistance. In the aftermath of World War II and the collapse of European imperialism around the world, resistance to French rule reignited, and Algerian guerrillas fought a campaign for independence, which was eventually established in 1962.

Since the adoption of its constitution in 1976, Algeria has been a multi-party state, and more than 40 political parties (not all of them active at the same time) have registered with the Ministry of the Interior. The head of state is the president, who is elected to a five-year term (with no term limits) and appoints a prime minister who acts as head of government, and in turn appoints the members of the council of ministers of which the president is head. The legislative branch consists of a bicameral parliament: The 144 members of the upper house, the council of nation, whose members serve six-year terms and are elected by regional authorities or appointed by the president; and the 389 members of the People's National Assembly, who serve five-year terms and are directly elected by their constituencies.

Though Algeria is almost entirely Sunni Muslim, there are small communities of Christians in the larger cities, including a quasi-underground evangelical Christian community operating out of home churches and actively proselytizing new members since the 20th-century rise in worldwide Christian evangelism. The Jewish population since the end of French rule is negligible.



The oasis town of Ghardaïa, in north-central Algeria, is known for crafts and is part of a U.N. World Heritage Site.

Most Algerians speak Arabic, which is the country's official language. The implementation of this official language was tied in with issues of Algerian independence, but has resulted in the derogation of the Berber population, which speaks Tamazight (recently recognized as a national language, which still excludes it from use in official contexts). French remains such a well-known language that some university courses are still taught in it, as they have been since before independence.

Algeria is 14th in the world in petroleum reserves and eighth in natural gas reserves, and fossil fuels account for nearly all exports (95 percent) and 30 percent of the gross domestic product (GDP). The high fossil fuel prices of recent years have resulted in a high and sustained trade surplus for Algeria, and a steady rise in the GDP; since 2006, Algeria's foreign debt has been less than a tenth of its GDP. But unemployment is high—around 12 percent—because this wealth, and especially the foreign investment behind it, does not extend to all sectors of the economy. Agriculture accounts for about a quarter of the economy, and the fertile soil of Algeria is ideal for cereal grains, which have been the principal agricultural good since the cotton industry declined in the 19th century. Tobacco, figs, dates, citrus, and olives are all significant exports as well.

See Also: Africa; France.

Bibliography: Charles-Robert Ageron, *Modern Algeria: A History from 1830 to the Present* (Hurst, 1991); Ahmed Aghrout and Redha M. Bougherira, *Algeria in Transition: Reforms and Development Prospects* (Routledge, 2004); Mahfoud Bennoune, *The Making of Contemporary Algeria: Colonial Upheavals and Post-Independence Development, 1830–1987* (Cambridge University Press, 1988); John Ruedy, *Modern Algeria: The Origins and Development of a Nation* (Indiana University Press, 1992); Benjamin Stora, *Algeria: 1830–2000* (Cornell University Press, 2001).

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Allianz SE

The German company Allianz SE, founded in 1890, is now the largest international insurance and financial services organization in the world. The two founders were Carl Thieme, the director of the Munich Rückversicherungs-Gessellschaft (Munich Reinsurance) and Wilhelm Finck, a Munich banker, and its original headquarters were in Munich. Thieme ran the reinsurance company on totally different lines to the original insurers as a market niche. However, his work quickly showed him that there were huge profits to be made from direct insurance, and Allianz was established to do this. It was not long before Allianz was making more profits than Munich Rückversicherungs-Gessellschaft, and Thieme and Finck started concentrating their efforts on Allianz.

The firm started offering transport and accident insurance very soon after the company was established, and as a result of an expansion in business, they moved the company headquarters to Berlin, the German capital, where they also offered fire insurance. In 1904 Paul von der Hahmer was appointed the second head of the company; by this time it had already opened an office in London, enabling it to become more international in its focus. Indeed, by 1913 some 20 percent of the premium income of the company came from outside Germany. During World War I, they assisted the German war effort, and the defeat of Germany in World War I led to a curtailing of the international arms of the company.

From 1921 until 1933 there were many mergers as Allianz, under its new general director Kurt Schmitt, took over Bayerische Versicherungsbank, the Stuttgarter Verein, the Frankfurter Allgemeine Versicherungs-AG, and other companies. It has been alleged that with the rise of the Nazi Party, executives in Allianz started cultivating close relations with some of the German Fascist leadership, although it was certainly not one of the major companies that backed the Nazis. During the Nazi period, Allianz grew and Kurt Schmitt himself served under Adolf Hitler as the Reich economy minister from June 1933 until January 1935. The company continued to expand in the late 1930s. However, with the outbreak of World War II, the company faced problems dealing with insurance in time of war. Much of the infrastructure of the company was destroyed in the war, and when the company's employees met on May 18, 1945, there were about 250 of them.

After the war, it was not until 1950 that Allianz was able to open an office in Paris, later expanding into Italy, and by the 1970s it was operating in Brazil, the Netherlands, Spain, the United Kingdom, and the United States. The expansion into Britain was helped with the takeover of Cornhill Insurance plc of London (which was renamed Allianz Cornhill Insurance plc), and Kleinwort Benson, which it gained when it bought the Dresdner Bank. It also moved further into the Italian market with the buying of a large stake in Riunione Adriatica di Sicurt of Milan. In the United States, Allianz bought Fireman's Fund, and in France it bought Assurances Générales de France. With the fall of communism in Eastern Europe, Allianz expanded into Hungary in 1990, and then into Slovakia, and during the mid-1990s started to become a major presence in China and South Korea.

The company Allianz SE now has its headquarters in Munich, Germany, and has achieved revenue of €102.6 billion (2007), with a net income of €7 billion (2006). It now provides insurance for 60 million customers in more than 70 countries, and has 165,505 employees. The CEO of the company since 2003 has been Michael Diekmann, who took over from Henning Schulte-Noelle, who ran the company for the previous 12 years. The company sponsors the Allianz Arena Stadium in Munich.

See Also: Company Profiles: Western Europe; Germany; Munich Re Group.

Bibliography. Gerald D. Feldman, *Allianz and the German Insurance Business* (Cambridge University Press, 2001); Harold Kluge, "Der Einfluss des Geschäfts der 'Allianz' auf die Entwicklung der 'Münchener Rückversicherungs-Gesellschaft' in deren ersten fünfzig Jahren (1880–1930)" [The Influence of the Business of Allianz on the Development of the Munich Reinsurance Company in its First Fifty Years, 1880–1930], *Jahrbuch für Wirtschaftsgeschichte* (v.2, 2006).

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All Ordinaries Index

Established in January 1980, the All Ordinaries or All Ordinaries Index (known colloquially as the All Ords) is the oldest stock index in Australia, so called because it contains nearly all ordinary (or common) stock listed on the Australian Securities Exchange (ASX). Its creation coincided with the establishment in September 1987 of the then Australian Stock Exchange (now ASX following a merger with the Sydney Futures Exchange in July 2006) from six separate state-based exchanges in the capital cities of Sydney, Melbourne, Brisbane, Perth, Adelaide, and Hobart.

Like all market indexes, the All Ordinaries is a summary measure of the movement of stock values that result when stock in companies held by individual and corporate stockholders trade on the ASX. It is useful as an indicator of overall share market performance and current trends. It also provides a performance benchmark for invested funds, a record of market cycles, and an indicator of stock market reactions to economic events. As a market index, the All Ordinaries is helpful in the construction of asset pricing models, like the capital asset pricing model (CAPM), where the All Ordinaries serves as the market factor and is used to calculate beta (the sensitivity of a stock's return to market or systematic or nondiversifiable forces). Daily data on the All Ordinaries for these purposes is available since 1980; movements before 1980 have been recalculated using changes in the older state-based indices (mostly the Sydney Stock Exchange). Reconstructed daily observations for the All Ordinaries from January 1958 and backdated monthly data from October 1882 are now available.

When established, the All Ordinaries had a base index of 500—28 years later in December 2007 the All Ordinaries was at 6,421, meaning that it had increased more than twelvefold in nominal terms (that is, not accounting for inflation). This represents an arithmetic return of 1,184 percent and a compound annual return of 9.54 percent. On November 1, 2007, the All Ordinaries hit a record high of 6,873. However, on January 22, 2008, the All Ordinaries plunged 408.9 points (7.26 percent) to 5,222, its fourth-worst day on record and worst performance since October 29, 1987, when it fell 7.52 percent. Since then, it has partially recovered, and as of June 6, 2008, stands at 5,633.

On April 3, 2000, the ASX reconstituted the All Ordinaries from a pool of 229–330 stocks to include the 500 largest companies. Prior to this change, to be included in the All Ordinaries portfolio used for calculating the index a company needed to have a market value of at least 0.2 percent of all domestic equities quoted on the ASX and maintain an average turnover of at least 0.5 percent of its quoted shares each month. The new index now accounts for about 99 percent (up from 90 percent) of the ASX's total market capitalization. This change coincided with the introduction of new benchmark indexes managed by Standard and Poor's (S&P), including the S&P/ASX 300 (i.e., the 300 largest companies listed on the ASX), S&P/ASX 200, S&P/ASX 100, S&P/ASX 50, S&P/ASX 20, and the S&P/ASX Small Ordinaries (i.e., small and medium-sized companies). The importance of the All Ordinaries has diminished with the introduction of the new S&P/ASX indexes.

The All Ordinaries is a market-weighted (or capitalization-weighted) index where stocks are included in the index according to the total market value of their outstanding shares. As a result, the impact of a stock's price change is proportional to the company's overall market value, which is the share price times the number of shares outstanding. Stocks in companies with a larger market capitalization will then exert a proportionally greater influence on the market index. Most stock indexes today are market-weighted; they include the S&P 500 and the Dow Jones Wilshire 5000 in the United States, the Financial Times Stock Exchange (FTSE) 100 in the United Kingdom, and the Tokyo stock Price IndeX (TOPIX) in Japan. Some other indexes are price-weighted where each stock makes up a fraction of the index proportional to its price. This means that stocks are included in proportions based on their quoted prices. Accordingly, higher-priced stock will exert the most impact on the index. Examples of price-weighted indexes include the Dow Jones Industrial Average (DJIA) in the United States and Japan's Nikkei 225.

In terms of calculation, the All Ordinaries represents the aggregate market value of the ASX. The aggregate market value is the sum of the market values (the number of shares on issue multiplied by the current price per share) of all companies included in the All Ordinaries portfolio. Today's movement in the index is then calculated by multiplying yesterday's index by the ratio of today's to yesterday's aggregate market values. Updates to the companies included in the All Ordinaries portfolio are made throughout the month when there are changes in the portfolio companies, including delistings, additions, capital reconstructions, and additions through dividend reinvestment plans and bonus and rights issues. These changes affect the number of shares on issue for each company and mean that the portfolio needs modification to maintain consistency.

The main limitation of the All Ordinaries is that it is a price index: it only includes movements in stock prices. However, investors accrue returns not only through price changes, but also through the receipt of dividends; hence, the All Ordinaries understates the total return to the investor. To resolve this, an All Ordinaries Accumulation Index is available that includes the effects of dividend receipts in its computation by assuming that dividends are reinvested to earn the same returns as the stock already held.

See Also: Australia; Dow Jones Index; FT Index; Nikkei Index; S&P 500; Stock Exchanges.

Bibliography. Australian Securities Exchange, www.asx.com.au (cited March 2009).

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Alternative Dispute Resolution

Alternative dispute resolution (ADR) is an umbrella term embracing various processes principally designed to overcome some of the alleged weaknesses in litigation. For instance, ADR is generally cheaper, less adversarial, and simpler than litigation, and ADR techniques offer a greater range of remedies than the courts. Contracts can be renegotiated and settlements can include nonlegal concessions such as providing a reference where there is an employment dispute. Moreover, ADR is generally speedier than litigation.

First used extensively in the United States in the 1970s, ADR then spread to other common law countries and is used in many situations; for instance, where there are commercial, accounting, construction, employment, and family disputes. It ranges from morally (and sometimes legally) binding decision making by a third party, such as arbitration, to nonbinding processes such as mediation and conciliation. These processes, which are court annexed in some jurisdictions in some countries, are described below. Arbitration is probably the oldest of ADR processes and can best be described as noncourt adjudication. Procedurally, an arbitration hearing is less formal than a court hearing; for example, the former normally has no formal rules of evidence. Furthermore, arbitration is private unlike a court, and there is finality. Appeals from an arbitrator's decision are severely limited, essentially to questions of procedural fairness and the arbitrator's conduct. Also, arbitration is generally speedier than litigation, and normally the parties choose the arbitrator as well as the time and place.

Arbitration can take various forms. In the most common variant, the arbitrator chooses anywhere between the limits (offers) set by the parties. Alternatively, the arbitrator is restricted to opting for either one party's final offer or the other party's final offer, but nothing in-between. This final offer arbitration is sometimes called flip-flop arbitration. A third variant is where the arbitrator makes a decision and then the offer of the party closest to the arbitrator's decision is the formal arbitration award.

Mediation and conciliation—and the terms are often used interchangeably—are becoming increasingly popular. Both mediation and conciliation are voluntary, nonbinding, confidential, without prejudice, and without precedent processes. Their aim is to assist people to talk to each other in a rational and problem-solving way and to bring realism and objectivity to a dispute. Whereas lawyers focus on *rights*, mediators/conciliators focus on *interests* and the needs of the parties and act as a catalyst to enable the parties to communicate with each other and identify common ground, essentially assisting negotiation. Mediators and conciliators, however, vary in the extent to which their main aim is therapeutic or their main aim is to obtain a settlement and how interventionist they are. Some are mainly messengers, shuttling back and forth with offers. Others not only seek to persuade the parties to settle by giving opinions on facts, law, and evidence but also make recommendations.

Although arbitration, mediation, and conciliation are the most common ADR processes, there are others including med-arb, ombudsmen, and mini-trials. In the United States and South Africa, med-arb is practiced: with the consent of the parties, the same person mediates and, if that is unsuccessful, then arbitrates. Ombudsmen, increasingly available in the United Kingdom, deal with complaints from individuals about public bodies and private sector services such as insurance, banking, and rentals. Once the organization has had an opportunity to deal with the complaint, the complainant can then go to the relevant ombudsman who will investigate the matter and suggest a resolution. As with mediation, the ombudsman procedure does not prevent complainants from entering another ADR process or embarking on litigation. Mini-trials are formalized settlement conferences where representatives of the disputants make short presentations and adjudicator(s) give a decision that, however, is not binding on any party, unless or until they agree to settle.

Although ADR has advantages compared with litigation, it also has disadvantages. First, because there are no precedents, the parties may not be able to weigh accurately the strength of their case. Second, because ADR processes are private, there is no wider message, for instance, about what practices can be viewed as discriminatory on grounds of race or sex or the extent of the duty of care owed by the employer to the worker. Third, a party might embark on conciliation or mediation to buy time, as a party can walk away without reaching a settlement at any time. Nevertheless, ADR is an attractive option for people who are unwilling to risk the complexity and financial reefs of litigation.

See Also: Arbitration; Mediation; Negotiation and Negotiating Styles.

Bibliography. A. Bevan, *Alternative Dispute Resolution*, (Sweet & Maxwell, 1992); M. S. Hermann, ed., *The Blackwell Handbook of Mediation: Bridging Theory, Research, and Practice* (Blackwell's, 2006); R. Smith, ed., *Achieving Civil Justice: Appropriate Dispute Resolution* (Legal Action Group, 1996); S. York, *Practical ADR* (Pearson, 1996).

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Altria Group

Between 1998 and 2004, the Altria Group spent $101 million on lobbying the U.S. government.

In the 1950s, a widely publicized article in *Readers' Digest* focused upon the health hazards associated with cigarette smoking. Since then, few companies have endured sustained attacks on their core product as much as has the Altria Group. There have been numerous changes within the Altria Group, many directly in response to health risk and other attacks from varied stakeholder groups.

With corporate headquarters located in Richmond, Virginia, the Altria Group (NYSE; MOS) is a parent company of Philip Morris USA (the largest tobacco corporation in the United States), John Middleton (a leading manufacturer of machine-made large cigars), and Philip Morris Capital Corporation (manager of a portfolio of primarily leveraged and direct-finance lease investments). The Altria Group owns 100 percent of the outstanding stock of Philip Morris USA, John Middleton, and Philip Morris Capital Corporation. Since 2002 the Altria Group has held a 28.6 percent economic and voting interest in SABMiller plc, one of the world's largest brewers.

In 1847 Philip Morris was founded by a London tobacconist of the same name. In 1881 Philip Morris Ltd. went public in London. Later (in 1887) it became Philip Morris & Co., Ltd. In 1902 Philip Morris & Co., Ltd. incorporated in New York and was acquired in the United States in 1919 by a firm owned by American stockholders.

In 1955 Philip Morris established its Overseas Division, and in 1960 renamed it the International Division. In 1968 Philip Morris domestic was renamed Philip Morris USA, and in 2008, the Altria Group completed the spin off of 100 percent of the shares of Philip Morris International to Altria's shareholders. In 1985 Philip Morris incorporated and became publicly traded as a holding company and parent of Philip Morris Inc. That same year, Philip Morris acquired General Foods. In 1988 Philip Morris continued its growth in the food manufacturing industry with the acquisition of Kraft (Jell-O, Kool-Aid, Maxwell House). In 1989 Kraft and General Foods combined to form Kraft General Foods. In 2000 Philip Morris continued to expand with the acquisition of Nabisco, which became part of Kraft. Several years later, in 2001, Philip Morris changed its name to Altria Group, Inc. (The name Altria, derived from the Latin word *altus*, conveys a notion of "reaching ever higher," and emphasizes the company's commitment to peak performance.) In 2007 Altria Group divested its distributed 88.9 percent of Kraft's outstanding shares owned by Altria to Altria's shareholders. As a result, Altria no longer holds any interest in Kraft Foods. In 2008 a similar spin-out of Philip Morris International was carried out with 100 percent of its shares being distributed to Altria's shareholders.

Altria's tobacco subsidiary, Philip Morris, is the world's largest commercial tobacco company in sales. The flagship brand, Marlboro, was first introduced in 1924. Other chief brands include Basic, Black & Mild, L&M, Lark, Parliament, Virginia Slims, and Benson and Hedges. Sales in 2007 in millions were $73,801.0 for this 84,000-employee company that is number 23 on the Fortune 500, one of the Dow Jones Titans, and number 15 on the Financial Times Global 500.

Philip Morris operates in the tobacco industry with an NAICS code of 312. Its top three competitors, according to Hoover's, are Altadis, the product of a Spanish-French merger and since February 2008 owned by Britain's Imperial Tobacco. Altadis had 2006 sales of $16,495.7 (in millions) and 2006 employees of 28,103. A second chief competitor is the London-based British Tobacco Company (AMEX: BTI; London: BATS). This 55,145-employee (in 2006) company had 2006 sales of $49,325.1 (in millions). It is on the FTSE 500 and is number 117 in the Financial Times Global 500. A third major competitor is Reynolds American (NYSE: RAI), with (in millions) 2007 sales of $9,023.0 and 7,800 employees. It is number 28 on the Fortune 500 and is also one of the S&P 500.

Demand for cigarettes is driven by discretionary consumer spending and awareness of the health effects of smoking. According to Hoover's, the profitability of this industry depends upon the strength of its marketing.

In 1999 the U.S. Department of Justice filed a racketeering lawsuit against Philip Morris (now an Altria division). After years of litigation, it was concluded that U.S. cigarette industry members conspired to minimize, distort, and confuse the public about health hazards of smoking, including nicotine's addictive properties. Among other charges, Philip Morris and other industry members were also accused of marketing to young people under the age of 21 as a means to recruit "replacement smokers." Thus, the 2001 name change to Altria was seen by some experts as a means to escape the stigma of selling tobacco products by "repositioning" its image in consumers' minds. Altria has also spent $101 million on lobbying the U.S. government between 1998 and 2004, according to the Center for Public Integrity.

The Altria Group is led by the chairman and CEO of Philip Morris USA, Michael E. Szymanczyk. The company focuses on the development of financially disciplined businesses that are leaders in providing adult tobacco consumers with branded products.

See Also: Acquisitions, Takeovers, and Mergers; Company Profiles: North America; Corporate Governance; Corporate Social Responsibility; S&P 500 Index.

Bibliography. Altria Group, www.altria.com (cited March 2009); Center for Public Integrity: Top 100 Companies and Organizations (Lobby Watch), www.publicintegrity.org (cited March 2009); Hoover's, www.hoovers.com (cited March 2009); Robert H. Miles and Kim S. Camerson, *Coffin Nails and Corporate Strategies* (Prentice-Hall, 1982).

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American Depository Receipt

An American Depository Receipt (ADR) is a U.S. dollar-denominated negotiable certificate that represents shares listed on an overseas stock exchange that is traded in the United States. ADRs are issued in the United States by a depository bank that owns the underlying foreign shares and holds them in custody in their country of origin. The issuing bank establishes a ratio of ADRs per each foreign share, ranging from a fraction of one foreign share to a multiple. The price of an ADR reflects the price of the underlying foreign stock adjusted for the exchange rate and the set ratio of ADRs per foreign share. Dividends on ADRs are paid in U.S. dollars. The first ADR was issued in 1927 by J. P. Morgan to allow American investors to invest in United Kingdom shares that were required to remain physically in the country. Subsequently their use has grown dramatically to include Global Depository Receipts (GDRs) that trade in two or more countries outside the issuer's home market. In 2008 there were more than 2,000 depository receipt programs totaling $1.5 trillion in market capitalization.

International diversification and the prospect of higher returns drive U.S. investor interest in foreign shares. ADRs provide a more convenient and less costly means to invest abroad than buying directly in foreign markets, especially for the retail investor. The U.S. investor relies on the depository bank to handle overseas trading and account settlement as well as foreign currency conversion into U.S. dollars, as the U.S. investor in ADRs is exposed to exchange rate risk. Another possible benefit to investors is greater legal protection with securities issued and traded in the United States.

For overseas issuers, ADRs provide effective access to U.S. equity markets, the largest in the world. They increase and diversify the issuer's shareholder base and expand the market for its shares. Several recent studies conclude that cross-listing in the United States increases the liquidity of the issuer's shares. Trading of a foreign corporation's shares in the United States can also increase international awareness of the firm's name. Beyond these benefits, some types of ADRs also allow issuers to raise capital in the United States.

There are several types of ADRs that are distinguishable by their intent, whether solely to expand trading in a firm's shares or to raise capital, and the exchange listing and U.S. Securities and Exchange Commission (SEC) compliance requirements. Level I ADRs are the most basic type. They permit a foreign issuer to have its shares traded in the United States. However, they are not listed on a U.S. exchange and, as a result, need not comply with the reporting standards of an exchange. They trade in the Over-the-Counter (OTC) market via the OTC Bulletin Board or Pink Sheets. They have the least rigorous reporting requirements from the SEC. Their intent is to increase the market for the issuer's shares in the United States. Level II ADRs are listed on a U.S. national exchange, such as the New York Stock Exchange, American Stock Exchange, or NASDAQ, and, thus, are subject to listing requirements of the individual exchange as well as greater SEC compliance requirements. The chief benefit of a Level II program is that listing on a national exchange expands the firm's coverage and visibility in U.S. equity markets. Finally, in addition to the benefits of a Level II program, Level III ADRs allow a foreign firm to raise capital in the United States by issuing new shares in an initial public offering (IPO), which entails stricter SEC compliance requirements but provides even greater exposure in U.S. capital markets. Rule 144(a) ADRs or restricted ADRs (RADRs) also allow foreign firms to raise capital in the United States through private placements to "qualified institutional buyers" as defined under the SEC's Rule 144(a). RADRs are less expensive and require less reporting than do Level III ADRs, but they are less liquid than publicly listed shares.

Another distinction between ADRs is between unsponsored and sponsored certificates. The former are issued by the depository bank without the involvement of the overseas issuer. Unsponsored ADRs are restricted to OTC trading and have become increasingly rare.

See Also: Exchange Rate Risk; Liquidity (or Market Liquidity); Securities and Exchange Commission; Stock Exchanges.

Bibliography. R. Aggarwal et al., "ADR Holdings of U.S.-Based Emerging Market Funds," *Journal of Banking and Finance* (2007); Citigroup, *Depository Receipts Information Guide* (2005); Deutsche Bank AG, *Depository Receipts Handbook* (2003); R. Knight, "Depository Receipts Show Robust Returns," *Oxford Metrica International Equity Review* (2008); B. Solnik and D. McLeavey, *International Investments* (Pearson Addison Wesley, 2003); U.S. Securities and Exchange Commission, *International Investing* (2007).

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American International Group

American International Group (AIG) is a financial services company that provides services in four distinct areas: General Insurance, Life Insurance, Financial Services, and Asset Management. Despite its name, AIG was founded in Shanghai, China, in 1919. Its first business area was selling insurance to Chinese customers. The business expanded throughout Asia, where the company maintains a very high profile throughout the region. AIG's employees in Asia number 62,000, and are located there with offices in the Philippines, Australia, New Zealand, Hong Kong, India, Malaysia, Singapore, China, Japan, Indonesia, Thailand, and Vietnam. AIG also operates in Latin America, Europe, and the Middle East, with a presence in 130 countries.

In 2007 AIG was the 18th largest company in the world and the largest insurance company in the United States. Its revenues for that year totaled over $110 billion with a reported adjusted net income of $9.3 billion. AIG, with 116,000 employees and 700,000 agents, brokers, and sales representatives, serves 74 million customers worldwide.

Although it had lost $5 billion in the last quarter of 2007 and despite warnings of impending problems from AIG's auditor (PricewaterhouseCoopers), Martin Sullivan, AIG's CEO, predicted that 2008 would be a good year. The prediction proved to be inaccurate. AIG suffered a $7.8 billion loss in the first quarter. In May the company would suffer the first of two downgrades from Moody's in that year. Sullivan resigned in June 2008.

Although several parts of the company were profitable, the London branch had been heavily involved in mortgage-backed securities and AIG, like many financial services groups (Lehman Brothers being one of the most visible examples) would suffer for its overextension in this area. The losses as reported by the London branch totaled $25 billion.

In September, the ratings agencies Standard and Poor's and Moody's notified AIG that it would be reviewed and its ratings downgraded again. AIG made attempts to raise capital and failed. The value of its shares would reach $1.25 from a 52-week high of $70.13. At this point, because it was believed that the impact of AIG's bankruptcy on the international finance markets would be too great, the U.S. federal government intervened. It loaned the company money in what would be the largest bailout of a private company in U.S. history. In return for equity and the right to cancel payment of dividends, the United States made an initial loan of $85 billion. Two months later, the U.S. Treasury said that it would provide more funding for a total of $150 billion in assistance.

The financial problems had been preceded by investigations into AIG's business practices. A federal investigation led to the payment of $126 million in fines to the U.S. Securities and Exchange Commission and the Department of Justice. In 2005 the U.S. federal government questioned some financial transactions that had the effect of improving the appearance, but not the substance, of the company's earnings. This issue would be brought up three years later when there were questions about what AIG had done with the money that it had been loaned by the federal government. The following year AIG paid a fine of $1.6 million to the State of New York for being involved in a case in which insurance customers were being steered to AIG on the basis of payoffs.

In October 2008, shortly after AIG had received an additional loan of $37.8 billion, its executives went on a retreat in California that cost $444,000, followed by an executive English hunting trip costing $86,000. These reports were accompanied by estimates that AIG had already spent $90 billion of the first $123 billion. Executive pay and bonuses were another story that was emerging. Joseph Cassano, considered by many to be most responsible for placing AIG in such a poor position, was receiving a $1 million monthly consultant fee. Testifying before Congress, former CEOs Sullivan and Robert Willumstad stated that they would not have done anything differently when they had managed the company. AIG stated that there had been no wrongdoing, that its meetings had been mischaracterized and were necessary for its sales executives to remain competitive. In 2008 AIG was suffering a public relations fiasco along with its financial crisis.

See Also: Accountability; Credit Ratings; Freddie Mac; Mortgage Credit Crisis of 2008; Securities and Exchange Commission.

Bibliography. AIG, *Annual Report 2007*, www.ezodproxy.com/AIG/2008/AR2007/HTML2/aig_ar2007_0018.htm (cited March 2009); AIG, www.aigcorporate.com/corpsite (cited March 2009); Ronald Kent Shelp, *Fallen Giant: The Amazing Story of Hank Greenberg and the History of AIG* (Wiley, 2006); Mary Williams Walsh, "A Question for A.I.G.: Where Did the Cash Go?" *New York Times* (October 30, 2008); Peter Whoriskey, "AIG Spa Trip Fuels Fury on Hill," *Washington Post* (October 8, 2008).

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AmerisourceBergen

AmerisourceBergen (AmerisourceBergen Corp.) is one of the largest pharmaceuticals companies in the world. It is engaged in the distribution of generic pharmaceuticals, over-the-counter healthcare products, and home healthcare supplies and equipment. A Pennsylvania-based company formed by the merger of Bergen Brunswig and AmeriSource companies in 2001, AmerisourceBergen now employs around 10,000 people (as of January 1, 2008). The company is traded on the New York Stock Exchange with the ticker symbol of ABC. It has approximately 4,600 shareholders (as of January 1, 2008).

AmerisourceBergen generates revenues mainly through its pharmaceutical distribution business division (98 percent of its revenues in 2007). The pharmaceutical distribution division provides drug distribution and related services. The pharmaceutical distribution division includes the operations of AmerisourceBergen Drug Corporation, AmerisourceBergen Specialty Group, and AmerisourceBergen Packaging Group. AmerisourceBergen Drug Corporation distributes brand name and generic pharmaceuticals, over-the-counter healthcare products, and home healthcare supplies and equipment to a range of healthcare providers.

AmerisourceBergen Specialty Group provides distribution and other services, including group purchasing services to physicians. It also distributes vaccines, plasma, and other blood products. AmerisourceBergen Packaging Group is one of the leading providers of contracted packaging services for pharmaceutical manufacturers. The company also owns Amerisource Heritage Corporation and PMSI, Inc., as subsidiaries.

AmerisourceBergen's products include generic pharmaceuticals, over-the-counter medicines, home healthcare supplies and equipment, medication, and supply dispensing cabinets. Its services include pharmacy healthcare solutions, pharmaceutical distribution, pharmaceutical consulting, packaging services, inventory management services, pharmacy automation, bedside medication safety software and information services, skilled nursing facilities, assisted living facilities, mail order pharmacy services, consulting services, staffing solutions, and scalable automated pharmacy dispensing equipment.

AmerisourceBergen was incorporated in 1988 as AmeriSource Distribution Corp. The name changed to AmeriSource Health Corporation in 1995. AmerisourceBergen adopted its current name in 2001. AmerisourceBergen preferred to grow by acquiring other companies. As a result, it acquired AutoMed Technologies in 2002; US Bioservices Corporation in 2003; MedSelect, Inc., and Imedex Inc., in 2004; Brecon Pharmaceuticals and Access M.D., Inc., in 2006; Xcenda LLC and Bellco Health in 2007.

As of February 2009, the executive team of AmerisourceBergen includes R. David Yost (President and Chief Executive Officer), Michael D. DiCandilo (Executive Vice President and Chief Financial Officer), Steven H. Collis (Executive Vice President and President, AmerisourceBergen Specialty Group), and the Senior Vice Presidents Antonio Pera, Jeanne Fisher, David W. Neu, John Palumbo, Thomas H. Murphy, John G. Chou, David M. Senior and Denise Shane. Tim G. Guttman and J. F. Quinn are Vice-Presidents. The board of directors includes Richard C. Gozon (Chairman of the Board), Charles H. Cotros, Edward E. Hagenlocker, Jane E. Henney, M.D., J. Lawrence Wilson, R. David Yost, Henry W. McGee, Michael J. Long, and Richard W. Gochnauer.

The success of AmerisourceBergen comes from its position in the U.S. pharmaceutical market. It maintains leading market positions, especially in drug distribution, specialty pharmaceuticals, and packaging. It is also the second largest pharmaceutical distributor in the Canadian market. Its well-positioned strategy of service and support to new biotech companies promises more profits in the future. AmerisourceBergen Packaging Group is one of the leading providers of contract packaging services for pharmaceuticals manufacturers. Therefore, the company is seen as a partner to both suppliers (manufacturers) and dispensers (hospitals or pharmacies). Another reason for its success is its continuous growth, which results in more profits to provide future growth. One important aspect may be the successful financial management of the company. By returning profits into assets efficiently, AmerisourceBergen favors profitable business, resulting in better investor confidence.

On the other hand, one of the major weaknesses of AmerisourceBergen is its high dependence on the operations concentrated in the United States. Any downturn in the demand for its products from the United States will pose significant risks, with severe impacts on the earnings. Another setback for AmerisourceBergen is its single business concentration. It has heavily invested in drug distribution, which is generally regarded as low-margin business. The company's acquisitions are relatively small transactions and concentrated into closely related pharmaceutical distribution. Its competitors, such as Cardinal Health, have diversified into businesses unrelated to drug distribution, such as manufacturing information systems for hospitals. This may have a disadvantageous impact on AmerisourceBergen in the future. Also, AmerisourceBergen may be regarded as a risky company with respect to its dependence on few customers with very large budgets going to AmerisourceBergen. Facing any possible problems with these key clients may result in significant negative impacts on AmerisourceBergen.

See Also: Cardinal Health; Healthcare Benefits/Systems; Supply Chain Management.

Bibliography. AmerisourceBergen, www.AmerisourceBergen.com (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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Anglo-American

This entry refers to the cultural relationship between peoples who share their origins in the United Kingdom (UK), the United States, and English Canada. It does not refer to the multinational natural resources company (AngloAmerican PLC) headquartered in London, UK, which was originally established in South Africa. Further, the meaning of the term *Anglo-American* varies depending on the context in which it is used, and the boundaries of who is included in the definition change over time.

In its earliest use, the term *Anglo-American* described people originally from England, Scotland, or Wales. Most settled in North America in the late 1700s. The term *Anglo-American* is also used to describe a region in the Americas in which English is the main language or which has significant historical, ethnic, linguistic, and cultural links to England, the UK, or the British Isles in general. For example, political leaders such as Ronald Reagan have used the term to portray the "special relationship" between the United States and the UK.

Anglo-America is distinct from Latin America, a region of the Americas where languages derived from Latin (namely French, Spanish, and Portuguese) are prevalent. *Anglo-American* is sometimes shortened to *Anglo*, which is a much broader term that refers to Americans who are not of Hispanic or French descent, most of whom speak the English language. Thus, in parts of the United States with large Hispanic populations, an American of Polish, Irish, or German heritage might be termed an Anglo just as readily as a person of English descent. However, use of the term *Anglo* generally ignores the distinctions between Anglo Americans, Irish Americans, German Americans, and other northern European descendants. Thus, many people included in the definition do not identify themselves as Anglo, and some may find the term offensive. Consequently, more specific names have been assigned to some ethnic groups who prefer not to be categorized under the much broader term of *Anglo*, resulting in Anglo Americans, Irish Americans, and numerous others.

According to 2005 U.S. Census data, 75 percent of Americans classified themselves as Anglo-American compared to 12 percent as African American, 15 percent as Latin American, 4 percent as Asian American, and 9 percent as multiracial/other. Thus, the term *Anglo-American* is a common expression that encompasses a significant proportion of the U.S. population and has for many centuries profoundly influenced and shaped the legal, economic, healthcare, educational, religious, political, and cultural values of the United States of America. While Anglo Americans remain the majority group in the multiethnic United States society, the proportion of Anglos in the total population is expected to decrease as the population of immigrants from Asia, South America, Africa, and other non-European countries expands.

Past research has shown that Anglo-American cultural values and patterns of thinking and behavior are very different from the cultural heritage of many other ethnic minority groups, each having its own customs and traditions. For example, hamburgers, hot dogs, rock music, fast food, football, sitcoms, and morning coffee are all part of Anglo-American culture. Existing research suggests that most Anglo Americans take their culture for granted as simply part of their life, and thus, may fail to recognize its unique features. Becoming aware of differences between Anglo Americans in relation to other cultures is important so that not all people in America are assumed to be the same, and therefore treated the same. Indeed, as the dominant culture in the United States, Anglo Americans tend to be considered as being all alike with little awareness of any differences between them. Such tendencies have led to cultural clashes, stereotyping, and racism.

Essentially, the English were the first Europeans to colonize the Americas in large numbers even though they were preceded in the southwest by smaller numbers of Spaniards. Anglo Americans had British roots that led to cultural values such as the nuclear family that were largely derived from pre-industrial Britain. There are some common Anglo-American beliefs, values, and practices that are shared and have been passed on to succeeding generations as dominant Anglo-American values, and have been cited by many writers and scientists of Anglo-American culture. Most broadly, Anglo-American culture is described as individualistic (independent, self-reliant) compared to, say, Africans and Latinos, whose culture is more often portrayed as collectivist (interdependent, community focused). Therefore, Anglo Americans are often viewed by these cultural groups as autonomous to the extent that they have difficulty valuing or conforming to group norms and other ways of living. Anglo Americans also value freedom and assertiveness, as well as equal gender roles and rights.

See Also: Acculturation; Ethnocentrism; Latin America; United States.

Bibliography. "Anglo-America," Micropædia, *Encyclopædia Britannica*, Vol. 1, 15th ed. (Encyclopædia Britannica, 1990); "Anglo America," *Wikipedia the Free Encyclopedia*, en.wikipedia.org (cited March 2009); R. N. Bellah, "Is There a Common American Culture?" *Journal of the American Academy of Religion* (v.66/3, 1998); J. A. Hague, ed., *American Character and Culture in a Changing World: Some Twentieth Century Perspectives* (Greenwood Press, 1979); C. P. Kottak, ed., *Researching American Culture: A Guide for Student Anthropologists* (University of Michigan Press, 1982); "North America," *The Columbia Encyclopedia,* 6th ed. (Columbia University Press, 2001–05).

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Angola

A country disadvantaged by a 27-year civil war that ended in 2002, Angola is on a rebound with a double-digit gross domestic product (GDP) growth rate and oil production of about 1.9 million barrels per day. The country is resilient; it withstood tribal conflicts and gained independence from Portugal and Brazil in 1975.

Geography contributed to a history of global trade. Angola has a land area of 1,246,700 square kilometers and is located in southern Africa by the South Atlantic Ocean and between Namibia and the Democratic Republic of the Congo. Major ports are in Cabinda, Lobito, Luanda, and Namibe. There are 232 airports in Angola, with an international hub in Luanda.

The 12 million Angolans are diverse, with ethnic groups such as Ovimbundu, Kimbundu Bakongo, Mestizo, European, and others. Portuguese is the official language, alongside Bantu and other African languages. About 47 percent hold indigenous beliefs, 38 percent are Roman Catholic, and 15 percent are Protestant.

The political environment is stable. Unrest in its history resulted from fighting between two rival camps—the Popular Movement for the Liberation of Angola (MPLA) led by current president Jose Eduardo Dos Santos, and the National Union for the Total Independence of Angola (UNITA) led by Jonas Savimbi. When Savimbi died in 2002, UNITA's insurgency ended and the MPLA held power.

Oil Production

Angola's natural resources, primarily oil, contributed to its economic transformation. Oil-related production constitutes about 85 percent of GDP. The country's production includes bananas, sugarcane, coffee, corn, cotton, tapioca, tobacco, vegetables, and forest products. Active industries include petroleum, diamonds, iron ore, phosphates, feldspar, bauxite, uranium, gold, cement, metal products, brewing, tobacco, sugar, textiles, ship repair, and fish and food processing.

Major oil companies and countries trade with Angola. ExxonMobil, Chevron, Total, and China's Sinopec have been oil industry participants. Angola exports over $40 billion worth of products primarily to countries such as the United States, China, Taiwan, France, and Chile. It imports about $11 billion worth of commodities such as machinery and electrical equipment, vehicles and spare parts, medicines, food, textiles, and military goods from the United States, Portugal, South Korea, China, Brazil, South Africa, and France.

Economic indicators suggest economic stability. In 2007 Angola's GDP was $80.95 billion with the real growth rate at 16.3 percent. GDP composition is largely industry and services, and GDP per capita is at $6,500. In 2006 stock of direct foreign investment was about $17.6 billion. Inflation declined from 325 percent in 2000 to 13 percent in 2007. The local currency, "kwanza," had minimal fluctuation against the dollar and was valued at $1 = 76 in 2007.

While the economy is growing, challenges exist. Notable issues relate to poverty, inadequate infrastructure, corruption, unemployment and underemployment, health and environment, and a need for government reforms and transparency. In order to rebuild, billions of dollars in lines of credit were provided by China, Brazil, Portugal, and the European Union.

Despite the challenges, rising oil production, construction, and abundant resources drive growth. In 2007 Angola became a member of OPEC, ensuring long-term participation in the oil trade and global business.

See Also: Africa; BP; OPEC; Portugal.

Bibliography. CIA, "Angola," *World Factbook,* www.cia.gov (cited March 2009); Martin Clark, "Africa," *Petroleum Economist* (v.26/28, October 2005); Embassy of Angola, "History of Angola," www.angola.org (cited March 2009); Martin Quinlan, "Forward, with China," *Petroleum Economist* (v.73/5, May 2006).

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Antiglobalization Movement

Antiglobalization movement is the most recognized term used to describe individuals and a wide variety of social movements that oppose different types of social, economic, and ecological injustice that are believed to be the consequence of globalization. As the ideas within the movement diverge on what globalization is about, who or what caused it, and what the alternatives to it would be, the validity of the term *antiglobalization movement* has been questioned. Alternative names are the global justice movement, the movement of movements, the alter-globalization movement, and the anti-corporate-globalization movement. The last expression shows that despite the internal heterogeneity of the movement, a common theme among its members is that corporate-driven global business is part of the problem, not part of any solution.

A "Movement of Movements"

It is often stated that the antiglobalization movement is a child of globalization. First of all the movement brings together different voices that in one way or another speak against the idea and reality of globalization. Second, these voices found each other and promoted their views by the very improvements in transportation and communication that are believed to carry the globalization process. Before dealing with the antiglobalization critiques, it is illuminating to see how the movement grew out of globalization and to review the variety of groups worldwide that are part of the antiglobalization movement.

The antiglobalization movement is a label that was first used by nonparticipants of the movement. During the 1990s, journalists and other observers around the world started to identify different local pockets of resistance in which people spoke out against the social, economic, and ecological injustices in the world. What made these protests remarkable was that many of them were not aimed against the old foes of the Left such as capitalism or the "yuppies" of the 1980s, but against corporate-driven globalization. Although the composition of the agenda and the protesters varied locally, the protests seemed to share the refusal to accept that the economy, before all else, defines the well-being of human society.

An important start for the movement was taken in 1994 when Mexican Zapatistas began their fight

Riot police used pepper spray on this crowd of antiglobalization protestors on November 30, 1999, during the pivotal World Trade Organization convention protests in Seattle, Washington.

against the NAFTA trade agreements. The founding of the World Trade Organization (WTO) in 1995 (as a successor to GATT, the General Agreement on Tariffs and Trade) and the Asian financial crisis in 1997 further fueled the belief that human societies no longer controlled their own fate but were somehow left at the mercy of commercial and financial interests.

The antiglobalization movement as such was perhaps born in 1999, when large protests tried to stop another round of global trade liberalization during the WTO meeting in Seattle. The "Battle of Seattle," as the protests were called, received international media attention and triggered a series of carefully chosen protests against meetings by the WTO, the European Union, the G8, or other associations that were believed to be the leading institutions behind globalization.

The protests brought together politicians, union members, individuals, and activists from a wide variety of social movements, united by slogans such as "the world is not for sale" or "people before profit." The protests were not organized by any central committee. The movement was very much carried from below and grew on the internet, where Web sites such as Indymedia provided the necessary platform for discussion and informed the public about the critiques against globalization.

The next important steps for the movement were taken in 2001. First of all, the attacks of 9/11 by Al Qaeda against the United States turned the intellectual mainstream away from globalization to global terror, making it harder for the movement to get its message across and be heard by the media. Next to this, the movement faced a public relations problem as the media paid attention to the movement, not so much because of its message, but because of the violent conflicts between protesters and law enforcers that characterized many of the anti-globalist rallies. The attacks of 9/11 made it clear that the movement had to renounce violence as a legitimate means of resistance, alienating perhaps its more militant members while becoming less interesting for the media.

The World Social Forum

Also in 2001, the heyday of the rallies was over. The antiglobalization movements somewhat "settled down" when the first World Social Forum (WSF) took place in Porto Allegre, Brazil, on January 25–30. These dates were not chosen at random, as the WSF wanted to serve as an alternative to the World Economic Forum (WEF) held in Davos, Switzerland, around the same time. The WEF is seen by anti-globalists as an important platform where leading businesspeople and politicians, since 1971, set the agenda for further corporate-driven globalization. The WSF, which does not have a guest list or admission fees, is presented as its democratic substitute.

During the first WSF, some 15,000 participants, among them more than 400 political representatives, searched for alternatives to corporate-driven globalization under the slogan "another world is possible." The second edition in Porto Allegre welcomed more than 50,000 participants. To underline the global outreach of the WSF, the fourth edition was organized in Bombay, India (over 70,000 participants). The sixth edition was polycentric and held in Caracas (Venezuela), Bamako (Mali), and Karachi (Pakistan). The seventh edition in 2007 was held in Nairobi, Kenya, and saw over 1,400 participating organizations from 110 countries, making it the most globally representative WSF so far.

The WSF's International Council organizes the WSF and the yearly event. It is constituted by several organizations working on issues including economic justice, human rights, environmental issues, labor, youth, and women's rights. Important social movements that carry the WSF are, for example, "Via Campesina" from Latin America, the Thailand-based NGO "Focus on the Global South," or France-based "ATTAC." The WSF underscores that it is but a platform for discussion and setting up joint actions. For this end, a "Charter of Principles" was drawn up after the first edition that would guide future ones. A very important principle that characterizes the WSF and the antiglobalization movement is that the WSF is a plural, diversified, nonconfessional, nongovernmental, and nonparty context that, in a decentralized fashion, interrelates organizations and movements engaged in concrete action at levels from the local to the international.

Since 2001 the movement has cherished the idea to "think global but act local." This means that while the antiglobalization movement unites people and protesters by sharing a common critique against the process of globalization, this critique is translated and adapted to the different local settings in which anti-globalists are campaigning around particular issues. To underline this call for "glocalised" action, the 2008 WSF was not organized at a particular place, but took place all over the world through thousands of autonomous local organizations that responded to the "Global Call for Action." Meanwhile the WSF has been complemented by the organizing of many regional social forums, such as the European, United States, and Asian Social Forums, and even Italian, Flemish, and Liverpool Social Forums.

The Antiglobalization Critique

Antiglobalization is of course a reaction to globalization, a concept that gradually came to the front of economic and political analysis after it was first used in *The Economist* in 1959. It took the oil crises of the 1970s, the growth of foreign direct investments during the 1980s, and the fall of the Soviet Union in 1991 before the idea of globalization broke through.

Most definitions of globalization revolve around a common theme of "time and space compression," revitalizing Marshall McLuhan's 1960 idea of a "global village." With regard to the economic sphere, globalization in its broadest sense is generally understood to point to the closer integration of countries and peoples that has been brought about by the enormous reduction in costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people.

However, the antiglobalization movement believes that this conceptualization is a deceitful one as many people do not have equal access to markets or infrastructure (both in terms of transportation and communication), while probably even more artificial barriers against the movement of people are being put up than broken down. Hence, the idea of globalization rests on the false premise of a closer integration of the peoples of the world. Of course, one could deduce from this that actually more globalization is needed, further bringing down international trade barriers and closing, for example, "the digital divide." The movement in general is, however, skeptical that this will be achieved in a significant and fair way as long as political and economic forces command the globalizing process. A much-referred to person in this respect is Nobel Prize–winning economist Robert Stiglitz, who criticized the way in which the International Monetary Fund (IMF) and World Bank mismanage global development and the financial infrastructure because they primarily serve American and European political, commercial, and financial interests. According to the movement, the globalization process does not lead to a globalized, "flat" world for all, but only to a global level playing field for capital.

The targets for the antiglobalization movement are the major private and public institutions that dominate the global economy. Protests are generally organized around international political meetings by associations such as the WTO or the European Union. Global business is also attacked for hijacking the development of human societies. Building on this critique, the antiglobalization movement believes that beneath the globalization rhetoric is an assumption that globalization is an anonymous and unstoppable force of nature. This implies that peoples and countries have little choice but to accommodate to the new globalizing condition. This has been illustrated by Thomas Friedman, who believes that globalization forces states to follow a particular set of economic policies that he has called "the golden straitjacket."

In a globalizing world in which it is primarily capital that is becoming mobile, countries are forced into competition to attract this capital. To succeed, countries must implement so-called neoliberal policies of privatization, trade liberalization, and business deregulation, while maintaining a low rate of inflation, balanced state budgets, and a small-sized government. According to the antiglobalization movement this view forces states to tailor their economic policies to the wish of mobile capital for total "commodification," meaning the right to do business in every sphere of society (education, health service, public transport, etc.), anywhere, at any time, and at the lowest cost. Meanwhile the state is giving up on the wishes of its citizens for full employment, respectable wages, and decent ecological and other living standards. Seen from this perspective, states have entered in a negative "race to the bottom."

The idea that in the longer run, the policies of the golden straitjacket will indeed benefit the whole of society because attracted capital will create jobs, jobs will create rising incomes, rising incomes create additional demand and this will lead to a diversification of the economy and the development of environmental friendly production processes, is discarded as wishful thinking. According to the movement, this "trickle down effect," as it has been called, is not an automatic process but one that is forced upon capital by political action through taxation and regulation. These are exactly the types of welfare policies that have become difficult to implement under the idea of globalization's unstoppable progress.

Contrary to this, the antiglobalization movement believes that globalization is a process that is instigated, driven, and determined by political decisions. Common opinion is that the golden straightjacket was first put on during the 1980s by Ronald Reagan in the United States and Margaret Thatcher in Great Britain. By stressing the political agency behind globalization, the movement holds political power accountable for the social, economic, and ecological deficits that the politicians themselves ascribe to globalization. Antiglobalists do not accept this excuse and at the same time they remind politicians that the process itself can be altered or reversed.

Alternatives

Whereas it is fairly easy to point to a general critique within the movement against the ideological idée fixe of globalization and who benefits from it, opinions diverge when it comes to fixing the problem and drafting plans for a better world. If anti-globalists are about global justice, much debate concentrates on how to achieve this. The movement is hesitant to come up with a blueprint for development. It refuses to promote its own straitjacket in opposition to the golden neoliberal one, believing that it is exactly this type of doctrinarian thinking that created the problems in the first place. Given the wide variety of individuals and movements that shelter under the umbrella of the movement, no common solution can be presented for all the issues that are discussed. Following this, a lot of the individuals and social movements that are campaigning around particular economic, ecological, and social issues do not feel the need to connect their different agendas or search for the bigger theory. In these cases anti-globalism serves as a metaphor for anti-consumerism, anti-discrimination, anti-war, anti-poverty, or anti-terrorism. The link with the problem of globalization as described above is not always clear, making the antiglobalization movement sometimes look more like an assembly of moral outcries than a movement with a message of its own.

Nevertheless, as the neoliberal and globalization rhetoric is exactly based on the famous TINA doctrine, short for "there is no alternative," the antiglobalization movement had to challenge this idea if it wanted to discredit neoliberalism. As said, the alternative depends on the manner in which the process of globalization needs to be altered or reversed. The belief in the ability to change the commercial and financial interests that drive the present globalization process determines to a large degree the extent to which members of the movement embrace the prefix anti- or alter-. Building on the metaphor of the golden straitjacket, opinions diverge whether the straitjacket should be made to fit more comfortably or should be taken off altogether.

In the anti- option, the exposure of globalization as a profit-driven process that serves the interests of capital implies that globalization itself should be stopped. The economy needs to be tailored to the wishes of the people, and they do not live in a borderless world but in particular societies, sharing particular value systems and cultures. Thought through, this type of reasoning calls for what Walden Bello has called de-globalization, putting up or reinstalling artificial barriers to the economic flows of goods, services, and capital, while reversing the neoliberal agenda by localizing or nationalizing production and regulating business. In practice, complete isolationism or full-fledged protectionism is rarely advocated. Despite its popular label, the movement contains more alter-globalizing than antiglobalizing opinions, especially because in a number of issues, such as migration, it generally favors open over closed borders.

In the alter- option, the general aim is to bring globalization back under democratic control. By and large two options to do so are often discussed. The first option believes that globalization can only be steered in the right direction by global, or at least international, multilateral organizations. The choice can be to reform leading institutions such as the IMF, World Bank, and the WTO, or to give more power to other institutions such as the International Labour Organization (ILO) or the United Nations Conference on Trade and Development (UNCTAD). With equal and fair participation of all countries in these organizations, globalization could be reshaped by implementing global labor and environmental standards. This way global business would be embedded in a more ethical framework of sustainable development. Global business also has a role to play in this by applying a decent code of conduct, a sign of "good governance." This led to several fair trade agreements and certification programs that indicate that products are labor-friendly and/or respect environmental standards.

The Tobin Tax

A more specific measure that is advocated in this context is the Tobin Tax, a small tax on all international trade in currency. The initiative is named after the Nobel Prize–winning economist James Tobin, who in 1978 suggested such a tax in order to discourage short-term speculation in currencies. This should have a stabilizing effect on the exchange rates by releasing them from the pressures of short-term expectations. Meanwhile the tax would be low enough (between 1 percent and 0.1 percent) to allow for the further financing of international trade and foreign direct investments.

Little attention was paid to Tobin's idea until it was picked up by the antiglobalization movement in the context of the 1997 Asian currency crisis. The crisis was seen as the proof of the destabilizing effects that free capital markets and speculation can bring along. Ignatio Ramonet, chief editor of the French-based *Le Monde Diplomatique,* suggested that the financial market needed to be "disarmed" and he called for a movement that would promote the Tobin Tax in the name of universal solidarity. After this call, ATTAC ["Action pour une taxe Tobin d'aide aux citoyens"] was founded in 1998, one of the driving forces behind the antiglobalization movement. The movement extended the ethical agenda of the Tobin Tax by suggesting that the money that the tax produced could be collected by a global or international organization and be put to use for international development. Of course this was not an end in itself as the tax would actually produce a small amount of money if it had its desired discouraging effect.

To some members of the antiglobalization movement, the fact that the Tobin Tax has not yet been implemented shows the limits of the idea of a "global regulation" of globalization. This option does not work because the building blocks of all these organizations are states and because it depends on the willingness and ability of the different governments to implement the necessary laws that would adjust globalization. Once the Tobin Tax could no longer be discarded as interventionist wishful thinking or as a technical impossibility, it still met with international distrust among national states. As long as one country does not implement the tax, so the argument went, the tax would be futile and that particular country would gain a substantial bonus for its economy. As some countries such as the United States and Great Britain are very much against the tax, other governments refused to operate as an international "avant-garde." By setting an example and implementing the tax, politicians sometimes feared this would hurt the national economy and in the process their own reelection.

Self-Determination

The second option to bring globalization under democratic control is therefore much more "anti-hierarchical." In this option, the basic problem with the present globalization is not so much a lack of global economic and ecological enforceable laws but the very top-down forms of decision making that globalization implies. The problem is not just the "commodification" of everything but the "alienation" of the individual, stripping away sovereignty. Seen from this perspective, the critiques that are raised against global business and capital for being nontransparent and nondemocratic also apply to the state.

Contrary to the actions of large NGOs such as Oxfam or the trade unions, this option leaves less room to use the state as an appropriate channel for change. This option is much more utopian as its fundamental solution is to replace hierarchical institutions such as global business and the state with new politics that again allow for a form of governance that is self-determining. Instead of regulating government in order to regulate capital, the "anti-hierarchical" option wants to come up with a self-organized alternative. This alternative is sometimes sought after in the "civil society," a difficult sociological concept that in its simplest form refers to an organizational sphere between the state and capital. According to some members of the movements, more power should be attributed to this civil society in order to get the economy and politics under democratic control.

Critics have noted that this idea is not only utopian as it aims for long-term change by neglecting the short-term reality of political and economic institutions, but that it is not much of an alternative in itself as the "civil society" is made up of all kinds of self-governing organizations, some with extreme right, other with extreme leftist political ideas. The "anti-hierarchical" option therefore needs to be more specific about its short-term strategy and long-term ideals.

Assessment

Given the heterogenic composition of the antiglobalization movement and its refusal to draft a general program, it is not only hard to define the movement and its message but also to evaluate its success. It is clear that some of the issues that the movement rallied against, such as environmental degradation, climate change, or global poverty, have become political priorities. It is another question if the answers that both political and economic institutions come up with would please all anti-globalists. The trade in carbon gas emission rights, or the international promotion of micro-credits, shows that the leading institutions are far from seeing market forces as a problem, not a solution.

Some members of the antiglobalization movement would support these measures, also believing that the market as such is not a problem, but an unregulated market is. Other anti-globalists would certainly disagree, arguing that none of these measures touches the profit motive behind corporate-driven globalization. The dispute shows that the antiglobalization movement had some strong critiques to offer and for some time it was able to capture the public eye. But now that attention has generally turned away and alternatives need to follow up criticism, the future of the antiglobalization movement seems uncertain.

See Also: Corporate Governance; Corporate Social Responsibility; Cross-Border Migrations; Fair Trade; Global Digital Divide; Globalization; International Labour Office/International Labour Organization; International Monetary Fund; Multinational Corporation; Sustainable Development; United Nations Conference on Trade and Development; World Bank, The; World Trade Organization.

Bibliography. ATTAC, www.attac.org (cited March 2009); Maude Barlow and Tony Clarke, *Global Showdown: How the New Activists Are Fighting Global Corporate Rule* (Stoddart, 2001); Walden Bello, *Deglobalization: Ideas for a New World Economy* (Zed Books, 2005); W. Lance Bennett et al., "Managing the Public Sphere: Journalistic Construction of the Great Globalization Debate," *Journal of Communication* (v.54/3, 2004); William F. Fisher and Thomas Ponniah, *Another World Is Possible: Popular Alternatives to Globalization at the World Social Forum* (Zed Books, 2003); Focus on the Global South, www.focusweb.org (cited March 2009); Thomas Friedman, *The Lexus and the Olive Tree: Understanding Globalization* (Farrar, Straus & Giroux, 1999); Global Justice Movement, www.globaljusticemovement.org (cited March 2009); International Forum on Globalization, www.ifg.org (cited March 2009); David Harvey, *A Brief History of Neoliberalism* (Oxford University Press, 2005); Martin Khor, *Rethinking Globalization: Critical Issues and Policy Choices* (Zed Books, 2001); Hans-Peter Martin and Harold Schumann, *The Global Trap: Globalization and the Assault on Prosperity and Democracy* (St. Martin's Press, 1997); Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (University of Toronto Press, 1962); Heikki Patomäki, *Democratising Globalisation. The Leverage of the Tobin Tax* (St. Martin's Press, 2001); Ignacio Ramonet, *The Geopolitics of Chaos* (Algora Publishing, 1998); John Ralston Saul, *The Collapse of Globalism and the Reinvention of the World* (Atlantic Books, 2005); Joseph Stiglitz, *Globalization and Its Discontents* (W.W. Norton, 2003); Via Campesina, viacampesina.org (cited March 2009); World Social Forum, www.forumsocialmundial.org.br (cited March 2009).

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Antitrust Laws

Though its earliest forms were enacted by the Roman empire, antitrust law is largely a product of the post–Adam Smith age of capitalism. *Antitrust* is the American term for this form of legislation, referring to the trustbusting of the Progressive Era when legislation was enacted to counter the anticompetitive effects of trusts and collusion, especially in the aftermath of the Panic of 1893 and attendant decline in demand and prices. Internationally, the legislation is better known as competition law, which reflects the broad focus of it: that class of legislation that exists to protect and regulate competition in the marketplace. This includes not only the repression of monopolies, cartels, and industry collusion, but the regulation or criminalization of predatory pricing, price gouging, and other abusive acts performed from a dominant position in the market, as well as the regulation of mergers and acquisitions.

The earliest acts of competition law were aimed principally at the support of local production. Tariffs were imposed on foreign goods to various ends, including offsetting the price difference if those imported goods were significantly cheaper than what could be found locally. This was a common practice in Rome during both the Republic and Empire periods; Rome was also known to seize the property of trade monopolies or collusive trade combinations which acted against the interest of the people or the state.

The rise of trade guilds in the Middle Ages required legislation to prevent their abuse, and in many European countries attempts were made to directly control prices, especially for household necessities like bread or ale, or commodities like grain. Various acts sometimes dictated the wages of specific types of laborers while fixing prices of the common items everyone was expected to purchase, thus preserving for those laborers a specific balance of income and outgo. Traders who overcharged for these items not only faced a penalty from the state, but paid punitive damages to the customer—a concept that was carried through English common law and adopted into American antitrust law in the form of the treble damages paid for certain violations of antitrust law or infringement of intellectual property rights.

Anti-competitive laws of the Middle Ages and Renaissance were called "combination laws," because they regulated or forbade the cooperation between combinations of merchants or businesses. Bohemian mining companies, for instance, were forbidden to cooperate in jointly raising their prices. Other combination laws targeted labor unions, as in the British Combination Act of 1799, which outlawed unions and collective bargaining; the idea of conflating monopolies and labor unions is today a foreign one, demonstrating the degree of change in those two centuries.

Modern Antitrust Law

Modern antitrust law began in the United States, where the Industrial Revolution, the railroads, 19th-century banking panics, and the tendency of the Gilded Age to shift thinking and activity from the regional to the national level—with the institution of nationwide professional organizations like the American Medical Association, nationwide newspaper and magazine distribution, and a growing number of firms attempting to do business nationally—colluded, as it were, to create an environment in which businesses could enjoy tremendous success and had the opportunity to abuse the power they attained.

The period from 1895 to 1905 saw more mergers than any other time in American history. To an extent, this was an organizational activity, as small local stores joined together to form chains and larger firms. There were practical and non-objectionable considerations at work, largely inoffensive to capitalist needs and nonharmful to the consumer. But there were also significant and increasingly common abuses of power, with businesses using these mergers and the creation of trusts in order to gain an advantage and be able to increase prices.

Trusts themselves are not the target of antitrust law, confusingly enough. A trust is simply the management of a property or business by a trustee or trustees, on behalf of the beneficiary—most people are familiar with them through the institution of trust funds, in which money is managed by a trustee, especially if the beneficiary is a minor. Trustees are accountable to their beneficiaries. The trusts formed in the 19th century, though, were legal entities formed in order to engage in anticompetitive practices—they were in essence cartels, groups of businesses colluding for the purposes of monopoly-like behavior.

The Sherman and Clayton Acts, passed in 1890 and 1914 and more or less bookending a particular era of pre-Depression trustbusting, codified and streamlined a body of common law and attempted to clarify various acts of abusive conduct. It was not nearly as effective as hoped, though Presidents Theodore Roosevelt and William Taft got a lot of political mileage out of Sherman Act prosecutions. In the reorganization of European institutions following World War I, American antitrust law was used as the basis for similar bodies of legislation across the west, and after World War II, these antitrust ideas were enforced externally on Germany and Japan, both of which were cartel-friendly during and in the years leading up to the war. In the United States, antitrust laws have been responsible for the break-up of companies like Standard Oil in 1911 and AT&T in 1982, as well as the source of a prolonged battle between the federal government and Microsoft.

The American model of antitrust law has been the essential core of antitrust law adopted around the world, and enforced by organizations like the World Trade Organization.

Because of its origins, antitrust law distinguishes between the actions of an individual company and the actions of companies working together; this in fact was one of its weaknesses in the Progressive Era, when the Sherman Act failed to prohibit the existence of a single-company monopoly, unless the actions taken to create that monopoly were themselves prohibited. Multi-company monopolies, on the other hand, were criminalized so long as intent—in the form of some kind of agreement among the companies, some form of collusion—could be demonstrated. Since the Progressive Era, restrictions of monopolies of any sort have been strengthened, though some exemptions, notably for labor unions and professional sports leagues, have also been granted.

Certain activities attract the attention of the federal government, and an examination of whether there are anticompetitive practices in play. Price fixing is the classic example of this; while goods will tend to reach a particular price because of market forces, the deliberate agreement among companies to set a price is in defiance of those forces. Likewise, agreements between potential competitors to limit their activities to particular geographic areas in order to avoid competing are potential violations of antitrust law.

Since the 1970s, the enforcement of American antitrust law has focused more and more on the effect on the consumer, rather than absolute standards of corporate behavior. The shift is the result of a distrust of government intervention in the economy, as new conservative factions came to power in the aftermath of Watergate's impact on the Republican Party. A particularly influential thinker in the matter is Robert Bork, who reframed the issue as a matter of consumer welfare—and both his supporters and his opponents have largely continued to do so.

Enforcement of antitrust legislation falls to various bodies. At the state level, the state's attorney general can file a suit against a corporation in violation of either state or federal antitrust laws; the Microsoft antitrust case involved various states acting in a coalition with the Justice Department. Private suits can be brought in either state or civil court. Both the Federal Trade Commission and the Antitrust Division of the Department of Justice can bring federal civil suits against companies in violation, but only Justice can bring a criminal suit. The most famous successfully prosecuted federal antitrust case remains the *United States vs. AT&T*, a suit brought by Justice in 1974 and settled in 1982 with the Baby Bell divestiture: effective 1984, in exchange for being allowed to branch out into computers, AT&T retained its long-distance services but divided its local exchange services into the seven Regional Bell Operating Companies.

Criticism

Though Bork's take on antitrust law is still fairly conservative, there are some who go much further than simply reframing the matter. Economist Milton Friedman has changed his mind on antitrust legislation over the course of his career, and believes that they have wrought more harm than good, despite the seemingly sound principles on which they are based. Former Fed chairman Alan Greenspan believes that the subjectivity of antitrust legislation, in particular, has dissuaded a good deal of legal and beneficial business activity out of the fear that it could violate the letter of the law.

One of the targets of antitrust law is predatory pricing, the pricing of a good so low as to constitute an anticompetitive action, with the goal of driving away existing competitors or preventing new ones from entering the market. The problem, antitrust critics point out, is that this is not rational behavior to begin with, and market forces are generally sufficient to prevent irrational business behavior if you give them sufficient time to do so. By its nature, predatory pricing can't be permanent—in order for the company to benefit from driving away its competitors, it has to bring the price back up, and once it has done so, the market is again safe for other companies to participate in. There are few incontrovertible cases of predatory pricing occurring over a significant period of time, and the anticompetitive motive is a difficult one to establish.

As game theory has become a more prominent part of economic thought, it has been used to demonstrate that certain anticompetitive practices like predatory pricing may be beneficial in the long run. The problem here, in part, is that it is difficult to institute a system of law in which the legality of actions depends in part on the expectation of how consequences will turn out "in the long run."

See Also: Acquisitions, Mergers, and Takeovers; AT&T; Barriers to Entry; Capitalism; Competition; General Agreement on Tariffs and Trade; Legal Environments; Microsoft; Monopolistic Advantage Theory; Pricing; World Trade Organization.

Bibliography. Dominick T. Armentano, *Antitrust: The Case for Repeal* (Ludwig von Mises Institute, 2007); Robert H. Bork, *The Antitrust Paradox* (New York Free Press, 1993); Jay Pil Choi, ed., *Recent Developments in Antitrust: Theory and Evidence* (MIT Press, 2007); Einer Elhauge and Damien Geradin, *Global Competition Law and Economics* (Hart Publishing, 2007); Milton Friedman, *Capitalism and Freedom* (University of Chicago Press, 2002); William H. Page, *The Microsoft Case: Antitrust, High Technology, and Consumer Welfare* (University of Chicago Press, 2007); Tony Prosser, *The Limits of Competition Law* (Oxford University Press, 2005); Edwin S. Rockefeller, *The Antitrust Religion* (Cato Institute, 2007); Richard Wilberforce, Alan Campbell, and Neil Elles, T*he Law of Restrictive Practices and Monopolies* (Sweet and Maxwell, 1966).

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A. P. Møller Mærsk Group

A conglomerate involved in a wide range of business—containers and related activities, energy, shipping and retail—Mærsk is Denmark's largest company, a dominant regional player in the North Sea oil and gas industry and the owner of the world's largest container shipping fleet.

Since its creation in the Danish town of Svendborg in 1904, Mærsk has developed into a multinational corporation, employing approximately 117,000 people in more than 130 countries. Mærsk was established as a privately run shipping business when 28-year-old Arnold Peter Møller together with his father, Captain

Shipping accounts for more than half of Mærsk's revenues, and its containers are a familiar sight at ports worldwide.

Peter Mærsk Møller, bought a secondhand steamer of 2,200 tons dead weight. In 1965 Arnold Mærsk Mc-Kinney Møller, son of Arnold Peter Møller, assumed the leadership of Mærsk. In 1993 Mærsk Mc-Kinney Møller withdrew from the day-to-day management, and today the group is headed by Nils S. Andersen, who took over as the fourth Group Chief Executive Officer and Partner in 2007.

Mærsk's container division is called Mærsk Line. It is one of the leading shipping companies in the world, with a fleet numbering more than 550 container vessels and more than 1,900,000 containers. Mærsk already has twice the overall fleet capacity of its nearest rival. Furthermore, Mærsk owns 50 container ports around the world.

Mærsk Line keeps expanding the economies of scale in shipping, a key driver of trade globalization. Mærsk's container business may play a role in the integration of production processes, not only by moving goods from manufacturers to consumers and coordinating multiple modes of transport, but also by connecting industrial productions that are located in different places. Container shipping and related activities are by far the largest business areas for Mærsk, providing 53 percent of the group total revenue in the first half of 2007. Its container-related activities are under the brand names Mærsk Line, Mærsk Logistics, Safmarine, and APM Terminals.

Mærsk's main competitor in the container shipping industry is the Mediterranean Shipping Company (M.S.C.), based in Geneva, Switzerland, and owned by the Italo-Swiss Aponte family. M.S.C. specializes both in the container and in the cruise business (revenue in 2007 equals US$14 billion and US$1 billion, respectively). It was established in 1970, is not listed, and is not as diversified as Mærsk. Its organizational chart is light and the consequent rapidity of adapting to market changes is M.S.C.'s main advantage. This fact combined with a competitive price policy has led M.S.C. to achieve a consistent market share as the second largest ocean-carrier in the world.

Tankers, offshore, and other shipping activities are part of the main business in which Mærsk operates. It offers solutions for the transport of crude oil, refined products, and gas; drilling with mobile production units; salvage; and towage activities, as well as door-to-door transport, inter-European freight, and passenger transport. All these activities are under the brand names Mærsk Tankers, Mærsk Supply Service, Mærsk Contractors, Svitzer, and Norfolkline. Excluding Svitzer's 600 vessels, they operate more than 260 vessels and rigs. Maersk Oil participates in oil drilling in Denmark, Qatar, United Kingdom, Algeria, and Kazakhstan. In addition, Mærsk Oil leads exploration activities in the North Sea, Africa, the Middle East, Central Asia, South America, and the U.S. Gulf of Mexico.

Retail activity includes supermarkets and hypermarkets in Denmark, Germany, the United Kingdom, Poland, and Sweden. Dansk Supermarked incorporates, among others, the Føtex stores, the Netto stores, and the Bilka hypermarkets. The group extends its interests in shipyards in Denmark and the Baltic countries, in the industrial production of plastic products, and in Star Air, an airways company engaged in contract parcel flying in Europe. In addition to this, the group includes a 20 percent stake in Danske Bank. Total market capitalization by March 2008 equalled DKK217 billion (US$45.4 billion).

See Also: Denmark; Globalization; Transportation.

Bibliography. Majbritt Greve, Michael W. Hansen, and Henrik Schaumburg-Müller, *Container Shipping and Economic Development: A Case Study of A.P. Moller–Maersk,* (Copenhagen Business School Press, 2007).

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Arbitrage

Arbitrage is the process whereby traders profit from price discrepancies between markets. Certain conditions must be met for arbitrage to occur. The profit opportunity must be a riskless one, meaning that the transactions (buying in one market and selling in the other) must occur as near to simultaneously as possible, and the prices at which the asset is traded are both known with certainty at the time of the trade. If these conditions are met, the trader will gain the profit without tying up any capital.

Arbitrage activities contribute to the "law of one price," a fundamental economic assumption that an efficient market will ensure at any time only one price prevails for a particular asset. Arbitrage drives prices together and is implicit within the concept of a perfect market (another way of describing the "law of one price"). Buying increases demand for the cheaper asset forcing its price up, while the higher price in the other market falls as the cheaper asset is introduced into the supply to that market.

The English word *arbitrage* is derived from the French *arbiter,* meaning to umpire or referee and so, by extension, to resolve differences. Traders who perform these activities are arbitrageurs. In immature markets, opportunities for arbitrage will be greater than in mature markets with widespread access to information.

In practice, all trading activity involves transaction costs, even if only very small. For arbitrage profits, any transaction costs must be less than the difference between the two anomalous prices and known at the time of the trade. The profit will be the net value of the price differences less transaction costs. Examples of transaction costs might be dealing charges, or transaction taxes. There is rarely such a thing as an entirely riskless transaction. Even computerized trades of currencies, for example, will involve a transaction delay, even if only a matter of seconds, during which the opportunity may disappear.

Arbitrage is not speculation. Speculators take risks and expose themselves to changes in price of the assets in which they take a position. Their objective is profit but they are prepared to risk losses to make gains. Speculators back their own judgment and may misjudge the direction markets take. Arbitrageurs take a certain profit from temporary market price anomalies and in doing so will remove those anomalies. Some arbitrageurs are occasional opportunists, but others engage in the process full time. In efficient markets profits on arbitrage may appear to be small relative to the value of the transaction, but when adjusted to an equivalent annual return and taking into account the riskless nature of the profit, the return may be high. Many financial institutions conduct arbitrage operations on a regular basis. The scale of their operations means that a high volume of operations compensates for the low margins. By conducting their own in-house dealing operations scale economies minimize their transaction costs.

In the real economy, firms may practice price discrimination by segmenting buyers and charging different prices according to their different price elasticities of demand. Arbitrage may not be possible between the price segments because of barriers between them. For example, the recipient of a discount price could not sell at a smaller discount to the normal price to make a profit because of the supplier's customer identity conditions. Thus a student could not sell a discount travel ticket to a full-fare-paying customer who had no student identification.

The principle of arbitrage is central to many important ideas in economics and financial theory. For example, arbitrage provides the logic for the "purchasing power parity" theory of international exchange rates. If prices in different countries are experiencing different rates of inflation, then exchange rates will alter to restore price parity. *The Economist* newspaper publishes a "Big Mac Index" based on the international price of hamburgers that identifies over- or undervaluation of currencies based on this limited purchasing power comparison. Although the theory is inadequate as a full explanation of exchange rate movement, it sheds light on the importance of international price differences for the long-term path of a currency's value.

"Interest rate parity" theory holds that the difference between future and spot (current) exchange rates reflects the differential between interest rates in the countries of the two currencies. Thus the practice of covered interest arbitrage seeks to take advantage of differences in interest rates in different countries while hedging (covering) the exchange rate exposure (risk of change) involved in dealing in a foreign currency. In the foreign exchange market, triangular arbitrage is a trading technique that exploits pricing anomalies between three currencies in different markets.

In markets for forward contracts (where two parties agree to a sale/purchase of a commodity or financial asset at some definite point in the future at an agreed price), the process of arbitrage ensures there is no difference between the current price of the asset and the forward price after allowing for the passage of time. In financial theory, the Modigliani and Miller propositions hold that all firms with the same potential earnings should sell at the same price, regardless of their capital structure, through arbitrage in the stock market. "Arbitrage pricing theory" has developed in recent years in an attempt to more accurately calculate the cost of capital for firms and their true value.

The term *arbitrageur* has been applied to entrepreneurs involved in the business of buying and selling companies or parts of companies and seeking a profit from perceived anomalies between the stock-market valuation of a company and the underlying value of the business. Regulatory arbitrage is the exploitation of variations in market regulations between countries.

See Also: Financial Markets; Purchasing Power Parity; Risk.

Bibliography. J. Madura, *International Financial Management* (Thomson South-Western, 2006); W. L. Megginson and S. B. Smart, *Introduction to Corporate Finance* (Thomson South-Western, 2006); K. Pilbeam, *Finance and Financial Markets* (Palgrave Macmillan, 2005).

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Arbitration

Generally considered a genre of dispute resolution, arbitration is a proceeding used to obviate the litigation process. Arbitration seeks to expedite the resolution of disputes in an uncomplicated and inexpensive manner prior to the filing of a lawsuit. An impartial, private third party—an arbitrator—hears the parties' dispute and makes a final determination that typically binds the parties. Litigation, by contrast, involves a lawsuit and, while also a method used to resolve disputes between parties, for the most part, tends to be lengthy and expensive. There are many benefits associated with arbitration; however, agreeing to submit to arbitration requires one to relinquish his or her right of access to the courts. Still, arbitration has been used more frequently throughout the past decade.

In theory, any contractual agreement may result in a disagreement. Businesses around the world understand that, many times, disputes are inevitable. Generally, disputes can be resolved in several different ways: litigation, mediation, conciliation, and arbitration. Arbitration and mediation are cost-effective alternatives to litigation. Arbitration is the submission of a dispute to one or more impartial persons for a final and binding decision. This is known as an award, which is made in writing and, generally, is final. Usually, awards bind the parties involved.

Non-binding arbitration is conducted similarly to binding arbitration, except that when the arbitrator issues the award after the hearing, it is not binding on the parties, who do not give up their right to a jury trial. In that case, the arbitrator's award is merely an advisory opinion. Many cases go to settlement or binding arbitration after this phase. Alternatively, the parties may choose to go to trial. By contrast, mandatory arbitration, also known as court-ordered arbitration, is a judicial mandate intended to resolve pending court cases, utilizing informal rules of evidence and procedure in an advisory arbitration process ordered by the court at an early stage of a lawsuit. The availability of this process, in large part, depends upon local, state laws or court procedures.

Mediation is a process in which an impartial third party facilitates communication and negotiation and, therefore, promotes voluntary settlements by the parties themselves. This process can be effective for resolving disputes prior to arbitration or litigation. Arbitration, however, offers parties a decisive legal outcome to their dispute without the expense and inconvenience of court proceedings and attorney fees.

Businesses and government departments—even courts themselves—have used arbitration programs to resolve disputes, and there is widespread satisfaction with the process. Because the arbitrator renders a final decision upon hearing both parties' arguments, arbitration is considered to be adjudicatory, not advisory. Similar to litigation, arbitration has a so-called appeals process. In other words, an arbitrator's decision can be challenged under very limited circumstances only, for example, if you can demonstrate an arbitrator was biased; therefore, parties are not always bound by the award. This process is somewhat of a misnomer, however. For the most part, arbitration is considered a binding, adjudicatory process.

Providers of alternative dispute resolution services address areas such as employment, intellectual property, consumer, healthcare, financial services, technology, construction, and international trade conflicts. The largest provider in the United States is the American Arbitration Association (AAA); it plays a vital role in resolving complex matters, especially in such volatile industries as construction. The plans, specifications, site conditions, disciplines involved, construction methods, and goals in each construction project vary. Today's projects, for example, are more intricate, the technology more advanced, and the trades working on them more specialized. Identifying and establishing systems to manage potential business disagreements on construction projects can help parties avoid delays and resolve disputes that could threaten an entire project.

Arbitration Agreements

Arbitration agreements are essentially of two types: (1) a future-dispute arbitration agreement, commonly referred to as an arbitration clause, which is contained in a broader contract between the parties and anticipates arbitration procedures to follow, should a dispute arise under the broader contract; and (2) a present-dispute arbitration agreement, known as a submission agreement, which counsel for the parties craft when the parties desire to arbitrate a dispute, but where there is no pre-existing contract clause.

Arbitration can take place only if both parties have agreed to it, unless of course, the proceeding is court-ordered. For this reason, the parties are obligated to accept the terms of settlement, regardless of whether it is unfavorable. If the parties do not agree in advance to follow the arbitrator's final decision, but merely agree to consider it, the process is termed conciliation. Additionally, parties are able to choose important elements such as the applicable law, language, and venue of the arbitration. In this vein, neither party enjoys home court advantage.

Parties may insert arbitration clauses into contracts to resolve future disputes. An existing dispute can be referred to arbitration by means of a submission agreement between the parties. In contrast to other forms of dispute resolution, specifically mediation, a party cannot unilaterally withdraw from the proceeding. Within the two main types of arbitration agreements, parties must agree on the terms of arbitration.

Terms agreed upon may be as narrow or as broad as the parties desire. For instance, the parties can agree in advance to the parameters within which the arbitrator may render his or her award. If the award is lower than the specified low, the defendant will pay the agreed-upon low figure; but, if the award is higher than the specified high, the plaintiff will accept the agreed-upon high. If, however, the award falls between the high and low, the parties agree to be bound by the arbitrator's decision. The parties' terms may include a form of binding arbitration wherein each of the parties chooses one number only, and the arbitrator may select only one of the figures as the award.

Whether to reveal the figure to the arbitrator is another decision the parties must make. In some instances, the parties exchange their own determination of that value of the case, but the figures are not revealed to the arbitrator. Subsequently, the arbitrator assigns a value to the case and the parties agree to accept the high or low figure closest to the arbitrator's value.

History

Historically, arbitration was practiced by the Greek city-states, and in the Middle Ages high ecclesiastical authorities were called upon to settle controversies. In the first part of the 20th century, some countries—the United States and France—began passing laws that sanctioned and even promoted the use of private adjudication as an alternative to what was perceived to be inefficient court systems. The growth of international trade however, brought greater sophistication to arbitration. As trade grew, so did the practice of arbitration. Ultimately, this led to the creation of international arbitration as a means for resolving disputes under international commercial contracts.

Since then, great advances have been made, notably the establishment of the Permanent Court of Arbitration. Functions analogous to arbitration were performed by the Permanent Court of International Justice under the League of Nations: functions that belong to the International Court of Justice. Today, many treaties contain clauses providing for arbitration or conciliation of disputes. The most notable of these is the Charter of the United Nations.

The last decade has seen an unprecedented increase in professional liability claims, including those brought by businesses and individuals against accounting firms. Typically, those disputes were resolved by litigation that, in more than 90 percent of the cases, results in a settlement.

Increasingly, the international business community is using arbitration to resolve commercial disputes arising in the global marketplace. Supportive laws are in place in many countries that provide a favorable climate for the enforcement of arbitration clauses. International commercial arbitration awards are recognized by national courts in most parts of the world. Arbitration is popular in international trade as a means of dispute resolution because, among other methods used to resolve disputes, it often is easier to enforce an arbitration award in a foreign country than it is to enforce a judgment of the court.

See Also: Bill of Lading; International Law; Mediation; Negotiation and Negotiating Styles.

Bibliography. F. Paul Bland, Jr., Michael J. Quirk, Kate Gordon, and Jonathan Sheldon, *Consumer Arbitration Agreements,* 4th ed. (National Consumer Law Center, 2004); Michael W. Buhler and Thomas H. Webster, *Handbook of ICC Arbitration* (Sweet and Maxwell, 2005); Christian Buhring-Uhle and Gabriele Lars Kirchhof, *Arbitration and Mediation in International Business,* 2nd ed. (Kluwer, 2006); A. Redfern and M. Hunter, *Law and Practice of International Commercial Arbitration,* 4th ed. (Sweet and Maxwell, 2004); Tibor Varady, John J. Barcelo, and Arthur Taylor Von Mehren, *International Commercial Arbitration,* 3rd ed. (West Group, 2006).

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Archer Daniels Midland

The Archer Daniels Midland Company (ADM) is a multinational agribusiness. It engages in processing agricultural commodities on a global scale. It uses agricultural produce to make food ingredients, food additives, oils, and other products. Some of the ingredients are used for human consumption, while other ingredients are used as animal feed ingredients. Nutrients are manufactured into digestible foods for both animals and humans.

Agribusinesses like Archer Daniels Midland serve as a vital link between farmers and consumers. Many food products must either be preserved or processed into easily transportable commodities. Many agricultural commodities such as corn are bulky and costly to ship; transporting them in a processed form not only adds value but also serves to start the processing. The processing operations that ADM engages in create thousands of products from the crops produced by farmers all over the globe. Its product line includes a range of products from amino acids to sweeteners and from nutraceuticals (foods with presumed health benefits) to chocolate.

The company was founded in 1902 in the heartland of American agricultural production. It has always sought to work in partnership with the farming communities in locations where it has operations. Its business philosophy recognizes that healthy agricultural sectors in an economy are essential for the overall health of both the national and the global economy. It is currently headquartered in Decatur, Illinois. Since ADM was incorporated in 1923, it has expanded its business activities to include sales and distribution facilities in 40 U.S. states. It also manages a network of grain elevators.

In Canada ADM engages in transporting and processing cereals such as wheat, durum, or oil seeds like canola and sunflower. It has a number of facilities in locations as diverse as Medicine Hat in Alberta and Montreal. It also produces lecithin, malt, and animal feeds across Canada, along with chocolate from its cocoa bean processing facility in the West African country of Côte d'Ivoire and other locations.

Latin American operations in Mexico produce sweeteners, starch, and wheat flour. ADM also has a number of joint ventures in the cornmeal business. Central American plants include several that mill wheat and premix a variety of products. It also has soybean crushing plants and a string of elevators. In South America ADM processes cocoa and maintains storage operations. It also works to promote the production of soybeans and other grains. ADM has also been very active in opening trade with Cuba.

Pacific Rim facilities operated by ADM process cocoa beans and corn, premix feeds, mill wheat, and manufacture vegetable oil. It also packages vegetable oil and many other products across Asia as well as the Pacific Rim. Sales offices are operated in many Asian countries, and ADM has been engaged in developing business exchanges with Vietnam.

The European oilseed crushing operations of ADM are numerous and spread across the continent. It currently has a fermentation plant in Ireland. Cocoa for the production of chocolates is another major part of ADM's European businesses. In the United Kingdom it operates flour mills. It also has meat and dairy alternative production plants.

The emerging biofuels industry is one of ADM's growing business sectors. It engages in biofuel production in Germany. Sales offices are located in all of its principal markets. Gasohol is a mixture of ethanol (grain alcohol) made from corn. Its use has been mandated by governments in a move to reduce dependence on foreign oil. The move has been profitable for ADM and other agribusinesses, but increased the price of corn for many individual consumers.

In mid-1995 ADM was prosecuted for price fixing. Two of its executives served short prison terms for their part, resulting in two sensationalist books about the affair.

See Also: Company Profiles: North America; Multinational Corporation; Nestlé; United States.

Bibliography. Archer Daniels Midland Company, *Nature of What's to Come: A Century of Innovation* (Archer Daniels Midland, 2002); M. James Bovard, *Archer Daniels Midland: A Case Study in Corporate Welfare* (Cato Institute, 1995); E. J. Kahn, *Supermarketer to the World: The Story of Dwayne Andreas, CEO of Archer Daniels Midland* (Warner Books, 1991); James B. Lieber, *Rats in the Grain: The Dirty Tricks of the "Supermarket to the World"* (Basic Books, 2000); Robert Rubovits, *Archer Daniels Midland: A Report on the Company's Environmental Policies and Practices* (Council on Economic Priorities, Corporate Environmental Data Clearinghouse, 1991).

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Argentina

Argentina is the second largest country in size in South America after Brazil and ranks as one of the highest in the region on human development indicators for life expectancy, educational attainment, literacy, and gross domestic product (GDP) per capita. The strong agricultural sector, abundance of natural resources, diversified industrial base, and a large middle class have made Argentina a popular target for global business. In addition, the democratic political structure with executive, judicial, and legislative branches operating at the national and provincial level has enhanced the attractiveness of the country. Despite a fragile economy in the past, this upper-middle income country is now flourishing. Nevertheless, the sustainability of the economy in the long term is questionable because of limited investment in infrastructure and in planning growth.

Several sectors are major contributors to Argentina's GDP, including manufacturing, telecommunications, the service industry, and agriculture. Manufacturing is the largest sector operating in areas such as the production of automobiles, farming equipment, cement, and industrial chemicals. The telecommunications, service, and tourism sectors are also important to the country's GDP. Nevertheless, much of the infrastructure in these areas still needs to catch up with the vigorous expansion that the economy has experienced since the beginning of the 21st century. In addition, domestic transportation is limited, and services are localized to major population areas.

Argentina contains an abundance of fertile land in the region covering several provinces known as the Pampas, which has thrived because of easy access to fresh water, low population density, and a mild climate. The primary staples produced for export include soy and vegetable oils as well as fruits and vegetables. These agreeable conditions have also led Argentina to become one of the largest wine producers in the world and enabled a vibrant cattle industry to prosper. This environment coupled with a flexible exchange rate has allowed the country to be extremely competitive in the export market at the turn of the 21st century and to achieve real annual average GDP growth of over 9 percent for five consecutive years. Participation in the free-trade agreement Mercosur with neighboring countries has also facilitated exports in the region.

Crisis

Argentina suffered a political, economic, and financial crisis in 2001, marked by widespread protests, several interim presidents, the collapse of the banking and financial system, and the default on foreign debt. This crisis was long expected, as the country had been undergoing a recession for a number of years. From 1991 to 2001, President Carlos Menem had upheld a fixed currency exchange rate with the U.S. dollar that was initially intended to control the rampant hyperinflation of the 1980s. Unfortunately this exchange policy led to massive imports with the consequent demise of the national industry and generalized unemployment as well as large trade deficits and high levels of foreign debt.

The country has rebounded from the crisis under the leadership of President Nestor Kirchner, who was elected in 2003. He unilaterally restructured the country's foreign debt, took steps to curb political corruption, exponentially expanded social programs and supported policies to increase exports and lower inflation. In 2007 his wife Cristina Fernandez de Kirchner became the first female president of Argentina.

History and Culture

Although indigenous groups lived in Argentina prior to the European conquest, they now make up less than 1 percent of the population. The country Argentina as it is currently known was largely molded by the arrival of the Spaniards in 1516. The Spanish created the Viceroyalty of the Río de la Plata, of which Argentina was a part, by 1776, but by 1816 under the leadership of General Jose de San Martin the country was declared independent from Spain. A large wave of European immigrants primarily from Spain, Italy, and to a lesser extent France arrived in the country at the turn of the 20th century and at the time contributed to making Argentina one of the wealthiest countries in the world by expanding the agricultural sector.

Nevertheless, during the 20th century recurring economic crises, numerous military coups, waves of high inflation, escalating external debt, and capital flight plagued the country. In addition, constant changes in civilian and military factions in power led to many periods of political unrest after independence. An important and controversial figure who shaped the political landscape of the country was President Juan Peron, who from 1946 to 1955 helped develop unions and other policies to protect the working class. Also of note is the military dictatorship that from 1976 to 1983 led a "dirty war" in which thousands of dissidents "disappeared."

Spanish is the official language of the country. Argentina is predominately Roman Catholic, but Arab and Jewish communities are also prevalent. The typical cuisine includes turnovers (empanadas), meat (asado), and pastries (facturas). Argentina is also one of the largest consumers of wine in the world. As in many Latin American cultures, the most popular sport is soccer. Tango, a melancholic style of music, came into being in Argentine brothels at the turn of the 20th century and is enjoyed worldwide.

See Also: Brazil; Latin America; Mercosur/Mercosul.

Bibliography. CIA, "Argentina," *World Factbook*, www.cia.gov (cited March 2009); C. Floria and C. García, *Historia de los Argentinos I and II* (Larousse Argentina, 1971); J. Lanata, *Argentinos* (Ediciones B, 2003); D. K. Lewis, *The History of Argentina* (Palgrave Macmillan, 2003); J. L. Nolan, *Argentina Business: The Portable Encyclopedia for Doing Business with Argentina* (World Trade Press, 1996); L. A. Romero, *A History of Argentina in the Twentieth Century* (Fondo de Cultura Economica, 2006); World Bank, *Argentina Country Brief*, web.worldbank.org (cited March 2009).

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Asia

Asian countries have recently become major players in the world economy with the emergence of Japan in the 1960s, India in the 1970s, and China in the late 1980s. Asia covers some 29.4 percent of the world's land mass, and since the 1980s its 4 billion people have made up about 60 percent of the world's population.

From ancient times, there has been significant trade around Asia and also between Asia and other parts of the world. There was contact between Han Dynasty–China and the Roman Empire, but this was through intermediaries, and there were theories that the Romans may have sourced some of their tin from southeast Asia. Archaeologists working at the port of

Oc-Eo in southern Vietnam in the 1930s uncovered two Roman coins in the remains of what was probably the capital of the Empire of Funan, which flourished from about 200 C.E. to 500 C.E. and was a precursor to Cambodia. This shows that there was contact, probably through intermediaries. By this time, Chinese junks sailed around much of the South China Sea, and there were also Arab dhows sailing the Indian Ocean. Trade in spices, other foods, silks, and other precious items took place at sea, and also on land with the emergence of the Silk Road, the land route through central Asia connecting China with Turkey and through Turkey to Europe.

In medieval times, there seems to have been increasing trade around Asia, with most trade with Europe along the Silk Road, although this was reduced with the emergence of the Seljuk and then the Ottoman Turks. Trade continued between China and the Turks, but much of Europe was cut off. There were some intrepid travelers who made the journey, such as Marco Polo (1254–1324). There were also many Christian missionaries, going back to St. Thomas himself, who was said to have gone to India soon after the crucifixion of Jesus.

In early modern times the Chinese were involved in trade with most of Asia, and in the early 15th century the government sponsored a number of massive expeditions under Admiral Cheng Ho. Records of these journeys survive, and it is quite clear from them, as well as from archaeological and other evidence, that there were Chinese communities (and also some Indian and Arab communities) around much of the Indian Ocean, southeast Asia, and the South China Sea. Many of these were trading families. There is also a theory that some ships from Cheng Ho's expeditions may have gone to the Americas, but this is disputed by some scholars. A changed political climate at home and the high expedition costs resulted in the Chinese discontinuing their explorations of the world.

European Trade and Imperialism

By the 1480s, there were Portuguese ships in the Indian Ocean, and in 1497–99, Vasco da Gama (c.1460–1524) sailed from Portugal to India and back again, leading to trade by ship from Portugal to India. This Portuguese trade was largely conducted by the Portuguese government, which financed the expeditions and reaped the rewards. In 1510 Afonso d'Albuquerque (1453–1515) took Goa for the Portuguese, and in 1511 he took Malacca. It was these successes that encouraged British and Dutch merchants to subscribe money to establish, respectively, the Honorable East India Company, founded in 1600, and Vereenigde Oost-Indische Compagnie (VOC), or the Dutch East India Company, established two years later. Both were chartered companies, operating through a government charter that gave them extraterritorial rights over the lands they captured. The profits they made from their expeditions went to pay their shareholders, which included many important government figures in both countries.

The British East India Company was the main trading company in Asia until the 19th century. It maintained a large army and its own navy, and gradually took over a number of important ports from Aden to many parts of India, Ceylon (now Sri Lanka), and also Penang, Malacca, and Singapore, as well as British Burma. It conducted trade with China, and also later attempted to trade with Japan.

The VOC took over Malacca from the Portuguese in 1642, but swapped it with the British in 1824 for British Bencoolen and other settlements on the west coast of Sumatra. The Dutch had also taken over parts of what was to become the Netherlands East Indies from the 1600s. The British captured them in 1811, but returned them in 1824. Both the British East India Company and the VOC suffered from major political interference and from their servants being involved in private trade. This was to lead to the British East India Company collapsing in 1784 and needing an injection of government money, but being kept afloat until 1858, and then formally dissolving in 1873. For the VOC, their rule over the Netherlands East Indies was replaced by direct rule from the Netherlands in 1801.

Other companies also maintained their own chartered companies in Asia with the Danish East India Company founded in 1616; the Portuguese East India Company founded in 1628; the French East India Company founded in 1664; and the Swedish East India Company founded in 1731. The Danes, at their height, are reported to have imported more tea than the British East India Company, with vast quantities smuggled into Britain. They also managed to establish some settlements in India, but their Danish East India Company had to be refounded in 1732 as Asiatisk Kompagni ("Asiatic Company"), which, in

1779, handed its monopoly to the Danish crown. The Swedish East India Company was actually launched by Scottish merchant Colin Campbell and made a fortune for its investors—paying a 25 percent dividend on the first voyage—but never had any territorial claims in Asia.

19th- and 20th-Century Companies

By the 19th century, many new companies started to become involved in trade in Asia. Many of these were trading companies that specialized in a particular field of business, although a few of them operated as general merchants. Later still, some of these businesses transformed themselves into agency houses whereby they imported items for which they were the agents, selling them in particular markets.

For the British, one of the oldest of the companies operating in Asia was Guthrie & Company. It had been established in 1821 by Briton Alexander Guthrie, who was living in Singapore, and James Guthrie who lived in London. By the 1850s the two had built up the company to become a large trading house that came to dominate British trade with Singapore. James Guthrie retired from the company in 1876 and he then returned to Britain where he died in 1900. By that time the company owned six banks, five insurance companies, two shipping companies and 23 new "general" agencies. It was reorganized in 1903, and by the 1920s and 1930s was heavily involved in oil palm. The company headquarters was destroyed in the Japanese bombing of Malaya, and after World War II, it expanded into Africa and Australia, moving its headquarters to London. There are now a number of companies in the Guthrie Group, as well as subsidiaries and independent companies using the name Guthrie.

Another early British-founded company that is still operating is the Borneo Company, founded in 1846. It operated throughout Southeast Asia, and had extensive lands in Sarawak and North Borneo (Sabah), hence its name, but also was involved in trade in Singapore, Malaya, and Thailand. During the 1960s, the Borneo Company were agents in Singapore and elsewhere for many major companies including Bosch, Bovril, Johnson & Johnson, Rolex, and the Sheaffer Pen Company. It still owns considerable property in Thailand, where much of its operation is still located.

Probably the most famous of the British trading companies of the period were those that centered on the Jardines. In Hong Kong and Shanghai, Jardine Matheson operated selling opium and other products, an event that led to the Opium Wars in 1839–42. Jardines remained a major company in the International Settlement in Shanghai, and also Hong Kong, and was also a major agency house there and in Singapore and Malaya, where they formed a partnership with the Henry Waugh Trading Company to form Jardine Waugh. Their business was involved in handling exports and imports, insurance, sales of airplanes and aviation accessories, mining, and heavy engineering.

Another British company that operated throughout Asia was the Peninsular & Oriental (P&O) Line, which had the contract for some of the Royal Mail and other mail deliveries as well as taking passengers between Asia and Europe. Of the other British companies that operated in Asia, two others were heavily concerned with trade in Malaya and Singapore—Sime Darby, which began operations in Malacca in 1902 and was established in Singapore in 1910, and William Jacks, which was created in 1919. The former is still important in Malaysia where it controls rubber plantations; the latter specializes in engineering equipment and also in exporting tin, copra, rubber, and pineapples as well as running a general agency.

There was also the firm of Boustead's, founded in 1828 by Edward Boustead, which was involved in trading in spices, coconuts, tobacco, tin, tea, and silks as well as being agents for the British companies Johnny Walker and Thomas Cook's. Mention should also be made of Anglo-Thai; Harper Gilfillan (formerly Gilfillan, Wood & Co. founded in 1867); Harrisons, Barker & Co. (founded in 1902); Huttenbach Brothers (founded in 1883); McAlister & Co. (founded in 1857); and H. Wolskel & Co. (founded in 1900). The Danish East Asiatic Company, founded in 1897 in Copenhagen, traded throughout southeast Asia, being particularly involved in trade in Thailand, Malaya, and Singapore. It still retains many interests in Asia, including in shipping. Other European agency houses operating in the region included the German firm Behn Meyer, which had been founded in 1840; the Swiss company Diethelm, founded in 1860; and the French firm Dupire Brothers, founded in 1897.

Mention has already been made of P&O, but there were also many other shipping lines in the region. These included the British companies China Navigation Co., Dominion of Far East Line, and Orient

Line; and in Burma, the Irrawaddy Flotilla Company. Other companies included the U.S. Pacific Far East Line; and the Japanese Nippon Yusen Kaisha, Osaka Shosen Kaisha, and Mitsui-O.S.K. lines. The liners were involved in transporting passengers, mail, and, in times of strife, military supplies and/or soldiers.

Many of the shipping companies had arrangements with local hotels, and this led to extensive tourism—the major hotels in Asia at that time included the Astor (c.1890, Tianjin, China); the Cathay (1931, Shanghai, China); the Eastern and Oriental (1884/1885, Penang, Malaysia); the Grand Hotel de Pekin (1900, Beijing, China); the Grand Oriental Hotel (1837, Colombo, Ceylon/Sri Lanka); the Hotel des Indes (1897, Batavia/Jakarta, Indonesia); the Imperial (1915–22, Tokyo, Japan); the Oriental Hotel (1876, Bangkok, Thailand); the Metropole (1901, Hanoi, Vietnam); the Peninsula Hotel (1928, Hong Kong, China); the Raffles Hotel (1887, Singapore); the Royal (1937, Phnom Penh, Cambodia); the Strand Hotel (1901, Rangoon/Yangon, Burma/Myanmar); and the Taj Mahal (1904, Bombay/Mumbai, India). Many of these have gone through several different management companies. In addition, since World War II, there has been an expansion with many major hotel chains buying up or building their own hotels in major cities in Asia.

There were also a large number of European banks that operated throughout Asia. For the British, Grindlays in India, the Hongkong and Shanghai Banking Corporation (now HSBC), the Imperial Bank of India, the National Bank of India, the Standard Chartered Bank, and many others operated, and some of these still maintain a presence in the region, although many of the smaller ones have since been absorbed by larger concerns. In Australia, the Orient Bank helped many Chinese miners transfer funds back to China during the Gold Rush of the 1850s. The French ran the Banque de l'Indochine; the Germans operated the Deutsche Asiatische Bank; and for the Japanese, the Yokohama Specie Bank had branches throughout Asia (the singer/artist Yoko Ono's father managed the Hanoi branch during World War II).

There were also a number of smaller banks such as the Banco Delta Asia located in Macao that gained worldwide attention in 2005 when it had sanctions placed against it by the U.S. government in connection with its dealings with the North Korean government. Later Chinese-owned and Chinese-run banks were established throughout Asia with the Overseas Chinese Banking Corporation, founded in 1932 from an amalgamation of three other banks; and the United Overseas Bank, formed in 1935, both operating heavily in Singapore, British Malaya, and the Netherlands East Indies.

In addition to the trading companies, there were many European-owned plantation or mining companies that focused on individual sites or ran groups of plantations or mines. Of the plantation companies, the most well known was the British-owned Dunlop, which controlled many rubber plantations in Malaya. The Compagnie du Cambodge, owned by the French nobles the Comtes de Beaumont in Paris, was one of the major rubber companies in French Indochina. The Bombay Burmah Trading Corporation operated in northern Thailand and Burma, mainly in timber. In India, the tea companies such Twining's and Lipton's (now a part of Unilever) were important. Other British companies such as the security printers De La Rue and Waterlow's, and the U.S. firm American Banknote Company, were (and still are) involved in the printing of money and postage stamps. Kelly & Walsh were major publishers of books in English from their offices in Hong Kong and Shanghai.

In addition to the European companies, there have also been large numbers of Chinese trading companies. Many of these were not well known until the 1950s, but some of these included Lee Rubber and Yeo Hap Seng's foods. The "Tiger Balm brothers," Aw Boon Haw (1883–1954) and Aw Boon Par (d.1944) were from Burma and developed the ointment Tiger Balm, making a fortune and operating for most of the time from Singapore. Cheong Fatt-tze also ran an extensive business empire in Penang, Sumatra, and some parts of southern China; and Loke Wan Tho (1915–64) ran the Cathay Organization. The Shaw brothers (Runme, Runje, Runde, and Run Run) ran a film company empire in Shanghai, Hong Kong, and Singapore.

Post-Independence

After independence in many of the countries in Asia, business laws were gradually changed to help the local population gain control of many of the businesses. In Malaysia, laws were introduced to promote Malays in business, and these have been successful with many firms in the country now controlled by Malays;

Malaysian citizenship is a requirement to become a director of a company in Malaysia.

In Cambodia, laws to establish state-owned corporations in the 1960s did reduce the Chinese domination of the businesses in the country but led to stagnation in the economy, which in turn has been blamed for the events leading up to the civil war that broke out in 1970. Since the late 1980s, the circle around Hun Sen has controlled many of the major businesses in the country. In Vietnam, the French tried to maintain their businesses in the country with some success, although their last plantations in the country were nationalized in 1976, a year after the end of the Vietnam War. A relaxation of communist restrictions has seen many people establish businesses, especially in Ho Chi Minh City. In Brunei, Shell Oil has formed a partnership with the local government to form Royal Brunei Shell, and in Indonesia, the local company Pertamina was established in 1957. In the Philippines, economic power is closely linked to political power, with many examples from the leading families such as the Ayalas, Cojuangcos, and Lopez.

Japan

The main transformations in Asian business since the end of World War II have been in the emergence of Japanese capitalism, in the reemergence of China from the 1980s, and in the development of the Indian economy. Mention should also be made of the "tiger" economies of the Pacific Rim, notably Hong Kong, Singapore, South Korea, and Taiwan (Republic of China), all of which have had high levels of economic growth.

There had been Japanese trading companies in early modern times, but the country was closed to most traders from 1635 until the arrival of Commodore Matthew Perry in 1853–54. This was followed by the Meiji Restoration, where the Japanese government actively sought to build up its own businesses. In many cases it encouraged existing businesses run by local landowners to transform into joint-stock companies. Government grants were provided for many of the companies such as the Yawata Steel Works, to develop with help from the Bank of Japan (Nippon Ginko), which had been formed in 1882.

After World War II, with the Japanese nation shattered, plans were introduced to rebuild the country's economy. Before the war, Japan had been the source of many cheap goods and toys; it did not have a good reputation for manufactures. As a result, the engineer and statistician Gen'ichi Taguchi sought advice from the U.S. quality control experts W. Edwards Deming, Joseph Moses Juran, and Walter A. Shewhart. The plan was for Japan to develop its business along strict lines that would ensure that the country gained a reputation for inexpensive but good-quality manufactured products. The newest factories, often "staffed" with robots, were developed for what became an economic "miracle."

In 1945 most of Japan's industry had been destroyed and during the Allied occupation of Japan, the large conglomerates (zaibatsus) were broken up. This allowed many new companies to form, but owing to the economies of scale, a number of these later merged. It was not long before Hitachi, Kawasaki, Mitsubishi, Mitsui, Nippon Electric Company (NEC), Nissan, Sony, and Toshiba became household names around the world. In the 1960s, Honda managed to make huge inroads into the motorcycle industry in the United States so quickly that the "Honda effect" was taught at many management courses in U.S. universities.

China

Before World War II, the Chinese economy had been dominated by foreign companies, although during the late 19th century Li Hung-chang and other officials had tried to develop Chinese companies such as the Kaiping Mines and the Shanghai Cotton Cloth Mill. After 1949, when the communists won the Chinese civil war, Chinese businesses on the mainland were nationalized. However, from the late 1970s, China started to engage more with the West, and this led to the creation of a capitalist economy alongside a communist political structure. The result has been great economic influence wielded by large Chinese companies that have been involved in low-price manufactures, which in turn has seen them dominate the textile industry and be responsible for many manufactured items sold around the world.

China has become wealthy through exports, and has also seen Western expertise and businesses relocate to China, especially to Shanghai, which has reemerged as the commercial capital of China. The return of Hong Kong in 1997, and the peaceful manner in which that took place, has in turn led to renewed confidence in the Chinese economy that has seen unparalleled rates of economic growth in the 1990s and the 2000s.

India

In India, the economy of the country has also been transformed since independence in 1947. For periods of time, India has been dominated by a socialist government, and under Prime Minister Indira Gandhi, large government corporations played a large part in the economy of India. However, gradually more and more private companies have been established, leading to India also having long periods of high economic growth, and the entrepreneurial spirit has seen the emergence of many new companies, especially in the information technology sector—India being able to take advantage of a large English-speaking population.

Globalization

With increasing prosperity in much of Asia, there have been many multinationals investing heavily in the region. Foreign banks have premises in many of the major cities of the region. Foreign banking institutions are involved in trade throughout the region, with many investment arms of foreign corporations being active in the Tokyo, Hong Kong, Shanghai, Singapore, Seoul, and other stock markets. Indeed, it was in Singapore in 1995 that the British bank Baring's lost a fortune on the stock market, causing the bank to be sold for £1.

Asia has benefited hugely from globalization with some countries such as China taking advantage of its vast human resources, many others doing so to a lesser extent, and all being able to draw on entrepreneurial skills; this has seen Asian businesses compete in every part of the world. Of the richest people in the world, Indians Lakshmi Mittal, Mukesh Ambani, and Anil Ambani rank, respectively, fourth, fifth, and sixth, with Kushal Pal Singh, also from India, being ninth. Li Ka-shing from Hong Kong is listed as the 12th richest, the Sultan of Brunei is listed as 17th richest, and the Kwok brothers from Hong Kong are the 25th richest.

See Also: Asian Development Bank; Asian Financial Crisis; Asian Tigers; Bangladesh; China; Hong Kong; India; Indonesia; Japan; Korea, South; Malaysia; Pacific Rim; Philippines; Singapore; Sri Lanka; Thailand; Vietnam.

Bibliography. Robert Blake, *Jardine Matheson: Traders of the Far East* (Weidenfeld & Nicolson, 1999); Sjovald Cunyngham-Brown, *The Traders: A Story of Britain's South-East Asian Commercial Adventure* (Newman Neame, 1970); Emil Hellfferich, *Behn, Meyer & Co.* (Hans Christians Verlag, 1983); Hongkong & Shanghai Banking Corporation, *A Century in Singapore 1877–1977* (The Corporation, 1978); David Howarth and Stephen Howarth, *The Story of P&O* (Weidenfeld & Nicolson, 1986); Frank H. H. King, *The Hongkong Bank in the Period of Imperialism and War 1895–1918* (Cambridge University Press, 1988); Richard Lim, *Building a Singapore Bank: The OUB Story* (Overseas Union Bank, 1999); Henry Longhurst, *The Borneo Story: The First Hundred Years of The Borneo Company Limited* (Newman Neame, 1956); David Shavit, *The United States in Asia: A Historical Dictionary* (Greenwood Press, 1990); *Sime Darby: 75th Anniversary* (Sime Darby, 1985); Poul Westpoll, *The East Asiatic Company Limited* (East Asiatic Company, 1972); Arnold Wright and H. A. Cartwright, *Twentieth Century Impressions of British Malaya* (Lloyds Greater England, 1907).

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Asian Development Bank

The Asian Development Bank (ADB) is an international organization consisting of 67 members, coming from both within and outside the Asia-Pacific region, with a focus on development, poverty, education, and improving the quality of life of the people of the region. ADB works with various partners to attempt to achieve its goals, including members of the private sector, nongovernmental organizations (NGOs), governments, and other organizations. The headquarters of ADB is in Manila, the Philippines, and ADB has a number of branch offices throughout the region.

The primary methods ADB uses to attempt to accomplish its mission are the issuing of loans and grants as well as supplying technical assistance and advice. The majority of the loans and grants ADB provides are given to the governments of Asian nations; however, the organization also provides direct assistance to some private enterprises in the region and ADB has developed a credit-rating service to assist

The Tarbela Dam in Pakistan, shown above in a photo taken from space, was funded in part by the Asian Development Bank.

private firms in securing private funding that is needed for investment. ADB is currently following a strategic framework entitled *Strategy 2020*, which emphasizes inclusive growth, environmentally sustainable growth, and regional integration.

ADB came into existence on December 19, 1966, with Takeshi Watanabe appointed its first president. As this was prior to the rapid industrialization and economic growth that has been seen in the later parts of the 20th century in much of Asia, ADB initially focused primarily on increasing the efficiency of Asian agricultural and rural development. As the economies of Asia began to grow and shift from a focus on agriculture toward a focus on industrial development, ADB shifted its focus as well to include improvements in education, health, and infrastructure as well as development of specific industries as its key objectives.

Into the 1980s and 1990s, ADB continued to expand both its membership and mission. Newly independent central Asian nations became members and recipients of loans, grants, and technical assistance from the organization. New programs were implemented that dealt with gender issues, micro-finance, urban planning, and environmental concerns. Furthermore, ADB got involved in creating a subregional organization with the creation of the Greater Mekong Subregion.

ADB's lending focuses primarily on funding major projects. In 2007 loans totaling $10.1 billion for 82 projects were approved by ADB. During the same year, ADB spent $243 million in technical assistance and gave grants totalling $673 million.

ADB is governed by a board of governors in which each of the 67 members is represented. The board of governors gathers each year for an annual meeting. The day-to-day operations are managed by the ADB president who is elected for a five-year term by the board of governors. Working with the president is a management team consisting of four vice presidents and the managing director general.

ADB has been active in promoting Asian regionalization in recent years, and the priority of achieving this objective has risen since Haruhiko Kuroda's election as president in 2005 and the creation of the Office of Regional Integration. As ADB is a major player in Asian regionalization, Asian regionalism efforts have been primarily concerned with economic development and trade promotion as opposed to security or political integration issues.

It should be noted that ADB has been the target of criticism from many quarters. Officials of the U.S. and UK governments, both members and financial supporters of ADB, have expressed concerns over the bank's management practices. There have also been concerns over ADB's growing mandate and whether it is necessary to duplicate functions that are already the responsibility of other international organizations such as the World Bank and International Monetary Fund. Furthermore, there have also been concerns expressed by grassroots organizations and environmental activists over ADB funding of projects that are seen to be environmentally unfriendly.

Nevertheless, during the period of ADB's existence, Asia has experienced some of the fastest growth and quickest reductions in poverty in the history of man-kind. Whether this progress has been assisted or hampered by ADB is open to debate.

See Also: Asia; Asian Financial Crisis; Asian Tigers; Asia-Pacific Economic Cooperation; Association of Southeast Asian Nations.

Bibliography. Asian Development Bank, www.adb.org (cited March 2009); Christopher Dent, "The Asian Development Bank and Developmental Regionalism in East Asia," *Third World Quarterly* (v.29/4, 2008); Raphael Minder, "Asian Development Bank's Donors Seek Shake Up of Oversight and Staffing, *Financial Times* (January 17, 2008); E. Kumar Sharma, "Grassroot Grumbles," *Business Today* (June 4, 2006); James Simms and Denis McMahon, "Asian Development Bank Debates a Change in Role," *Wall Street Journal* (May 8, 2007).

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Asian Financial Crisis

The Asian financial crisis, which led to a wave of currency depreciations and economic recession among many east Asian economies, started in Thailand during the summer of 1997. Thailand, Indonesia, and Korea were the most affected, while Malaysia and the Philippines were affected at a lower, but nonetheless significant scale.

The fact that many of east Asia's currencies were pegged to the U.S. dollar before 1997–98 significantly contributed to the crisis. With the dollar appreciating in the 1990s, most east Asian countries experienced huge balance of payments deficits. The countries' governments used their foreign exchange reserves primarily to support the peg. In a short period of time, the reserves decreased to very low levels, leading to a currency crisis in the region.

Large international debts in the private sector also contributed to the crisis. A number of big corporations (mostly financial institutions) from the region borrowed expensive, short-term, foreign currency denominated, unhedged loans to finance rapid investments in real estate and the stock market. The worsening of economic conditions in 1997 led to a sharp rise in defaults among borrowers, causing a number of banks to become financially distressed. That led to a bank run.

In the early 1990s, Thailand's bigger corporations (mostly financial institutions) borrowed heavily on the international market to finance investments, mostly in real estate and stocks. Following an economic recession in 1997, some of Thailand's banks started missing loan repayments; investors feared the event would kick-start an imminent bank run. Thailand's stock of foreign exchange reserves had been drawn down to such low levels that its government could not afford the dual costs of bailing out its banks and maintaining the foreign exchange rate of the Thai baht simultaneously. A depleted reserve forced the government to allow its currency to float in July 1997. The Thai baht depreciated heavily in the subsequent months. At the same time, the lack of governmental support and/or inability of the government to rescue them caused a number of Thai financial institutions to go bankrupt.

During that time period, the Bank of Indonesia was increasing reserve requirements, increasing interest rates, and making attempts to curb credit expansion. Fearing an appreciation of the rupiah, Indonesia repeatedly widened its currency's trading band, hoping that the increased volatility would discourage speculators. That hope did not materialize, and investors did not put too much faith in Indonesia's ability to reform.

In Malaysia, the current account deficit was widening at an alarming rate as well. The then prime minister Mahathir bin Mohamad's "Vision 2020" led to an unrestrained expansion of credit, leaving the Malaysian central bank, Bank Negara, with few options but to take steps to do the exact opposite, i.e., tighten credit availability. Furthermore, Malaysian interest rates were too high to be ignored and that led to a large inflow of speculative capital.

Financing its ever-increasing current account deficit led to an accumulation of short-term foreign debt in Korea. Its large conglomerates, called chaebols, were heavily in debt; this led to a wave of corporate bankruptcies, causing consequential losses to Korean banks. International lenders did not roll over loans that would have been voluntarily restructured in normal circumstances.

In the Philippines, aggressive lending led to a speculative boom in its real estate market. Lenders were left with nonperforming loans when the boom cycle finally went full circle.

Low reserves and inflated currencies led to a wave of currency depreciations in the region. These depreciations dramatically increased the burden of foreign-currency liabilities. Hence, the costs of bailing out financial institutions were now beyond the fiscal means of these countries. The governments were powerless as their currency, financial institutions, and economic activity collapsed.

Although the International Monetary Fund (IMF) intervened at an early stage of the crisis, as the crisis kept its momentum and kept unfolding, adjustments were needed to some of the institutions' policy recommendations that were already under way. The World Bank, the Asian Development Bank, and bilateral donors also assisted in reform efforts that eventually helped the region to recover. The IMF's handling of the Asian financial crisis has been criticized by many. Nonetheless, it is also acknowledged that many of the affected countries had structural deficiencies (for example, weaknesses in financial systems, governance, and politics) that hampered the successful achievement of IMF recommendations.

See Also: Asia; Asian Development Bank; Asian Tigers; Chaebol; Contagion; Currency; Indonesia; International Monetary Fund; Korea, South; Malaysia; Philippines; Thailand.

Bibliography. Iwan J. Azis, "Indonesia's Slow Recovery after Meltdown," *Asian Economic Papers* (v.7/1, 2008); Andrew Berg, "The Asia Crisis—Causes, Policy Responses, and Outcomes," *International Monetary Fund Working Paper* (October 1999); Peter C. Y. Chow and Bates Gill, *Weathering the Storm: Taiwan, Its Neighbors, and the Asian Financial Crisis* (Brookings Institution Press, 2000); Dilip K. Das, *Asian Economy and Finance: A Post-Crisis Perspective* (Springer, 2005); Stephan Haggard, *The Political Economy of the Asian Financial Crisis* (Institute for International Economics, 2000); Karl D. Jackson, *Asian Contagion: Causes and Consequences of a Crisis* (Westview Press, 1999); David R. Meyer, "Structural Changes in the Economy of Hong Kong since 1997," *China Review—An Interdisciplinary Journal on Greater China* (v.8/1, 2008); Dick Nanto, "CRS Report: The 1997–98 Asian Financial Crisis," *CRS Reports for Congress* (1998); Wing Thye Woo, Jeffrey Sachs, and Klaus Schwab, eds., *The Asian Financial Crisis: Lessons for a Resilient Asia* (MIT Press, 2000).

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Asian Tigers

Asian tigers as a term originally referred to the four economies of Hong Kong, Singapore, Korea (South), and Taiwan, which are all known for their very high growth rates and rapid industrialization following Japan from the late 1960s onward. Although usually reserved for the original four economies, the expression "new tigers" since the 1990s and early 2000s has been used for some other economies in Asia (e.g., India) due to their increased visibility in world high-technology competition.

Similarities between the original four are, first, an export-driven model of economic development, where goods were exported to the highly industrialized nations. At the same time the governments tried to put a brake on domestic consumption by way of, for example, high tariffs against imports. Other common traits are that the governments focused explicitly on improved education levels as a means to increase productivity. All four economies suffered the impact of the Asian financial crisis of 1997, although in slightly different degrees, with Taiwan seemingly suffering the least.

Differences between the original four Asian tigers are depicted in a book by C. Edquist, L. Hommen, and colleagues: Variation in policies and specialization within different kinds of industries, in addition to obvious cultural and historical variations. Korea is the largest economy of the four, and also has a high complexity of industrial structures. Its industrialization process was rapid and remarkable in that it evolved from being a poor, agricultural economy, undergoing exploitation during Japanese colonization, and experiencing devastation during the Korean War, into a full-fledged industrialized state in a very short time. As in Taiwan, Japanese colonial rule resulted in a capitalist basis for the economy and infrastructure such as railways, marine ports, roads, and irrigation systems, whereas post-colonial development has been an interplay between indigenous policies and relations with selected foreign ideas.

According to the *Total Economy Database* (TED), Korean gross domestic product (GDP) per capita for the year 1960 was estimated at US$4,071, increasing to US$9,541 (1975), US$15,457 (1985), US$26,161 (1995), and US$30,568 (1999, compared to US$57,460 for the United States). Korea has a dual structure of firms divided into large firms able to have an international technology and market orientation and a large segment of domestic-oriented smaller firms. Industry networks (chaebol groups) and their affiliated firms are dominant in the country also in terms of research and development (R&D), although there is a significant amount of R&D organized as a large government research institute sector rather than in universities. The financial system has predominantly been a banking system and underwent reforms that are in part a result of the more liberalized environment triggered by the aftereffects of the Asian financial crisis.

In the case of Taiwan, the TED figures for GDP per capita are US$4,976 (1960), US$11,559 (1975), US$21,117 (1985), US$31,256 (1995), and US$37,589 (1999). Taiwan can be characterized as a predominantly government policy–led system, although the actual development obviously has been an interplay between government and private firms. However, Taiwan is a prime case of government playing a key strategic role by changing the economic base itself in order to create new market segments in which Taiwanese firms could compete. The Taiwanese system is strongly focused on specialized production, often in the form of original equipment manufacturing (OEM) and original design manufacturing (ODM). This strength is simultaneously a challenge for the system, since it might be necessary to foster new trajectories of growth in the future. For example, the economic growth of mainland China has in part become a source of competition for Taiwan's existing specializations.

Singapore has experienced rapid development since political independence in 1965. The TED figures for Singapore GDP per capita are US$7,691 (1960), US$17,455 (1975), US$23,847 (1985), US$39,399 (1995), and US$43,986 (1999). Until the late 1990s, this development was largely through reliance on foreign direct investment (FDI), i.e., attracting subsidiaries of foreign multinational corporations. Government played a central role by providing incentives, training programs, and infrastructure.

Unlike the structure in terms of ownership of firms in Korea and Taiwan, where there is a large proportion of indigenous firms, there has been a situation in Singapore in recent years with about three-quarters of the manufacturing output coming from multinational corporations, and where more than 60 percent of equity in its manufacturing sector was foreign. In view of the somewhat recipient-oriented nature of these activities, the recent Singapore policy efforts have been aimed at increasing the innovation intensity of the activities located in Singapore. A challenge similar to Taiwan's is to achieve balance between government guidance and independent entrepreneurial initiative.

Hong Kong was a Crown colony of Great Britain 1847–1997, and developed during the five decades leading up to 1997 into a newly industrialized economy as well as a trade hub between the People's Republic of China and the world. Since 1997 Hong Kong has tried to diversify its role. Hong Kong's production networks have started to become integrated into the Chinese mainland. In addition, Hong Kong was particularly hard hit by the Asian financial crisis. Recent policies regarding Hong Kong have included R&D-related investments and attempts at generating new technologies through public support, thereby trying to transform Hong Kong into an innovation hub with links to and from China.

See Also: Asia; Asian Financial Crisis; China; Hong Kong; Korea, South; Singapore.

Bibliography. Lowell Dittmer, "The Asian Financial Crisis and the Asian Developmental State: Ten Years After," *Asian Survey* (v.47/6, 2007); C. Edquist and L. Hommen, eds., *Small Country Innovation Systems: Globalization, Change and Policy in Asia and Europe* (Cheltenham, 2008); Groningen Growth and Development Centre and The Conference Board, *Total Economy Database, Gross Domestic Product Per Capita in 1990 PPP US$*; E. M. Kim, ed., *The Four Asian Tigers: Economic Development and Global Political Economy* (Academic Press, 1998); P. Krugman, "The Myth of Asia's Miracle," *Foreign Affairs* (November/December 1994); S. Lall, *Learning from the Asian Tigers: Studies in Technology and Industrial Policy* (Palgrave

Macmillan, 1997); Hugh De Santis, "The Dragon and the Tigers—China and Asian Regionalism," *World Policy Journal* (v.22/2, 2005).

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Asia-Pacific Economic Cooperation

Asia-Pacific Economic Cooperation, known also under the acronym of APEC, is an international forum created in 1989 in order to enhance commercial and economic cooperation in the Asia-Pacific region by facilitating economic development, trading exchanges, and investments. APEC's members now include 21 countries of the Pacific Rim: the United States, Australia, Japan, Mexico, Peru, Malaysia, Brunei, Russia, Vietnam, Singapore, Thailand, Indonesia, Hong Kong, Papua New Guinea, New Zealand, the Philippines, Taiwan, Republic of Korea, People's Republic of China, Canada, and Chile. They are usually referred to as "member economies."

APEC's main goals, first set in 1994 at the Bogor (Indonesia) meeting, can be summed up as follows: Promotion of free and open trade in the Asia-Pacific area; facilitation of trading exchanges by the elimination of trade, tariff, and other types of barriers that make difficult economic exchanges across the Pacific; reduction of the costs of business transactions by improving access to trade information; improvement of business facilitations in order to help economic operators conduct business more efficiently; expansion of the Asia-Pacific import-export economy by providing cheaper goods and services and more employment opportunities; and enhancement of technical cooperation. Additionally APEC works toward the creation of an international space for the safe and effective movement of goods, services, and people across its member states through policy alignment on the one hand and economic and technical cooperation on the other.

APEC activities are planned and implemented with the consensual agreement of economic leaders and ministers of its member economies. During the meetings in which the representatives of each member state participate, the guidelines of APEC's activities are outlined. Member economies' representatives meet throughout the year to program future cooperation in the Asia-Pacific region and further already agreed-upon projects.

The inaugural meeting of APEC was promoted by and held in Australia in January 1989. It was the then Australian prime minister who launched the idea to implement more efficient cooperation in the Asia-Pacific area. However, when APEC began it was only an informal forum for the ministers of 12 states of the Asia-Pacific region. The first APEC Economic Leaders' Meeting took place in 1993 at Blake Island in the United States under the presidency of Bill Clinton.

The meeting of the member economies' leaders held in 2007 (in Sydney, Australia), put new issues at the top of APEC's agenda, including climate change, energy security, and clean development. Participants in the meeting also emphasized the Asia-Pacific's vulnerability to natural disasters, recognizing the need for protecting the region from environmental risks. Additional economic integration in the area was also discussed, and new agreements were negotiated to further reduce trade barriers, and institutional and noninstitutional impediments to investments. The enlargement of APEC with the possible entry of more members as a tool to strengthen it was considered as well. The issue of membership, which is particularly important, will be discussed again in 2010.

APEC is financed by contributions of member economies, and the annual budget is used for developing projects and sustaining the activities of the secretariat located in Singapore. Japan is the only member that until now has provided additional funds for specific projects related to trade liberalization.

Unlike other international organizations, APEC works on the basis of nonbinding commitments. There are, in fact, no treaty obligations for its members, and commitments are undertaken on a purely voluntary basis. The fact that there are nonbinding agreements, and the enforcement of any decision depends upon the voluntary commitment of each member, impinges upon APEC's practical efficiency as well as on its real capacity to achieve specific goals.

See Also: Asia; Association of Southeast Asian Nations; Australia; World Trade Organization.

Bibliography. Elek Andrew, *APEC after Busan: New Direction* (Korea Institute for Economic Policy, 2005); Mohammad Ariff, *APEC and Development Cooperation* (Institute of South Asian Studies, 1998); Sandra L. Dawing, ed., *Asia-Pacific Economic Cooperation (APEC): Current Issues and Background* (Nova Science, 2003); Richard E. Feinberg, ed., *APEC as an Institution: Multilateral Governance in the Asia-Pacific* (Institute of Southeast Asian Studies, 2003); Loke Wai Heng, *APEC Trade Liberalisation: Open Regionalism, Non-binding Liberalisation and Unconditional MFN* (University of Sussex, 2006); Richard Higgot, *Cooperation-building in the Asia-Pacific region: APEC and the New Institutionalism* (Japan Research Centre, 1991); John Ravenhill, *APEC and the Construction of Pacific Rim Regionalism* (Cambridge University Press, 2001).

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Assicurazioni Generali

Assicurazioni Generali is one of the leading financial services group providers of insurance products and services in Europe. With a presence in about 40 countries through 331 subsidiaries, the group primarily operates in Italy, where it is the largest insurance company, followed by Germany, France, Spain, Austria, Switzerland, and Israel. The company was established in 1831 and the headquarters are in Trieste, Italy. During the fiscal year 2007, the group has recorded revenues of €66,217.8 million, a consolidated result of €2,915.6 million, and employs 67,306 people. The main shareholders include Mediobanca Group (15.63 percent), Unicredit Group (4.,66 percent) and Bank of Italy (4.45 percent). Its main international competitors are AXA, Allianz, Fortis, and ING Group.

From the very beginning Assicurazioni Generali has been characterized by the capacity to grow, evolve, and innovate constantly, enhancing its wide presence across various segments and geographies. The business of Generali is concentrated on life and non-life insurance products, financial services, and real estate. The life division is involved in the offer of life insurance products for both individuals and corporate clients. The non-life division is engaged in the provision of motor, personal, accident, and health insurance. The financial services division provides a range of banking and asset management services such as bancassurance and investment management products and services for individuals and institutional clients. It also provides services in the areas of real estate. The strategic focus of the group is on product and distribution innovation, increasing efficiency and improving standards for products and customer service.

Generali can be defined as a global born-leading company. After only four years from its foundation, Generali had already opened 25 offices in western and eastern Europe. Within a few decades, the group had expanded into Africa and Asia (in the 1880s) and North and South America (from 1950), diffusing around the world the trademark of the lion of St. Mark introduced after the establishment of the Republic of Venice. This symbol, after profound restyling, still identifies the group.

Generali's expansion has continued in recent years with a number of mergers and acquisitions, agreements, and joint ventures that have always characterized the growth strategy of the company, giving a strong brand recognition leveraging a distinctive competitive advantage, especially in high-growth areas. Nevertheless a strong base for the growth initiatives has been always represented, especially in recent years, by the group's robust financial performance.

Recent milestones include, in early 2005, the constitution of Generali China Life, a joint venture between Generali and China National Petroleum, followed a year later by the authorization to set up a joint venture to operate also in the Chinese non-life insurance business. The group expansion in the emerging markets was reinforced in 2006 through a joint-venture agreement signed with one of the leading retailers in India, Pantaloon Retail, to serve both life and non-life segments.

Further acquisitions and partnerships have been recently carried out to enhance the market position of Generali in central and eastern Europe (CEE). An agreement was signed in 2004 between Generali and EBRD (the European Bank for Reconstruction and Development) in order to set up a new real estate fund with the aim of investing in the real estate sector in CEE. Additionally Generali acquired majority shareholding in Delta Osiguranje, Serbia's largest private insurance company. In June 2006, an agreement with the UkrAvto Group was signed for the acquisition of a 51 percent stake in Garant Auto and Garant Life (insurance companies) in the Ukrainian market. In the same year the group continued its expansion with the acquisition of Orel-G Group, a leading player in the Bulgarian insurance market. To enhance the geographical reach of the company and strengthen its market position in the CEE market, in 2007 Generali and PPF Group signed a joint venture creating a new company named Generali PPF Holding. The joint venture combines the CEE businesses of both companies to create one of the region's leading insurers with more than 9 million clients throughout Czech Republic, Slovak Republic, Poland, Hungary, Romania, Bulgaria, Ukraine, Russia, Serbia, Slovenia, Croatia, and Kazakhstan.

With its continuous growth at a global and local level, it is notable to point out that Assicurazioni Generali has always demonstrated a strong commitment in the areas of welfare, culture, and sports, and has recently introduced environmental concerns to its list of commitments.

See Also: Company Profiles: Western Europe; Italy.

Bibliography. Datamonitor, "Assicurazioni Generali S.p.A.," www.datamonitor.com (cited March 2009); Hoovers, www.hoovers.com (cited March 2009); Assicurazioni Generali, www.generali.com (cited March 2009).

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Association of Southeast Asian Nations

The Association of Southeast Asian Nations (ASEAN) was established on August 8, 1967, with an initial membership of five countries: Indonesia, Malaysia, Singapore, the Philippines, and Thailand. Its formal establishment was announced by the Bangkok Declaration. The association has subsequently expanded to include Brunei (1984), Vietnam (1995), Laos (1997), Myanmar (1997), and Cambodia (1999). ASEAN aims to promote economic growth and peace in the region. Nominal Gross Domestic Product was US$1,281.9 billion in 2007, and a total trade of about US$1,400 billion for all 10 members of ASEAN. The total population is over 566 million and the ASEAN member states cover a total area of 4.5 million sq. km.

The Bangkok Declaration incorporates statements concerned with the region's economic growth, cultural development, security, technological, academic, and administrative development. ASEAN members are agreed to solve their differences through dialogue and in the spirit of mutual accommodation.

The highest decision-making body of ASEAN is the meeting of ASEAN Heads of State, the ASEAN Annual Summit. The ASEAN ministerial meeting for foreign ministers and the ASEAN economic ministers' meetings are also held annually. The meetings of these two bodies focus on defense and the environment and the region's economy, respectively. ASEAN also provides a forum for discussion and decision making in the areas of energy, agriculture and forestry, tourism, and transport at a ministerial level. The secretariat was established by the ASEAN foreign ministers during the 1976 Bali Summit. The secretariat's purview is to initiate, advise, coordinate, and implement ASEAN activities, using an annual operational budget funded through equal contribution of all ASEAN member countries.

Specialized bodies within ASEAN include the Agricultural Development Planning Centre, ASEAN-EC Management Centre, Centre for Energy, Earthquake Information Centre, Poultry Research and Training Centre, Regional Centre for Biodiversity Conservation, Rural Youth Development Centre, Specialized Meteorological Centre, Timber Technology Centre, Tourism Information Centre, and the University Network to promote cooperation among member countries.

There are three ASEAN Communities: the Security Community, Economic Community, and Sociocultural Community. The ASEAN Security Community aims to promote peace and harmony within the region. Its duties include political development, shaping and sharing of norms, conflict prevention, conflict resolution, post-conflict peace building, and implementing mechanisms components. The ASEAN Economic Community works toward establishing ASEAN as a single market and production base, and the ASEAN Socio-cultural Community aims at nurturing a community of nations, with caring societies and a common regional identity.

ASEAN was founded at a time of conflict in southeast Asia and was unavoidably divided by the two prevailing ideologies, exemplified in the two competing political entities, the Communist and the Western blocs. The establishment of ASEAN by five non-Communist countries divided southeast Asia into two parts. However, ASEAN was not an anti-communist regional organization but a geographical body. The enlargement of ASEAN in the 1990s shows that those new members share the association's commitment to regional peace and stability as a prerequisite for economic development, which is the top priority among members. This enlargement coincides with the fall of communism in eastern Europe. Political cooperation stressed the resolution of disputes negotiation and the benefits to be gained through peace and stability in the region.

ASEAN is not a homogeneous group. There are considerable differences among its member states with respect to size, history, and level of industrialization. The four new members—Cambodia, Laos, Myanmar, and Vietnam—are still in the process of adjusting their economic policies. At one end of the scale, the wealthiest state is Singapore, with a per capita income more than 50 times that of Cambodia. In descending order, the per capita income of the other members starts with Brunei, and is followed by the four older members—Malaysia, Thailand, the Philippines, and Indonesia. Bringing up the economic rear are the remaining new members—Cambodia (as previously mentioned), Laos, Myanmar, and Vietnam.

ASEAN aimed to create an ASEAN Economic Community through the ASEAN Free Trade Area in the Fourth ASEAN Summit, and the ASEAN Free Trade Area agreement was signed on January 28, 1992. The agreement is a common, external preferential tariff scheme to promote the free flow of goods within ASEAN. More than 90 percent of the total tariff lines in ASEAN are now included in the Common Effective Preferential Tariff Scheme, which covers manufactured and agricultural products.

From 2005, tariffs on 99 percent of the products in the inclusion list of the ASEAN six older members (Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand) have been reduced to less than 5 percent. For the other newer members, tariffs on about 80 percent in the inclusion list have also been reduced to less than 5 percent. Products in the inclusion list are those that have to undergo immediate liberalization through reduction in intraregional (CEPT) tariff rates, removal of quantitative restrictions, and other nontariff barriers. A zero tariff has to be achieved by older members by 2010 and by 2018 for the newer members. The ASEAN Free Trade Area is regarded as a tool to increase ASEAN members' competitiveness in international markets and to attract foreign investment.

Members of ASEAN want to be free to implement independent policies without interference from their neighbors. Thus, noninterference, consensus, nonuse of force, and nonconfrontation became the principles of the organization. ASEAN is a setting in which leaders at the highest levels communicate with each other on regional affairs, prefer consensus decision making, and make nonbinding treaty plans. This kind of new culture is called the ASEAN Way. The ASEAN Way consists of beliefs, practices, structures, responses, and values commonly shared in ASEAN. It relies on the personal, often face-to-face approach in contrast with Western dependence on structures and functions.

International Network

The collective weight of ASEAN has made the association a force as an international bargaining tool. In the ASEAN regional forum and APEC, ASEAN has established its authority. However, ASEAN does face some difficulties in reaching consensus because of existing differences between old and new members.

ASEAN members also take part in discussions with nonmembers, with a view to promoting good external relationships. ASEAN established the Regional Forum in 1994 to maintain peace and stability in the region. The forum is an official dialogue in the Asia Pacific region, consisting of 27 participants—ASEAN members and others, such as Australia, Bangladesh, Canada, China, the European Union, India, Japan, North Korea, South Korea, Mongolia, New Zealand, Pakistan, Papua New Guinea, Russia, East Timor, the United States, and Sri Lanka. There are three stages: confidence-building measures, development of prevention diplomacy, and elaboration of approaches to conflicts. Prevention diplomacy includes efforts to build mutual trust and confidence between states, norms building, and enhancing channels of communication.

See Also: Asia; Asia-Pacific Economic Cooperation; Brunei; Free Trade; Free Trade Zone; Indonesia; Malaysia; Philippines; Singapore; Thailand; Vietnam.

Bibliography. Alexander C. Chandra, *Indonesia and the ASEAN Free Trade Agreement: Nationalists and Regional Integration Strategy* (Lexington Books, 2008); ASEAN Secretariat, "ASEAN Overview," www.asean.org (cited March 2009); Denis Hew, *Brick by Brick: The Building of an ASEAN Economic Community* (Institute of Southeast Asian Studies, 2007); Institute of Southeast Asian Studies, *Know Your ASEAN* (Institute of Southeast Asian Studies Publishing, 2007); Estrella D. Solidum, *The Politics of ASEAN* (Eastern Universities Press, 2003); Mya Than and Carolyn L. Gates, eds., *ASEAN Enlargement: Impacts and Implications* (Institute of Southeast Asian Studies, 2001).

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ATA Carnet

The Anglo-French term *ATA Carnet* is derived from *Admission Temporaire/Temporary Admission*. *Carnet* is a French word long used in English to refer to particular customs documents, presumably resulting from the frequent trade between the United Kingdom and France. Specifically, a carnet is a customs document that allows the item it covers to be imported without paying a customs duty (tax) on it. The ATA Carnet is used for goods that are going to be imported temporarily, and excuses the holder from all taxes that would normally apply.

The Customs Cooperation Council (now known as the World Customs Organization) first adopted ATA Carnet conventions in 1961, which are now issued according to an agreement administered by the International Chamber of Commerce in conjunction with the World Customs Organization and the relevant entities of member nations, which actually issue the carnets. In many nations, the national chamber of commerce is the issuing body. In the United States, carnets are issued by the United States Council for International Business (USCIB), the business advocacy group that represents American business interests to the United Nations.

Over 150,000 ATA Carnets are issued annually, by 65 participating countries. Various other countries, especially smaller ones, are known to accept ATA Carnets without actually committing to the international guarantee to do so, and without issuing their own. A modified ATA Carnet, which does not cover exhibition goods, is used for trade between the United States and Taiwan: the TECRO/AIT Carnet (named for the Taipei Economic and Cultural Representative Office, in the United States, and the American Institute in Taiwan).

ATA Carnets cannot be used for perishable goods, but the conceivable range of goods that could be covered is otherwise theoretically limitless. The three categories of goods for which such carnets are issued are goods brought into the country for exhibitions or fairs; professional equipment; and commercial samples. What those categories have in common is that all such goods are being brought into the country for some commercial purpose other than their sale or rent, and will be brought back out of the country as a result. Excusing such importation from tax encourages international business activity in the country of import, and in many cases leads to increased customs revenue for the country at a later date—such as if tax-free samples and demonstrations lead to sales of taxed goods.

ATA Carnets are granted by the home country of the exporter, which will have various requirements. The USCIB, for instance, requires a refundable cash deposit or surety bond equal to 40 percent of the value of the goods, as collateral. Similar collateral requirements are common in other countries, and the collateral is used to pay taxes if a claim is filed against the importer because of ineligibility for an ATA Carnet or because the time frame has expired. Such claims are filed by the country of import, the country that would have been collecting the customs taxes.

Other carnets include the Carnet de Passage, which is issued to motor vehicles and is typically used to distinguish (and excuse from customs duties) a vehicle that is the owner's possession from vehicles imported for sale; and the International Road Transport (TIR) carnets used to harmonize the administration of road transport across multiple countries (especially in Europe).

See Also: Import; International Chamber of Commerce; World Customs Organization.

Bibliography. Richard J. Hunter Jr., "The ATA Carnet System," *Review of Business* (March 22, 2001); Thomas E. Johnson, *Export/Import Procedures and Documentation* (AMACOM, 2002).

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AT&T

The history of AT&T provides an interesting dialectic of how a firm is created and severely wounded by technology; is aided and hindered by regulation; welcomes and hides from competition; and uses and abuses shareholder and market valuations.

On February 14, 1876, Alexander Graham Bell's patent on the telephone was filed at the Patent Office in Washington, D.C., and on July 9, 1877, the American Bell Telephone Company was formed. Between 1880 and 1894 AT&T had monopoly protection and telephone growth was a steady 33 percent per year. However, after the patent protection expired, independent telecommunication companies (ITCs) were quick to enter the market. As a result, between 1894 and 1907, prices declined 47.5 percent for business customers and 64.9 percent for residential customers in competitive markets.

In 1905 Theodore Vail, AT&T's chairman, embarked on a strategy of rapid acquisition of ITCs. As telecommunications grew domestically and became an increasingly important component in everyday life, federal and state governments began to exercise increasing intervention. The legislative response was the Communication Act of 1934 that created the Federal Communications Commission for the regulation of interstate telecommunications.

The advent of World War II spurred significant technological development by Bell Labs in radio telecommunications. The invention in 1947 of the transistor ushered in the modern era of computers. Bell Labs also did breakthrough research on satellites in 1960, fiber optics in 1977, and cellular technology in 1983; however, the commercialization of each of these innovations was severely limited by a regulatory process that discouraged replacement technologies.

During the 1950s and 1960s, AT&T sparred with government institutions but managed to fend off regulatory interference by providing high-quality and low-priced telephone service to an ever-increasing number of Americans. Beginning in the mid-1970s, competition was introduced into the U.S. long distance telephone market, first with MCI and later with Sprint and resellers. First radio technology and then fiber optics provided a cost-effective technology for competitive entry.

In the early 1980s, the Justice Department and Second Circuit Federal District Court in Washington, D.C., approved the Modification of Final Judgment (MFJ) that required AT&T to divest the 22 regional Bell operating companies (RBOCs) but permitted it to keep Western Electric and Bell Labs. With the new market freedoms, AT&T in 1986 also had a new chairman and corporate unifying "Single Enterprise" strategy. Bob Allen, who took over after Jim Olson's death in 1988, employed a dramatically different strategy, focused on individual business unit profitability and overall corporate shareholder value.

In 1991, AT&T acquired NCR ($7.3 billion) in a hostile takeover to increase its data networking and international presence and in 1993 acquired McCaw Cellular Communications ($11.5 billion)—renamed AT&T Wireless—to enter the rapidly growing cellular market. On September 20, 1995, Chairman Allen surprised almost everyone when he announced that AT&T shareholders would be better served by AT&T restructuring into three separate publicly traded companies: a systems and equipment company (Lucent Technologies), a computer company (NCR), and a communications services company (AT&T).

To increase competition in the telecommunications industry, Congress enacted the Telecommunications Act of 1996 that allowed RBOCs to offer long distance service and allowed long distance carriers to offer local service.

In 1997 the Board chose its first outside CEO, C. Michael Armstrong, who had experience with Hughes Electronics and IBM. Armstrong envisioned AT&T as a full-service communication provider, enabled by cable television providing access and driven by the "convergence" of video, voice, and high-speed internet data. The internet bubble provided AT&T with the financial resources to make a string of acquisitions: Teleport Communication Group ($11.3 billion), Tele-Communications ($48 billion), and MediaOne Group ($54 billion). The strategy was not without doubters; many questioned the "inflated" price AT&T paid for these companies, others questioned performance of the voice-over-cable technology. With long distance revenues dramatically dropping and little incremental revenues accruing from the new acquisitions, the market punished AT&T in October 2000. Similar to Allen, Armstrong announced that he would break AT&T into four separate firms: cable/broadband, cellular/wireless, business, and consumer/residential. Soon after, Comcast bought the cable unit for $52 billion, and Armstrong left AT&T to be its CEO.

In November 2002, when David Dorman assumed leadership of AT&T consumer and business areas, the global telecommunications industry entered an era of chaos and instability—highlighted by oversupply, fraud, a complicated regulatory environment, and nonstop pricing pressures. Once again AT&T tried another strategic transformation, i.e., to evolve from a consumer-oriented voice company to an enterprise-focused company based on global internet protocol networking. In January 2005 the remaining parts of AT&T were sold to SBC Communications for only $16 billion. SBC renamed the combined entity AT&T and hopes to create the industry's premier communications and networking company—what the original AT&T once was. So ends the proud history of arguably one of the greatest 20th-century companies.

See Also: Communication Challenges; Deregulation; Verizon Communications.

Bibliography. AT&T, "Milestones in AT&T History," www.corp.att.com/history (cited March 2009); C. Wymbs, "Telecommunications, An Instrument of Radical Change for Both the 20th and 21st Centuries," *Technological Forecasting & Social Change: North-Holland* (v.71/7, 2004).

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Attitudes and Attitude Change

Attitudes could be regarded as the categorization of a stimulus object along an evaluative dimension based upon three general classes of information: (a) cognitive information; (b) affective/emotional information; and/or (c) information concerning past behaviors or behavioral intentions. In this sense, attitudes are evaluations. They denote a person's orientation to some object. All attitudes have an "object of thought," which may be specific and tangible or abstract and intangible (equality, globalization). By denoting the individual's orientation to the object, an attitude conveys the individual's evaluation of the object. Attitudes are expressed in the language of "like/dislike," "approach/avoid," and "good/bad." When the object of the attitude is important to that person, the evaluation of the object produces an affective, or emotional, reaction in that person. Two features are important here. The first feature is that attitudes can be activated and can function automatically, suggesting that attitudes are a part of cognitive life (since they constitute categorizations). The second feature is that attitudes are communicative and social, since they only have sense inasmuch as they convey information from one person to another.

The tendency to evaluate is not directly observable and intervenes between certain attitude objects and certain responses. It is assumed to be grounded in experience and to have many observable manifestations. Both the experiences that lead to a certain attitude and its manifestations are often divided into three components: cognition, affect, and behavior. The cognitive component refers to a person's perception of the object of the attitude, and/or what the person says he or she believes about that object. The affective component entails emotions and feelings elicited by the attitude object, and the behavioral component comprises actions directed at the attitude object as well as behavioral intentions.

Attitudes serve a number of functions. The knowledge function is similar to the common understanding of what an attitude does. Attitudes help us explain and understand the world around us. Attitudes serve a utilitarian function, by which it is meant that they help us gain rewards and avoid punishments. To be "politically correct," for example, is to hold and display attitudes for utilitarian reasons. The third function is the value-expressive one. The expression of an attitude can sometimes be no more than a public statement of what a person believes or identifies with. Finally, attitudes can serve an ego-defensive function. Such attitudes are usually deep-seated, difficult to change and hostile to the attitude object. Attitudes that serve this function project outwardly what are really internal, intrapsychic conflicts.

Work-Related Attitudes

There are two specific work-related attitudes that are crucial in organizations: job satisfaction and organizational commitment. Job satisfaction could be defined as a positive emotional state resulting from the appraisal of one's job or job experiences. It generally refers to a variety of aspects of the job that influence a person's level of satisfaction with it. These usually include attitudes toward pay, working conditions, colleagues and boss, career prospects, and the intrinsic aspects of the job itself.

One of the major determinants of job satisfaction seems to derive from the intrinsic features of the work itself. According to J. Hackman and G. Oldham's model, such features might be skill variety—the extent to which the tasks require different skills; task identity—the extent to which an individual can complete a whole piece of work; task significance—the extent to which the work is perceived as influencing the lives of others; autonomy—the extent to which the individual has freedom within the job to decide how it should be done; and feedback—the extent to which there is correct and precise information about how effectively the worker is performing. In addition, leader behavior is also important in satisfaction at work as well as perceptions of distributive justice. Finally, value theory claims that job satisfaction exists to the extent that the job outcomes an individual receives match those outcomes that are desired. The more people receive outcomes they value, the more satisfied they will be; the less they receive outcomes they value, the less satisfied they will be. Value theory focuses on any outcomes that people value, regardless of what they are.

Organizational commitment has been defined by R. T. Mowday and his colleagues as "the relative strength of an individual's identification with and involvement in an organization." This concept is often thought to have three components: (a) a desire to maintain membership in the organization; (b) belief in and acceptance of the values and goals of the organization; and (c) a willingness to exert effort on behalf of the organization. N. Allen and J. Meyer have divided organizational commitment slightly differently into: (a) affective commitment—essentially concerns the person's emotional attachment to his or her organization; (b) continuance commitment—a person's perception of the costs and risks associated with leaving his or her current organization; and (c) normative commitment—a moral dimension, based on a person's felt obligation and responsibility to his or her employing organization.

Organizations can do several things to enhance employees' commitment. People tend to be highly committed to their organizations to the extent that they have a good chance to take control over the way they do their jobs and are recognized for making important contributions. Thus, job enrichment becomes a significant tool for the enhancement of organizational commitment. In addition, aligning the interests of the company with those of the employees leads to highly committed individuals. Many companies do this directly by introducing profit-sharing plans: By letting employees share in the company's profitability, they are more likely to see their own interests as consistent with those of their company. And when these interests are aligned, commitment is high. Finally, in many ways, the easiest way to enhance commitment—also the most effective and the least expensive—is simply listening to employees. The mere act of listening to employees shows them that the organization cares about what they have to say, and they are more likely to reciprocate in terms of organizational commitment.

Attitudes and Behavior

One of the most enduring enigmas researchers have been concerned with is the relationship between attitudes and behaviors. The common-sense view of attitudes has it that attitudes directly cause a person to act in a particular way. However, the relationship between attitudes and behavior is not as simple as this, since as often as not behaviors appear to be quite unrelated to attitudes, and behaviors can cause attitudes as much as the other way around. A number of possible reasons were suggested for this lack of correspondence between attitudes and behavior. One was social pressures of various kinds: laws, societal norms, and the views of specific people can all prevent a person behaving consistently with his or her attitudes. So can other attitudes, limitations on a person's abilities, and a person's general activity levels. It was also argued that the research on this issue was badly designed, that measures of attitude were often general whereas measures of behavior were specific, reflecting only one of many elements of the attitude. Also, behavior was assessed on only one occasion or even a short time period.

A. Praktanis and Turner suggested a number of factors which could increase the correspondence between attitudes and behavior: (a) When the object of the attitude is both well-defined and salient. Salience concerns the extent to which the object of the attitude is perceived as relevant to the situation at hand. (b) When attitude strength is high—that is, when the attitude comes easily to mind. (c) When knowledge supporting the attitude is plentiful and complex. This increases a person's certainty about what he or she thinks, as well as his or her ability to act effectively toward the object of the attitude. (d) When the attitude supports important aspects of the self.

Icek Ajzen and M. Fishbein developed a model of the relationship between attitudes and behavior designed to overcome these difficulties. This model was called the theory of reasoned action. They argue that attitudes do not predict behaviors per se, but rather behavioral intentions. It is behavioral intentions that directly predict behavior. Behavioral intentions are determined by a person's attitude and his or her subjective norms. Subjective norms refer to what the individual actor believes his or her significant others believe he or she should do. The theory of reasoned action is only applicable to behaviors under volitional control.

As one of the authors of the original model, Ajzen has revised the model to become the theory of planned behavior, to accommodate the fact that behaviors are often not under the volitional control assumed by the theory of reasoned action. The theory of planned behavior retains behavioral intentions as central in the link between attitudes and behavior, and still holds that behavioral intentions are the product of attitudes toward the behavior and subjective norms. However, an important third factor is added—perceived behavioral control. This factor refers to the person's perceptions of the ease or difficulty of performing the behaviors. Perceived behavioral control affects the formation of behavioral intentions, and also directly affects the production of behavior itself, independently of behavioral intentions.

Attitude Change

Changing attitudes is an important part of many people's work in organizations. Attitudes might change by changing behavior more immediately through sanctions and incentives rather than focusing on attitude change per se. Some research indicates that attitude change may often be opposite in direction to a change in behavior. According to the theory of psychological reactance, restricting a person's freedom of choice motivates the person to evaluate the eliminated alternatives more positively. Thus, the application of sanctions against some undesired behaviors may backfire, especially if the freedom to engage in the restricted behavior is highly valued. But offering positive incentives for engaging in desired behaviors may also have opposite consequences on attitudes, especially if those who receive the incentive have already been intrinsically motivated (i.e., held a positive attitude toward the behavior). Even though the frequency or intensity of the behavior may increase while the reward is applied, attitudes toward the behavior may become less positive, a phenomenon known as the overjustification effect.

There are also conditions under which attitudes are assimilated to a prior change in behavior. The investigation of these conditions has been stimulated by the theory of cognitive dissonance developed by L. Festinger. According to the theory, a person's thoughts, attitudes, and beliefs can be consonant, dissonant, or irrelevant to each other. Holding dissonant beliefs creates cognitive dissonance, an unpleasant state of arousal which motivates the person to reduce the dissonance by adding, subtracting, or substituting cognitions. In this sense, behavior change can lead to attitude change via a process of dissonance reduction. There are three conditions that are necessary for attitude-discrepant actions to produce attitude change: (a) the person must perceive that the behavior has negative consequences; (b) the person must take personal responsibility for the behavior; and (c) the person needs to feel physiological arousal and to attribute this arousal to the attitude-discrepant behavior.

Persuasion

Attitudes might also change through persuasion. Persuasion is a method of influence using communicated information and argumentation from a given source that begins with changing beliefs and knowledge, the cognitive component of the attitude system. The suggestion is that the key to understanding why people would attend to, understand, remember, and accept a persuasive message is to understand the characteristics of the person presenting the message, the contents of the message, and the characteristics of the receiver of the message. The communicator variable affects the acceptability of persuasive messages. A high level of expertise, good physical looks, and extensive interpersonal and verbal skills make a communicator more effective.

Other source characteristics include credibility, attractiveness, likeability, and similarity. The credibility of a communicator rests partly on his or her expertness and trustworthiness. Expertness concerns how much the communicator knows about the subject of the communication. Trustworthiness usually depends mainly on whether the communicator has a record of honesty, and on whether he or she appears to be arguing against his or her own interests. Sometimes, however, a low credibility source has as much persuasive effect as a high credibility one. This has been termed the sleeper effect, and is thought to be due to the person remembering the message but forgetting the source.

The amount of attitude change is also directly related to the degree of attractiveness of the change agent. The power of attractiveness may rest on the desire of the message receiver to be like the communicator. There is also evidence that attractiveness is useful when the message is likely to be unpopular, though its power can be undone if the communicator is perceived to be deliberately exploiting his or her attractiveness. Finally, with regard to similarity, because we tend to like people who are similar to us, we are more persuaded by similar than dissimilar sources. However, it is not quite this simple. When the issue concerns a matter of taste or judgment, similar sources are better accepted than dissimilar ones. However, when the issue concerns a matter of fact, dissimilar sources do better.

Is the use of threat effective in changing attitudes? Moderate amounts of fear increase the effectiveness with which people process information, but high amounts of fear tend to immobilize them. The amount of fear depends not only on how scary the message is, but also on how optimistic a person is about his or her ability to deal with the threat described in it.

Finally, R. Petty and J. Cacioppo made a distinction between the central route to persuasion (which involves careful thought and weighing of arguments) and the peripheral route, which relies more on emotional responses but relatively little thought. Peripheral processing of information occurs when the recipient of the persuasive message is unwilling or unable to pay it very much attention. When this is the case, peripheral cues matter more than the strength of arguments, which include communicator attractiveness and expertise, sheer length of the message, and reactions of other recipients of the message.

On the other hand, persuasive messages processed through the central route need to contain strong arguments that stand up to scrutiny. People who enjoy thinking, are able to concentrate, feel involvement in the issues in question, and feel personally responsible for evaluating the message are most likely to process persuasive messages by the central route. It could be argued that attitude change through the central route is longer lasting and more closely associated with behavior than that through the peripheral route.

See Also: Commitment; Compliance; Conformance/Conformity; Employer–Employee Relations; Motivation; Persuasion.

Bibliography. I. Ajzen and T. J. Madden, "Prediction of Goal-Directed Behavior: Attitudes, Intentions, and Perceived Behavioral Control," *Journal of Experimental Social Psychology* (1986); A. H. Eagly and S. Chaiken, *The Psychology of Attitudes* (Harcourt Brace Jovanovich, 1993); D. T. Gilbert, S. T. Fiske and G. Lindsey, eds., *The Handbook of Social Psychology* (McGraw-Hill, 1998); M. A. Hogg and J. Cooper, eds., *The SAGE Handbook of Social Psychology* (Sage, 2003); P. G. Zimbardo and M. R. Leippe, *The Psychology of Attitude Change and Social Influence* (McGraw-Hill, 1991).

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ATX Index (Vienna)

The Austrian Traded Index (ATX) is the most important market index of Austria's Wiener Börse, also known as the Vienna Stock Exchange, itself one of the most important exchanges in eastern Europe. Almost half of the stock trades in Austria are over-the-counter trades, with the remainder handled on the Wiener Börse. Trades on the Wiener Börse are conducted through the Electronic Quote and Order-driven System (EQOS), and the exchange manages the stock exchange of Budapest (sharing structure, information, and stocks). A similar relationship is being arranged with the exchanges of Bucharest (Romania) and Zagreb (Croatia).

The ATX is one of two indices tracking the Wiener Börse; the other is the Wiener Börse Index (WBI), which tracks all domestic shares traded on the exchange. The ATX tracks a mere 20 stocks:

- Andritz AG, a plant engineering group with 120 subsidiaries.
- bwin, an online gaming company formerly known as betandwin.com. Most of bwin's revenue comes from sports betting and online poker; it operates internationally with a variety of licenses from locations as diverse as Gibraltar and the First Nations reservation of Kahnawake in Canada. Like most online gambling services, it has met and largely adapted to a variety of legal challenges.
- Erste Bank, a bank operating throughout central Europe, offering investment and commercial banking services in addition to private lending.
- EVN AG, a holding company for energy and waste management firms.
- Flughafen Wien, the company that developed and operates the Vienna Airport; half of Flughafen's stock is publicly traded.
- Intercell, a biotech company that focuses on the production of vaccines.
- Mayr-Melnhof Karton, a paper and packaging manufacturer with 40 percent of its stock publicly traded.
- Österreichische Post, a postal savings bank owned by the Austrian Mail. A 1996 act of Parliament turned it into a joint-stock company.
- OMV, Austria's largest oil and gas company.
- Palfinger, a manufacturer of cranes and other heavy machinery.
- Raiffeisen International, a cooperative bank with almost 3,000 branches.
- RHI, a large diversified construction company.
- Schoeller-Bleckmann, a supplier of nonmagnetic components for the oilfield industry.
- Strabag, the fifth-largest construction company in Europe.
- Telekom Austria, a telecommunications giant.
- Verbund, Austria's largest power company, dealing mostly in hydropower.
- voestalpine, an international steel company.
- Wiener Städtische, an insurance company operating throughout central Europe.
- Wienerberger, the world's largest brick producer.
- Zumtobel, a lighting company.

See Also: Austria; Dow Jones Index; Stock Exchanges.

Bibliography. "ATX Index," finance.mapsofworld.com (cited March 2009).

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Auditing Standards

Auditing standards are professional guidelines promulgated either by an authorized national or international body. Any standards are based on the universally or generally adopted practices, which should serve as guidelines for auditors undertaking audit. They are usually distilled through years of practice and are of such quality that a professional should in most cases apply them indiscriminately. The aim of auditing standards is to provide guidance to professional auditors in fulfilling their professional duties and responsibilities, primarily in the process of audit of historical financial statements. As a rule, auditing standards give full consideration to professional qualities, like competence and independent reporting requirements and evidence.

The International Standards of Auditing (ISA) are promulgated by the International Federation of Accountants (IFAC) through its Audit and Assurance

Standards Board (AASB). Although the intentional standards are, as a rule, not compulsory, they are considered more or less the best practice which should be upheld. National standards are developed by national bodies, and although in the past have been more associated with professional accounting organizations, in recent times the regulatory activity has been moving from a professional self-regulatory model to the model in which a publicly appointed body (representing a wide variety of stakeholders) will in fact be producing the accounting standards and taking care of their enforcement. This shift toward more government-controlled standard setting is undoubtedly the result of the falling public trust in the accounting and auditing profession following a number of high-profile scandals in the early 2000s, Enron being the most publicly covered.

The promulgation of the Sarbanes-Oxley Act in 2002 has changed the shape of the audit profession, preventing the audit companies to be in other professional relationship with their clients, if they are doing statutory audit of the firm, rotation of accountants, etc. The implementation of audit in public interest has been reemphasized and the auditors are made more aware of their assurance function. The users of financial information are primarily interested in the quality and reliability of information submitted to them by the companies, in order to make the best investment decision.

In the United States, the American Institute of Certified Public Accountants (AICPA) has developed the set of 10 generally accepted auditing standards (GAAS), which in accordance with usual national standard-setting practices focus on: (1) general standards; (2) standards of fieldwork; and (3) reporting standards. The predominant feature of GAAS is the focus on the important personal qualities that an auditor must demonstrate in professional conduct. However, with the changes in regulation, GAAS are now applied only to private companies, while those that are "public" (that is, listed on the stock exchange and whose shares are the object of trading) are required to apply the Public Company Accounting Oversight Board's (PCAOB) standards of auditing.

The general standards require auditors to have adequate technical training to perform the audit, maintain independence in mental attitude in all matters related to the audit, and demonstrate due professional care. Standards of field work define accumulation of evidence and filing all other activities. An auditor must demonstrate adequate planning and supervision, proving that he or she can understand the firm and its environment, and sufficient evidence has to be provided. Standards on reporting require the auditor to prepare a report on the financial statements taken as a whole, including any informative disclosures.

Although IFAC promulgated ISA already in 1991 with the first standard being published, the success in ensuring the adoption worldwide is somewhat less noticed than the drive by the International Accounting Standard Board (IASB) aiming at having the International Financial Reporting Standards (IFRS) endorsed by as many countries in the world as possible (at present over 80 countries have adopted or do not oppose the application of IFRS). In the case of ISA there is more convergence with the U.S. practices than it is the case with IFRS. However, there is a noticeable increase in development and application of national auditing standards, where Anglo-Saxon countries are leading. Transitional and developing economies are more prone to endorse ISA and provide the legal base, through their national legislation, for their full application.

Auditing standards provide a professional and technical framework for actions of professional auditors undertaking auditing and assurance services for their clients. Therefore, technical and professional competence are at the center of attention in auditing standards (standards of audit). As auditors (individuals and audit firms) are to discharge the duties in a professional manner, ensuring at least the minimum level of service, they are to follow the sets of professional rules. Often auditing standards cannot be observed individually, but should be regarded as one of the pillars of professional regulations targeting the accounting and auditing profession. For instance, in the United States the professional accountancy firms (CPA firms) should not only adhere to Statements of Auditing Standards (SAS), but also to fully observe compilation and review standards (Statements on Standards for Accounting and Review Services [SSARS]), other attestation standards, consulting standards, and finally the Code of Professional Conduct. All these regulations are enacted by AICPA, as a professional accountancy body in the United States.

Review and Modification

Audit standards, regardless of which body enacted them, are a living body. They are reviewed almost on a constant, rolling basis, taking into consideration new positive practices, problems in application, acts of rules avoidance, or practices that may be regarded as improper, but are not *stricto lege* against the current rules and regulations. Therefore, they are published on an almost annual basis, and periodically all the standards are reviewed and modified. IFAC's AASB even published the plan of activities on the review and modification of the existing standards, allowing the member organizations, their members, and the general public to influence the processes of modification of accounting standards. In such a manner the assurance function of international professional regulation, especially in accounting and auditing, is particularly strengthened.

It is difficult to say whether there will be further harmonization and/or convergence toward ISA, but following the example of IFRS, it is likely to happen, although probably not in the immediate future. However, this may not be an onerous process, after all, as the synergies between ISA and the U.S. regulation is currently higher than between U.S. Generally Accepted Accounting Principles (GAAPs) and IFRS.

See Also: Accounting Harmonization; International Accounting Standards Board; International Financial Reporting Standards; Nonfinancial Information Reporting.

Bibliography. American Institute of Certified Public Accountants, *Codification of Statements on Auditing Standards; Numbers 1 to 111* (2006); American Institute of Certified Public Accountants, *Codification of Statements on Auditing Standards; Numbers 1 to 114 as of January 1, 2008* (2008); International Federation of Accountants, *2008 Handbook of International Auditing, Assurance, and Ethics Pronouncements* (2008); International Federation of Accountants, *International Standards of Auditing*, redrafted (2006).

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Australia

The only nation to occupy a continent, Australia is a country of approximately 21.5 million people (2008 estimate) and had a gross domestic product in nominal dollars that ranked 14th in the world in 2007. Although less populous than Romania, Australia occupies an area approximately 80 percent the size of the continental United States and is one of the wealthier economies in the world. The country is endowed with substantial natural resources, especially coal and precious metals, which serve as primary exports. Agriculture, though declining in relative importance as in most developing countries, is also an important export sector. The economy is reasonably diversified and post-industrial with services being the leading sector (70.7 percent of total GDP in 2007), followed by industry (25.6 percent) and agriculture (3.7 percent).

Australia shares many similarities, and a few important differences, with Canada, a country that it is often compared to. Both are countries founded by the British and both retain ties to that country through the British Commonwealth. As a result, both have legal and political systems based on English common law and parliamentary government. Both countries have significant mineral, energy, and agricultural export sectors. Both countries have small populations within very large national boundaries that nonetheless concentrate heavily in urban areas outside a largely uninhabitable interior (in Australia, along the coasts away from the hot and dry interior broadly referred to as "the Outback"). Both are federal systems formed out of unions of previously separate British colonies.

The differences, however, are equally telling. In particular, Australia has what is frequently referred to as a "Washminster" political system that rests heavily on the model of the British Parliament but that explicitly borrows elements of the U.S. political system such as a written constitution with clearly delineated powers and an upper house of government called the Senate that has nonproportional representation.

Australia also has a persistent trade deficit and its economic fortunes are particularly, though not exclusively, tied to swings in resource prices. Whereas Canadian economic cycles tend to move much in parallel with those of its neighbor the United States, Australia's booms and busts have tended to diverge quite markedly in timing, rising and falling with resource prices. Because of this close link, the value of the Australian dollar in foreign exchange markets tends to move in a wide range and is very volatile. It is one of the 10 most traded currencies in the world mainly

Environmental issues have recently come to the forefront in Australia, which has one of the highest per capita levels of greenhouse gas emissions in the world. At the same time, its agricultural sector has been burdened by a decade-long drought.

because of its being a perceived proxy for commodities prices and also because of its role in the foreign exchange "carry trade" in which speculators move into and out of a currency to exploit differentials in domestic interest rates across different countries.

Australia is continually defining its role in the greater Asian region in which it is located. Originally setting itself apart from Asia and closely aligning itself with Great Britain and, after World War II, the United States, the country has increasingly drawn closer to its Asian neighbors, though not always smoothly. Economic links with Asian countries have vastly increased (China is now Australia's largest trading partner) and immigration into the country has become more open, in contrast to a long-standing and infamous "White Australia" immigration policy that was ultimately repealed in the 1960s. Although still predominantly European Caucasian, other ethnic groups have grown strongly in relative and absolute number and the population is increasingly diverse. The country also established in 1989 the Asia-Pacific Economic Cooperation (APEC), a forum for 21 Pacific Rim countries to discuss the regional economy.

Australia is a generally free-market economy with a mostly two-party political system, with the major parties being loosely left-of-center and right-of-center, respectively. However on issues of economic sector reform, especially in the area of privatization and financial deregulation, there is a broad bipartisan consensus at both federal and state levels. There has also been liberalization in the area of labor relations although this is less bipartisan and was interrupted and in the process of a partial reverse with the election of the Australian Labor Party (ALP) to the federal government in 2007 after 11 years out of power.

The natural environment looms large in Australian society and economy. The country is quite dry and has been in a sustained and serious drought for at least a decade, with many thinking the change to be a permanent trend due to climate change. Such a permanent shift would pose serious challenges to both urban drinking water and to the agricultural sector, both of which are under stress as a result. Also, the resources sector is a major contributor to greenhouse gas and other emissions, with Australia having one of the highest per capita levels of emissions in the world. Thus debate about the causes and effects of climate change and policies needed to meet the issue are present throughout the world but have a special resonance (though not necessarily always a clear consensus) in Australia.

Culturally, Australia is ranked according to the cross-cultural scale developed by Geert Hofstede as highly individualistic, very close to the United States, but with a more egalitarian social structure than that country, indicating a communitarian streak.

See Also: Asia; Asia-Pacific Economic Cooperation; Company Profiles: Australia and Pacific; Hofstede's Five Dimensions of Culture; Privatization.

Bibliography. Australian Bureau of Statistics, www.abs.gov.au (cited March 2009); CIA, "Australia," *World Factbook*, www.cia.gov (cited March 2009); International Monetary Fund, *World Economic Outlook Database, April 2008* (2007); Organisation for Economic Development and Co-operation, *Economic Survey of Australia 2006* (2006); J. Singh et al., "A Comparative Study of the Contents of Corporate Codes of Ethics in Australia, Canada and Sweden," *Journal of World Business* (2005); E. Thompson, "The 'Washminster' Mutation," *Australian Journal of Political Science* (1980).

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Austria

This European country has a population of 8.3 million (2007), and a land area of 83,872 square kilometers. Although now a relatively small country, historically it was a dominant power in central Europe with Austria and then the Austro-Hungarian Empire being one of the major economic, political, and military forces in Europe from the Napoleonic Wars until the end of World War I in 1918.

Wine was produced in the region since early medieval times, and probably earlier. There has also been a printing industry in the country since 1482, and Austrians have been important in the central European book trade. Vienna and Salzburg were centers of music, and both cities were seen as cultural capitals of Europe. Musical instruments made in Austria were sold throughout Europe. There was also the state tobacco monopoly established in 1784 by which war victims and the disabled were able to earn income from selling tobacco products.

During the 19th century, because of its position in central Europe, the Austrian railways became important for trade just as their waterways had previously seen much international commerce. The Donau Dampfschiffahrts-Gesellschaft (Danube Steam Navigation Company), founded in 1829, flourished with an Imperial Charter, giving them a monopoly on Danube trade for 15 years, and they continued in a monopoly position up to 1880 during which time they had to carry government mail free of charge. In 1847 they were transporting some 850,000 passengers and 200,000 tons a year on their 41 vessels. The company continues to operate to this day, as does Austrian Lloyd Trieste, which used to operate from the Austro-Hungarian port of Trieste. In 1873 Vienna hosted the World's Fair and 10 years later the Austro-Hungarian Postal Savings Bank was established. It introduced the world's first postal check system.

The Austro-Hungarian Empire was broken up at the end of World War I, and most of the German-speaking region, which also included Vienna, the former imperial capital, became the Republic of Austria. The major industrial center of the Austro-Hungarian Empire had been in what became Czechoslovakia, and the Republic of Austria was initially in a perilous economic state. Indeed, it did not have enough coal for its industry and went through shortages of food. This led to the League of Nations establishing a process of helping the country in 1922 as economic reconstruction took place. There was significant hardship and unemployment before the Great Depression, and Austria was badly hit in the early 1930s, leading to Austria being annexed by Germany in March 1938. This led to economic recovery and the establishment of many new industrial complexes, but the economic infrastructure was badly damaged in World War II.

After World War II, Austria was initially divided into four zones run by the Allied forces, and these differences were to lead to major problems for the economy for many years. Its economy had been badly damaged by the war, and the black market flourished. Widespread nationalization took place in 1946 and 1947. This included iron and steel plants, smelting works, factories, and also the three largest credit institutions and the main electrical energy installations. Compensation to the previous owners was paid in 1954 and in 1959, and the economy gradually improved with foreign investment and became a stable economy.

For much of the postwar period, Austria enjoyed a Socialist economic outlook, although mention should be made of the influential Austrian-born economist Friedrich von Hayek (1899–1992). However, the country was badly affected by the oil crisis in 1973–74. Since 1965, the Organization of Petroleum Exporting Countries (OPEC) has had its headquarters in Vienna, and it was there that OPEC oil ministers were conferring in 1975 when the meeting was attacked by Carlos "The Jackal." Some of the major Austrian companies involved in the export trade are Agrana (fruit juices, sugar), AVL (automotive engineering), Plansee (metallurgy), Red Bull (beer), Silhouette (glasses), and voestalpine (steel). There has also been a burgeoning electronics industry.

Many migrant workers came to Austria in the 1960s, and by 1973 they constituted some 227,000 people, about 8.7 percent of the workforce. Many of them were from Eastern Europe, but some were from Turkey and, in recent years, migrants from China have also arrived in Austria. During the 1970s and 1980s, Austria had a good reputation for taking refugees, although during the 1990s there was some resentment toward them. Tourism has been very important to the Austrian economy, with many coming either for music-related events or for skiing. The sale of winter sports equipment is now significant in world terms.

See Also: ATX Index (Vienna); Black Market; Cross-Border Migrations.

Bibliography. Sven W. Arndt, *The Political Economy of Austria* (American Enterprise Institute, 1982); Steven Beller, *A Concise History of Austria* (Cambridge University Press, 2006); International Business Publications, *Austria Banking & Financial Market Handbook* (International Business Publications, 2007); Eugen K. Keefe, *Area Handbook for Austria* (Foreign Area Studies, American University, 1976); Anton Pelinka, *Austria: Out of the Shadow of the Past* (Westview Press, 1998); *The Europa Year Book* (Europa Publications, 2008); Rolf Steininger, Günter Bischof, and Michael Gehler, eds., *Austria in the Twentieth Century* (Transaction Publishing, 2008).

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Aviva

Aviva is a relatively new transnational corporation that started its international expansion during the last decade through a series of mergers, acquisitions, and strategic alliances such as bancassurance joint ventures. Headquartered in the United Kingdom, Aviva is the world's fifth-largest insurance group, has 57,000 employees, and serves around 45 million customers. With a corporate lineage that dates back to 1696, Aviva's main activities are long-term savings, fund management, and health and general insurance. Known as Aviva since July 2002, the corporation brought together more than 40 different brands and operates in 27 countries, including the United Kingdom (UK), France, Canada, the United States, China, India, Russia, Ireland, the Netherlands, Poland, and Romania.

Aviva is currently creating a new worldwide financial services brand that is expected to be completed by April 2010. The corporation's vision "One Aviva, twice the value" suggests the top management's strategic objective to gain recognition as a world-class financial services provider and maximize Aviva's full potential as a transnational corporation. To fulfill this objective, Aviva enters new markets through acquisition and then brings together relatively autonomous business units. Thus, Aviva targets and gets closer to more customers in these new markets using the structures of the acquired units and deploying resources more efficiently. The corporation offers innovative products, such as "Pay as You Drive" insurance that can be sold across different regions, with a clear growth strategy. This strategy is likely to make Aviva successful in an increasingly global and competitive marketplace.

Much like other transnational corporations, such as General Motors, Aviva has different growth targets and strategies for different geographic regions, and derives a significant part of its profits from new markets. Case in point, Aviva's chief executive Andrew Moss aims for minimum 10 percent annual average growth in new business sales and profits to 2010 in Europe, minimum 20 percent annual average growth in new business sales to 2010 in Asia and the Pacific, and 100 percent growth in new business sales in Aviva USA within three years of the acquisition. Meanwhile, the projected growth in the UK is less specific: "grow at least as fast as the market, subject to at least maintaining margins." Likewise, regional strategies for Europe and the Asia Pacific region emphasize the benefits of scale and capture opportunities arising from increasing wealth, whereas the strategies for the UK address legacy, transformation of business model, synergies, and capital generation. According to the three-month interim management statement issued on April 25, 2008, these regionally diversified strategies seem to be successful, in that long-term savings sales (up 2 percent worldwide), as well as life and pension sales (up 5 percent), have been resilient even in the current tough economic conditions. Among other factors, this management statement attributes the sales increases to Aviva's excellent performances in India and China, resilient performance in Europe, and attractive product design in North America, highlighting positive effects of the geographical diversity and balanced distribution.

In addition to the advantages associated with its global diversity and membership in the global business community, Aviva has drawn on collective resources and services, and increased the use of shared services to realize the benefits of scale and purchasing power. For instance, Aviva has increased efficiency of its marketing function by reducing advertising and sponsorship expenses. Corporate social responsibility efforts in areas such as employee satisfaction, sustainability, community involvement, and environmental protection have also contributed to the positive outlook of the corporation.

A pitfall of its fast international expansion is that Aviva is facing risks associated with direct foreign investment, global consistency, and the need for cultural and managerial integration. As a result of buying existing businesses in many different foreign countries and the tendency to sell similar products and run operations in the same way across these countries, Aviva may find some of these businesses to be less efficient. Aviva must maintain a balance between global consistency and local adaptation.

See Also: Aegon; Allianz SE; American International Group; Assicurazioni Generali; AXA; Company Profiles: Western Europe; Fortis; ING Group.

Bibliography. Aviva, www.aviva.com (cited March 2009); Andrew Moss, *One Aviva, Twice the Value*, www.aviva.com (cited March 2009).

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AXA

AXA is a France-based financial holding company that specializes in financial protection, insurance, and asset management products and services. It has grown to become one of the world's leading insurance companies, occupying a leading position in France (market share: 10 percent at the end of 2007), the United States (8 percent), and the United Kingdom (7 percent).

The AXA group's origins can be traced back to the 19th century. In 1817 the fire insurance company Compagnie d'Assurances Mutuelles contre l'Incendie was created in Rouen, France. In 1881 France's first mutual life insurer, Mutuelle Vie, was founded. In 1946 these two companies were merged by Sahut d'Izarn, then general manager of Compagnie d'Assurances, to create Groupe Ancienne Mutuelle. A number of further acquisitions followed, including Anciennes Mutuelles Accidents and Ancienne Mutuelle de Calvados in 1946, Ancienne Mutuelle d'Orleans in 1950, and Mutualité Générale in 1953. Under d'Izarn's disciplined management style, Groupe Ancienne Mutuelle prospered during the 1960s and 1970s and was renamed AXA in 1985.

By 2007 AXA was generating revenues in excess of €90 billion per year and employed over 150,000 salaried employees and distribution agents in a total of 47 countries across Europe, North and South America, Africa, the Middle East, and the Asia Pacific region. The company had over 52 million clients around the world.

In 2008 the company had four operating business segments. The life & savings division accounts for roughly two-thirds of company revenues. It offers a range of life and savings products, including individual and group savings retirement products, life, and health products. Products offered by the property & casualty segment include mainly motor, household, property, and general liability insurance for both personal and commercial customers. The segment generates around a quarter of the company's total revenues. The company's remaining revenues are split between its asset management and banking activities (the latter conducted primarily in France and Belgium) and its international insurance division, which offers large national and international corporations insurance products to cover the large risks associated with property, transportation, and financial projects.

The recent growth and success of AXA has been attributed to Claude Bébéar, one of the most highly regarded business leaders in France. Bébéar joined Groupe Ancienne Mutuelle in 1958. Early in his career, he was singled out by d'Izarn as one of his potential successors. He worked in various company divisions, undertook several international assignments, and served as AXA's chief executive officer from 1985–2000. He remained chairman of the supervisory board until 2008.

Bébéar brought a North American management style to the once-genteel practice of business in France. Bébéar pushed AXA to focus not only on organic growth but to expand its operations through a combination of acquisitions and direct investments, which were funded primarily through proceeds earned from the sale of non-core businesses and assets and new share issues.

Under Bébéar's leadership, AXA listed on the New York Stock Exchange in 1996 and embarked on a strategy of acquiring and building up businesses in new markets and re-branding them under the AXA name. Notable acquisitions included Equitable Life (1992), National Mutual Holdings (1995), Compagnie UAP (1997), Guardian Royal Exchange (1999), Nippon Dantaï Life Insurance Company (2000), Sterling and Ipac Securities (2002), the Winterthur Group (2006), and MLC Hong Kong (2006).

The France-based AXA is one of the world's leading insurance companies and has won an 8 percent share of the U.S. market.

Bébéar retired from the Supervisory Board in 2008, but continues to push for economic reforms in France through the Institut Montaigne, an independent think tank that he founded in 2000 to contribute to debates surrounding the major economic and political issues facing contemporary France.

In the post-Bébéar period, concerns have been raised that, despite its international expansion strategy, the group generates too high a share of its total revenues in mature markets. By concentrating its business activities in France, the United States, the United Kingdom, Germany, and Japan, AXA is potentially missing out on opportunities to expand in the emerging financial markets of, for example, China and Brazil, which financial analysts consider to have stronger growth potential. Bébéar's successor, Henri de Castries, now faces the challenge of spreading AXA's revenues more effectively over different geographical markets and providing the group with the stability to shield itself from demand fluctuations in established markets.

See Also: Aegon; Allianz SE; American International Group; Assicurazioni Generali; Aviva; Company Profiles:

Western Europe; Fortis; France; ING Group; Multinational Corporation.

Bibliography. Claube Bébéar, *Le courage de reformer* [The courage to reform] (Editions Odile Jacob, 2002); Datamonitor, *AXA* (Datamonitor, 2007); Bertrand Venard, "The French Insurance Market: Background and Trends," in *Handbook of International Insurance*, J. David Cummins and Bertrand Venard, eds. (Springer, 2007).

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Back Translation

The verbal translation of a document or a questionnaire has two principal methods—forward translation and backward translation. While forward translation is a method to convert a document or a questionnaire from the source language to the target (foreign) language, the back translation method is used for translating the same document or the questionnaire back from the target language to the original (source) language.

The back translation method has been traditionally used in educational testing and psychological measurement, and has proven to be an important tool for scientific study, legal or ethical liability reviews, and in marketing research. Moreover, the development of new opportunities in global marketing research in the 21st century has increased the importance of the back translation method as an instrument for assuring the quality of translation between source and target languages in the emerging markets beyond the United States, Europe, and Japan.

This method is used to identify language conversion errors by translating back from the target language to the source language. In other words, the back translation process enables the producer or the owner of the document or questionnaire to see how the forward translation will be read by the target audience. The trouble spots are then identified by comparing the back translation to the original document or questionnaire. A few examples of such trouble spots are the parts in a document where the meanings may have been altered or parts that are not fully comprehensive. These defects are then corrected according to the objective of the project and to the satisfaction of the producer or the owner. There are numerous procedures, judgmental or statistical, to evaluate the equivalence and the quality of translation.

In a verbal translation process, a single translator or a group of translators prepares one or several versions of forward translations of the document or the questionnaire from the source language (*S*) to the target language. These bilingual translators are native speakers of the target language. These translations in the target language are then translated back to the source language (*S'*) by another translator or group of bilingual translators who are native speakers of the source language. The final translated version (*S'*) and the original document (*S*) are then compared to detect errors and to evaluate the quality of the translation.

The quality and the accuracy of the back translation depend on the competency of the translator(s). A committee approach using a group of translators, instead of a single translator, is preferred to reduce translation errors in back translation. This is organized either by a parallel or a split translation. In a parallel translation several translators make independent translations of the same document/questionnaire. A final version is then decided after reviewing those translations in a meeting. For example, a project coordinator evaluates two questionnaires, back translated from Hindi to English, and finds some differences in some of the questions. In one of the questions, the first translator used the meaning of the word *Aankho* as "eyes," whereas the second translator used "vision" instead. The project coordinator contacted both translators to resolve the discrepancies before running a pilot test of the final questionnaire. This approach is time consuming and costly, yet more accurate.

The split approach, on the other hand, saves time and requires less effort. In this case, the document/questionnaire is divided among two or more translators in an alternate fashion. Each translator then meets with a reviewer to agree on a joint version. To ensure consistency, the committee, including the translators, reviewers, and an adjudicator, reviews the whole document/questionnaire and decides on the final translation.

The bilingual translators are susceptible to developing a particular language structure and usage, and therefore may translate commonly used idioms incorrectly. There is also the possibility of using words that are difficult for respondents to understand. Often the intended meaning may not be captured properly by using standard rules for translating the nonequivalent terms, for example, *amigo* as *friend*. However, with a thorough knowledge in both languages, the bilingual translators are capable of making sense of a poor translation and thus provide a back translation with acceptable quality.

There is always a possibility of dominance of the source language since back translation starts with the assumptions of the structures and the terms of the source language. A "decentering" approach is used to reduce the dominance of the source language by modifying both source and target document or questionnaire through successive iterations and translations, until both terminologies are equally well understood and equivalent in each language context. This process results in the best translations; however, it is time consuming and tedious. Many international projects have difficulty in decentering due to the lack of resources. This process becomes almost impossible in the case of translations involving three or more languages.

Verbal translation, including back translation, is an art rather than a science. A word in one language literally may have no equivalent in another language, or could have a completely different "meaning" or effect in the translated language. A skilled translator is capable of conveying the true meaning, instead of verbatim interpretation. An idiomatic phrase can be forward translated and back translated using standard rules without conveying proper meaning. For example, the phrase *Das Leben in vollen Zügen geniessen* in German may be forward translated as "enjoy life in full train" in English and literally back translated. However, the translation methods have failed to convey the proper meaning "live life to the fullest." Another example of how the meaning of a phrase can be changed during the verbal translation process is as follows: In preparation of a questionnaire for Brazil, a part of the questionnaire was forward translated from French *un repas d'affaires* (a business meal) to Portuguese as *jantar de negocios*. When back translated, it became a "*diner d'affaires*" (business dinner).

Back translation is likely to fail to identify formal textual problems, such as those affecting target language syntax, morphology, spelling, orthography, punctuation, parallelism, or consistency. It is also a time-consuming and expensive method. However, if used properly, back translation is an efficient and valuable tool to confirm the integrity of any project involving two or more languages by revealing the accuracy of the translation.

See Also: Consumer Behavior; Consumer Surveys; Cross-Cultural Research; Cultural Norms and Scripts; Ethnocentrism; Focus Groups; Home Country; Host Country; Market Research; Multicultural Work Groups and Teams.

Bibliography. Richard W. Brislin, "Back-Translation for Cross-Cultural Research," *Journal of Cross-Cultural Psychology* (v.1/3, 1970); Donald T. Campbell and Oswald Werner, "Translating, Working through Interpreters and the Problem of Decentering," *A Handbook of Methods in Cultural Anthropology* (Natural History Press, 1970); C. Samuel Craig and Susan P. Douglas, *International Marketing Research* (John Wiley & Sons, 2005); C. Samuel Craig and Susan P. Douglas, "Collaborative and Iterative Translation: An Alternative Approach to Back Translation," *Jour-*

nal of International Marketing (v.15/1, March 2007); Ronald K. Hambleton, "Translating Achievement Tests for Use on Cross-national Studies," *European Journal of Psychological Assessment* (v.9, 1993); J. Harkness, "Questionnaire Translation," in J. Harkness, F. J. R. Van de Vijver and P. Mohler, *Cross-cultural Survey Methods* (John Wiley & Sons, 2003); Charles S. Mayer, "Multinational Marketing Research: The Magnifying Glass of Methodological Problems," *European Research* (1978).

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Bahrain

Bahrain is a small Arab state (665 sq. km; estimated population 508,573 in 2007) situated in the Persian Gulf. It is an archipelago consisting of two main islands, Bahrain and Al Muharraq, and more than 30 smaller islands. The country's economy depends on processing crude oil, manufacturing, financial and commercial services, and tourism. Manama, its main port, commercial center, and capital, is located on the northeastern end of Bahrain Island.

About 90 percent of Bahrain's population live in urban areas, mainly in Manama and Al Muharraq. Islam is the religion of almost all Bahrainis and the majority of nonnatives. About 70 percent of native Bahrainis belong to the Shia sect of Islam, while the remaining population, including the ruling al-Khalifa clan, belong to the Sunni sect. Christians and other religious minorities represent about 19 percent of the total population. Languages spoken include Arabic (the official language), English, Farsi, and Urdu.

In 2002 the Emir of Bahrain, Sheikh Hamad bin Isa al-Khalifa, declared himself king and approved plans for a constitutional monarchy. The executive branch consists of the king and an appointed prime minister and cabinet. The National Assembly consists of an appointed 40-member Consultative Council and an elected 40-member Chamber of Deputies. In the 2006 elections, the Shia-dominated opposition secured 18 seats while Sunnis secured 22 seats.

Bahrain's gross domestic product (GDP) is $16.9 billion (official exchange rate) or $34,700 per capita (estimated 2007). Services account for 56 percent of the GDP, industry for 43 percent, and agriculture for less than 0.5 percent. Since the discovery of petroleum in the 1930s, oil production and refining has been a mainstay of the country's economy. However, depletion of oil reserves prompted governmental actions to develop other industries. In the 1970s the government started establishing aluminum smelting as an important industry. In a further effort at diversification, the government has also promoted industries such as ship repair and tourism. Bahrain is a worldwide center of Islamic banking. The country is also home to offshore banking units of large multinational banking companies because of its generous financial regulations and tax rules.

The government controls the oil and gas industry, heavy manufacturing, transportation, and certain other sectors. However, light manufacturing, banking, and commerce are managed by private firms, including multinational corporations. In 2006 Bahrain implemented a free trade agreement with the United States, the first of its kind in the Gulf region. Bahrain was described as the freest economy in the Middle East according to the 2006 Index of Economic Freedom published by the Heritage Foundation/Wall Street Journal.

Because the country's refining capacity is much larger than the domestic production of petroleum, Bahrain imports about 225,000 bbl/d of crude oil from Saudi Arabia for refining and further processing. Other imports include machinery, transportation equipment, food, and chemicals. Exports include petroleum and its products, aluminum, and manufactured goods. Petroleum refining and production account for more than 60 percent of Bahrain's exports, representing about 11 percent of GDP (exclusive of allied industries). Bahrain's major trading partners are Saudi Arabia, India, Japan, the United States, and the United Kingdom.

Of the country's labor force of 363,000 (estimated 2007), 79 percent work in industry, 20 percent in services, and 1 percent in agriculture. The unemployment rate is quite high (about 15 percent), at times contributing to discontent among Shias who are historically less advantaged and more prone to unemployment than Sunnis.

See Also: Free Trade Zone; Globalization; Middle East; Saudi Arabia.

Bibliography. M. Almossawi, "Starting and Sustaining Small Enterprises in the Kingdom of Bahrain: Investors' Needs, Available Incentives, and Obstacles," *World Review of Entrepreneurship, Management and Sustainable Development* (2005); A. Alyousha, "Investigating Bahrain Business Cycles," *Applied Economics* (1997); F. Lawson, *Bahrain: The Modernization of Autocracy* (Westview Press, 1989).

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Balance of Goods and Services

The balance of goods and services, also known as the trade balance, is part of the Current Account (CA) balance in a nation's Balance of Payments (BoP) statistics. This net measure of a country's position with respect to trade in goods and services is a widely cited statistic in the context of the current U.S. trade deficit and implications for its sustainability in future years.

A country's balance of trade in goods records the difference between exports and imports of merchandise and is therefore also referred to as the merchandise balance. As a category, merchandise (or goods) includes physical items such as cars, steel, food, furniture, clothes, appliances, etc. Merchandise exports record the transfer of ownership, between a country's residents and nonresidents, of all tangible goods (including nonmonetary gold). However, some goods are excluded in this category, such as merchandise purchased by a country's residents abroad and purchases of goods by diplomatic and military personnel. The latter are separately classified under travel transactions in the balance of services.

The standard practice in determining the value of merchandise exports is to include the value of the goods themselves, and the value of outside packaging, and related distributive services used up to and including loading the goods onto the carrier at the customs frontier of the exporting country. This is commonly known as the free on board (f.o.b.) value. The value of all exported goods appears as a credit in a country's CA since payments from foreigners are received in exchange for the exported merchandise. Similarly, imports of merchandise appear as a debit in the CA since they reflect exchanges of movable goods between residents and nonresidents (also valued f.o.b. at the customs frontier of the country that is exporting them). Thus, the merchandise balance is a net measure of merchandise trade which can be either positive (a surplus of exports receipts over import expenditures) or negative (a deficit showing import expenditures exceeding receipts from exports).

Similarly, the difference between exports and imports of services is known as the balance on services. Trade in services includes exports and imports of transportation services (such as shipment and passenger services), insurance services, travel services (such as hotel and restaurant services), legal services, consulting, etc. Other transactions in the services category include items not separately classified as merchandise, or non-factor services, or transfers. Examples include transactions with nonresidents by government agencies and their personnel abroad and transactions by private residents with foreign governments and government personnel stationed in the reporting country. The balance on trade in services is therefore also a net measure which can be either positive (a surplus of services exports over imports) or negative (a deficit indicating that services imports outweigh exports).

Taken together, the balance on merchandise (goods) and services trade comprise the balance of trade which is itself a net trade measure of a country's trade position. A trade deficit implies that a nation is importing more goods and services than it is exporting. A surplus would indicate that exports of goods and services outweigh imports.

Historically, the United States has experienced both trade surpluses and trade deficits. A long (and almost unbroken) string of trade surpluses prior to, and following, World War II coincided with strong support by the United States for the elimination of barriers to trade and investment. Starting in the 1970s, however, trade deficits not only became the norm but grew quite large in the 1980s and 1990s. Since trade deficits are by definition an excess of imports over exports, such imbalances are often seen as an international trade problem that may be alleviated through trade policy initiatives. For example, opponents to freer trade may point to a burgeoning trade deficit as evidence of declining competitiveness and consequently argue in favor of trade restrictions and protectionist measures. At the same time, economic theory shows that imbalances between savings and investment (both domestic, and in relation to the rest of the world) are the more likely long-term cause of trade deficits and trade policy initiatives are unlikely to eliminate the latter.

Statistics from the Bureau of Economic Analysis show record trade deficits in the United States since 2000. The deficit on goods and services stood at an unprecedented $758.5 billion in 2006 and decreased modestly to $708.5 billion in 2007. By comparison, the trade deficit in 1995 was $96.3 billion. This escalation of the U.S. trade deficit over the past decade has intensified the public debate surrounding sustainability of trade imbalances. Arguably, trade deficits of the late 1990s were relatively benign, since they were viewed as a means to finance higher U.S. investment rates. On the other hand, recent trade deficits are generating new concerns. Unlike their 1990s counterparts, they are seen as representative of high consumption and large government deficits (corresponding to increases in U.S. government budget deficits).

The relationship between government budget deficit and trade deficits (also known as the twin deficits), can be established through a National Income accounting identity, which states that the difference between the two is equal to the difference between private saving and investment. From a policy perspective, therefore, a sizable reduction in the U.S. budget deficit is a credible policy recommendation in view of current trends. In addition, policy initiatives need to promote expansion of market demand in major economies outside the United States, and a gradual and substantial realignment of the U.S. dollar with the currencies of other major trading partners. Global adjustment to U.S. trade imbalances could, alternatively, occur through financial markets. However, the latter may have grave implications for the value of the dollar, and consequently, the health of the world economy and the global trading system.

See Also: Capital Account Balance; Current Account; Invisible Trade Balance; Trade Balance.

Bibliography. P. R. Krugman and M. Obstfeld, *International Economics: Theory and Policy* (Pearson/Addison-Wesley, 2006); M. Obstfeld and K. S. Rogoff, *Foundations of International Macroeconomics* (MIT Press, 1996); U.S. Bureau of Economic Analysis, www.bea.gov (cited March 2009).

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Banana Wars

The banana wars were an eight-year trade dispute between the European Union (EU) and the United States that started in 1993. It escalated to include sanctions on the import of a range of other products. By 2008 it still had not been fully resolved.

The European Economic Community (EEC) introduced the European Union Common Market Organisation for bananas in 1992, and the European banana import regime was put in place in 1993. At this time barriers against bananas imported from Latin America were established. The EEC did this to give former banana-producing colonies from Africa, the Caribbean, and the Pacific (ACP) preferential access to European markets by imposing a quota and 25 percent tariff on bananas from Latin and Central America. This was clearly to the detriment of those producers. The objective of the regime was to help smaller farmers from the former colonies compete with large plantations run by U.S. multinationals in Central and Latin America.

In February 1996 the U.S. government along with Ecuador, Guatemala, Honduras, and Mexico filed

The WTO approved U.S. sanctions of up to $191.4 million a year to try to reopen access to outlets like this German fruit market.

a legal complaint to the World Trade Organization (WTO) against the European Union's banana import regime, claiming that it unfairly restricted the entry of their bananas to the EU and favored the former colonies. The action of the U.S. government was partly in response to pressure from one of the big three U.S. banana companies, Cincinnati-based Chiquita Brands International, and its chairman Carl Lindner. (During the period of the banana wars, Chiquita reported that its share of the European market had fallen from 40 percent to 20 percent with estimated revenue losses of $1.5 billion. It said it had been pushed to the brink of bankruptcy.)

In September 1997 the WTO ruled that the EU's banana import regime was inconsistent with WTO rules. Following further consideration in January 1999, the EU introduced a new banana import regime. However, in April 1999 the WTO again ruled that this new regime was still incompatible with the EU's WTO obligations. It was at this stage that the WTO granted the United States authorization to impose sanctions up to US$191.4 million per year on EU products entering the U.S. market. This case is one of only seven out of 315 that have reached the stage where the WTO has authorized retaliatory penalties.

The banana wars then spread beyond the banana market. The U.S. government put in place sanctions on a number of European goods, including cashmere, cheese, French fashions, and Danish ham. In return, the Europeans countered by banning the import of hormone-treated beef from the United States. The situation was intensified still further when in May 2000, the WTO granted Ecuador authorization to impose sanctions up to US$201.6 million per year on EU exports to Ecuador. The so-called carousel legislation, introduced into a 2000 trade bill, also required the United States to implement rotating sanctions against Europe until it lifted its restrictions on imports of bananas and hormone-treated beef.

The carousel sanctions were never enacted. The dispute had dragged on for eight years when in April 2001 the EU, United States, and Ecuador accepted a solution whereby Ecuador and the United States agreed to suspend their sanctions and in return the EU agreed to change its banana import regime from the existing tariff-rate quota system to a tariff-only system by January 1, 2006.

The EU Trade Commissioner, Pascal Lamy, announced that the policy would be changed and assured equal access to the European banana market. The new agreement came into effect in July 2001. Under the agreement Chiquita was allowed immediate access to EU markets. It has been suggested by Dole Food Co., a major competitor, that the preferential treatment accorded to Chiquita may have been a result of the substantial campaign contributions given by the company to Democrats and Republicans during the 2000 election cycle.

Subsequently, at the November 2001 Ministerial Conference in Doha, two Ministerial Decisions were adopted that formalized the agreement. These were for a transitional EU import regime for bananas and for the introduction no later than January 1, 2006, of a tariff-only regime that would result in at least maintaining total market access for MFN (most-favored-nation) banana suppliers. The Ministerial Decision also spelled out the procedures and timetable for possible arbitration in the event the EU was unable to reach an agreement with the banana-supplying countries on the new tariff-only system.

In January 2005 the EU proposed a new tariff of €230 per ton. This was not agreed to by the Latin American countries. A WTO arbitration panel ruled that the tariff would not maintain access for these countries. The tariff was revised to €176 per ton and a 775,000-ton tariff quota on imports of bananas of ACP origin, but the parties could still not agree, so a second arbitration was requested. The arbitrator concluded that the EU had failed to rectify the matter. On January 1, 2006, the EU unilaterally introduced its own regime.

On March 21, 2007, Colombia requested further consultations, stating that the application of the banana import regime still entailed discrimination between ACP bananas and MFN bananas. Subsequently, the Disputes Settlement Body (DSB) has ruled that the EU has maintained measures inconsistent with different provisions of the GATT 1994. The panel recommended that the DSB request the European Communities to bring the inconsistent measures into conformity with its obligations under the GATT 1994.

See Also: Fair Trade; Most Favored Nation Status; Nontariff Barrier; Trade Sanctions; Trade War; World Trade Organization.

Bibliography. P. Borrell, "No One Can Afford a New Banana Drama," *Financial Times* (April 20, 2004); A. Bounos, "Banana Wars," *Latin Trade* (v.9/6, 2001); G. Meyers, *Banana Wars: The Price of Free Trade. A Caribbean Perspective* (Zed Books, 2004); WTO, "Dispute Settlement: Dispute DS361 European Communities—Regime for the Importation of Bananas, 2008," www.wto.org (cited March 2009); WTO, "Hong Kong WTO Ministerial 2005: Briefing Notes. Bananas: Discussions Continue on a Long-standing Issue, 2005," www.wto.org (cited March 2009); WTO, "WT/DS27/RW/USA, 2008," www.wto.org (cited March 2009).

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Banco Bilbao Vizcaya Argentaria

An international financial institution, headquartered in Spain and with operations in over 30 countries in Europe, Asia, North and Latin America, Banco Bilbao Vizcaya Argentaria (BBVA) offers personal banking, loans and mortgages, insurance, investment banking, asset management, and wholesale banking.

The bank was born from the merger of Banco Bilbao and Banco Vizcaya in 1988, which formed BBV, and the later merger of BBV with Argentaria in 1999. Banco Bilbao had started its international operations in the early 1900s, opening offices in Paris and London. During the 1960s and 1970s, the bank started its expansion in Latin America with the acquisition of banks in Panama and Puerto Rico. However, it was only after the merger with Banco Vizcaya that the institution began a large-scale expansion in Latin America through gradual acquisitions and partnerships with local banks. Through the 1990s, BBV established banking subsidiaries and pension funds in Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela.

BBV strategy coincided with the growth of other Spanish companies in Latin America, such as Banco Santander, Endesa, and Telefónica, a phenomenon dubbed by some journalists as La Reconquista. This expansion is a result of market deregulation both in Europe and Latin America, cultural factors stemming from the two continents' former colonial relationships, and acquisition opportunities created by differences between the performances of banks in the two regions.

In 1999, when BBV merged with Argentaria, the companies unified the Spanish retail banks BBV, Argentaria, Banca Catalana, Banco del Comercio, and Banco de Alicante under the BBVA brand. However, some of the former BBV branches outside Spain have maintained their original names. Because of its strong international presence, BBVA has structured its operations around business areas that mainly reflect the bank's geographic reach: business in Spain and Portugal, Mexico, South America, and the United States. Other business areas—global business, finance, risk, and innovation and development—support all markets and global customers' activities. In addition to the business areas, BBVA comprises two other divisions: support and the chairman's office.

To hedge against the volatility of the Latin American market, BBVA's strategy has turned to the United States, Europe, and Asia. In the United States, the bank focuses on immigrant—particularly Latino—customers, and it is currently structured around five businesses: BBVA Bancomer USA specializes in first-generation immigrants in California; Bancomer Transfer Services (BTS) offers money transfers to Mexico and other Latin American countries, China, India, and the Philippines; and BBVA Finanzia USA provides consumer financial services and credit cards. BBVA's other businesses in the United States include banking business in Texas—a state with a large Hispanic population—and Puerto Rico. In Asia, BBVA has partnered with Hong Kong–based CITIC to take a 5 percent stake in CITIC-China. BBVA also has branches in Japan and Singapore, and representatives in India, South Korea, and Taiwan.

The expansion of Spanish banks like BBVA has been the result of their strong investment in information technology (IT), and the early deregulation of the banking industry in Spain. BBVA's expenditure in IT has allowed the bank to create detailed profiles of its customers and thus more accurately target clients for new products. BBVA expects to use this platform to become a "distribution-service company," offering products in insurance, education, healthcare, and retirement. Moreover, this IT investment and the depth of its management experience after many years of strong competition in the Spanish market allows BBVA to improve the performance of the institutions it acquires at home and abroad. Information technology allows BBVA to coordinate the activities of subsidiaries in many countries in real time.

Lately, BBVA has benefited from national regulations that limited the exposure of Spanish banks to mortgage-backed securities. The Bank of Spain, which regulates all Spanish banks, created a series of requirements concerning leverage and capital reserves that are more stringent than the provisions of the Basel I Accord. Despite its good position in the global financial crisis, BBVA still faces challenging times in Spain as a result of the cooling of the local housing market. However, its international diversification should continue to provide a hedge against falls in any particular market.

See Also: Banco Santander Central Hispano Group; Basel Committee on Banking Supervision; Latin America; Spain.

Bibliography. "Conquistadors on the Beach," *The Economist* (2007); E. Sánchez-Peinado, "The Internationalisation Process of Spanish Banks: Strategic Orientation after the Mergers," *European Business Review* (2003); M. Sebastián and C. Hernansanz, "The Spanish Banks' Strategy in Latin America," *Société Universitaire Européenne de Recherches Financières* (2000).

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Banco Santander Central Hispano Group

Banco Santander Central Hispano (BSCH) is a Spanish banking group offering retail and wholesale banking, asset management and insurance service in Europe and Latin America. It is headquartered at the Ciudad Financeria Santander (Santander Financial City) in Madrid and employs around 130,000 people worldwide.

The history of BSCH began in 1857 when Banco Santander was established by royal decree to support trade links between the northern Spanish port of Santander and Latin America. During its early years, Banco Santander grew steadily, building up a network of regional branches around the city of Santander. In the early 1930s, Emilio Botín Sanz de Sautuola y López was appointed managing director and embarked on an expansion program throughout Spain. During the 1940s and 1950s, the bank opened its first international offices in Cuba, Argentina, Mexico, and Venezuela. By the 1960s, Banco Santander had become the seventh-largest Spanish bank. Expansion continued through to the 1980s, with Santander acquiring new businesses in Chile, Puerto Rico, and Uruguay. The CC-Bank was acquired in Germany in 1987, and an alliance was formed with the Royal Bank of Scotland. During the 1990s, Banco Santander developed its business in Brazil, Colombia, and Peru.

In 1999, Banco Santander merged with Central Hispano, a major Spanish banking group created following the fusion in 1991 of Banco Hispanoamericano (created in 1900) and Banco Central (created in 1919), to create Banco Santander Central Hispano. On Santander's 150th anniversary in 2007, BSCH was the largest banking group in the Eurozone and the eighth largest bank in the world in terms of market capitalization. In 2007, it generated revenues of €27.095 million, an increase of 20 percent compared to 2006. The same year, the group's operating profit was €9.060 million, an increase of 19 percent over 2006. With nearly 11,000 branches, the bank also operated the largest retail network in the Western world.

BSCH's recent growth has been achieved through a combination of factors, including a continued program of international expansion. In 2000, it acquired Banespa in Brazil, Grupo Serfín in Mexico, and Banco Santiago in Chile. A further landmark was reached in 2004 when it bought Abbey, Britain's sixth largest retail bank. A year later, BSCH acquired a 19.8 percent stake in Sovereign Bancorp, the 18th largest bank in the United States. Together with the Royal Bank of Scotland and Fortis, BSCH launched a successful takeover of ABN AMRO in 2007. As a result, BSCH obtained Banca Antonveneta, acquiring a long-desired presence in Italy, and Brazil's Banco Real, giving it a leading position in the fast-growing Brazilian market.

Recent growth can also be attributed to its exploration of business opportunities beyond its core retail banking operations. In 2002, for example, the bank created Santander Consumer Finance, a pan-European franchise for financing new and used car sales. Following a strategy of acquisitions, this division now operates in 19 countries around the world and generates nearly 10 percent of BSCH's total profits. Santander Consumer Finance now acts as platform to offer other forms of consumer finance, including credit cards and personal loans.

Moving forward, the bank faces a number of strategic challenges. Financial analysts point to its lack of presence in key emerging markets. Having focused its recent international expansion on the Eurozone and South America, it has not yet expanded its operations in the fast-growing markets of Asia where competitors such as Citigroup and HSBC are already exploring the opportunities presented by high growth in the retail banking sector. In addition, the Santander brand was until recently relatively unknown outside of Spain and Latin America. The bank hopes that a five-year sponsorship agreement signed with the McLaren Mercedes Formula One team in 2006 will raise the international recognition of Santander's brand.

See Also: ABN AMRO; Acquisitions, Takeovers, and Mergers; Branding; Spain.

Bibliography. Luisa Alemany, "Venture Capital in Spain: Evolution, Characterisation and Economic Impact Analysis," *International Journal of Entrepreneurship and Innovation Management* (v.6/4–5, 2006); Kevin Dobbs, "With Sovereign Deal, Santander Plans Light Touch," *American Banker* (v.173/199, 2008); Marcela Espinosa-Pike, "Business Ethics and Accounting Information: An Analysis of the Spanish Code of Best Practice," *Journal of Business Ethics* (v.22/3, 1999); Mauro Guillen and Adrian Tschoegl, *Building a Global Bank: The Transformation of Banco Santander* (Princeton University Press, 2008); Ronald A. Ratti, Sunglyong Lee and Youn Seol, "Bank Concentration and Financial Constraints on Firm-Level Investment in Europe," *Journal of Banking & Finance* (v.32/12, 2008).

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Bangladesh

Bangladesh (population 150,448,000 in 2007, gross domestic product $208 billion in 2007) is one of the most densely populated countries in the world. A south Asian country, it is almost entirely surrounded by India except for the small Burmese border and the Bay of Bengal to the south.

Bangladesh and the Indian state of West Bengal were once united as the kingdom of Bengal, which became an Indian province under British control in the 19th century. Bengal was instrumental in the Indian independence movement, and when India finally gained that independence, the province of Bengal was divided between Hindu West Bengal and Muslim East Bengal, the latter under the control of Pakistan. Bengal-Pakistan tensions were high from the beginning, and when the Pakistani government failed to respond to the damage caused by the Bhola cyclone that devastated the Bay of Bengal in 1970, outrage helped to motivate the Bangladesh Liberation War, which eventually won the support of India and overlapped with the 1971 Indo-Pakistani War. Independence from Pakistan was successfully declared on March 26, 1971.

Islam is the state religion of Bangladesh, though there is a sizable Hindu minority. A parliamentary democracy, Bangladesh holds direct elections for its 345 members of the Jatia Sangsad. Forty-five seats are always held by women. The president, the head of state, is elected by the members of parliament and appoints the prime minister, the head of government, who is always a member of parliament and who forms the cabinet and is responsible for the day to day business of governance. The president's powers are largely confined to the caretaker government that presides during election periods, but he or she also appoints the justices of the Supreme Court. Bangladesh's legal heritage is a mixture of British common law and local religious traditions, and thus laws vary some from municipality to municipality, in keeping with local customs.

Bangladesh's population density compounds its problems with poverty. Per capita income is $1,400—around 14 percent of the worldwide average. About 65 percent of the labor force works in agriculture, which accounts for only a fifth of the GDP; most agricultural workers are poor, rural, subsistence farmers, producing only enough for themselves and their families to live on. Like other south Asian agricultural economies, Bangladesh's is dependent on the monsoon cycle of floods and droughts, which is erratic and costly—but which does result in especially fertile

A student learning textile production in Bangladesh, where garment exports may reach $15 billion by 2011.

soil. In the years since independence, Bangladesh has made great strides in rice and wheat production, and despite population growth, less of the population is at risk of starvation than it had been.

Industry and infrastructure are limited. There are perennial problems with power and water distribution and telecommunications, and Bangladesh has not been able to take advantage of the adoption of overseas call centers to the extent that India and other Asian countries have. Manufacturing is thus dominated by the textile industry, most of the employees of which are female; this region was known for its silk even centuries ago, and ready-made garments are now the number-one export. The American and European caps on imports of Chinese textiles have helped Bangladesh as well, as have the country's efforts to stamp out child labor in textile factories (thus avoiding foreign boycotts).

Since 1989, Bangladesh has actively sought foreign investment, and the Board of Investment in theory exists to streamline the process of starting up foreign-owned businesses and other investments. In practice, investment has been slow to come. The country has been the recipient of $30 billion in grants since independence, from the West, from Japan and Saudi Arabia, and from various international development programs. Improvements are slow, but steady, even in a climate of global recession.

See Also: Asia, Asian Development Bank, India.

Bibliography. Craig Baxter, *Bangladesh: From a Nation to a State* (Westview, 1998); Richard Sisson and Leo Rose, *War and Secession: Pakistan, India, and the Creation of Bangladesh* (University of California Press, 1991).

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Bank for International Settlements

The Bank for International Settlements (BIS) is an organization that provides services for many central banks, nations, and other official monetary institutions around the world. However, the bank does not provide financial services to corporations or individuals.

The Bank for International Settlements is responsible for promoting monetary and financial stability in the world, and it meets on a bimonthly basis to discuss monetary and financial matters. The organization is composed of four major committees: the Basel Committee on Banking Supervision, the Committee on the Global Financial System, the Committee on Payment and Settlement Systems, and the Markets Committee. In addition, there are several independent organizations involved in international cooperation in the area of financial stability, and these organizations have their secretariats at the Bank of International Settlements. These organizations are the Financial Stability Forum, the International Association of Insurance Supervisors, and the International Association of Deposit Insurers.

The Basel Committee on Banking Supervision provides an avenue for the banking industry to discuss banking supervisory matters. The overall objective of this entity is to increase knowledge and understanding of key supervisory issues and improve the quality of banking supervision worldwide. In January 1999 the Basel Committee proposed a new concept, which became known as Basel II, and a final version was distributed in June 2004. Basel II has three main principles, which are minimum capital requirements, supervisory review, and market discipline.

The Basel Committee has made two major contributions since its beginning. The first contribution occurred in 1975 when the committee took a lead role in making sure that countries share responsibilities when making international banking transactions. The Basel Concordat was an agreement that established the foundation for this process. The first stipulation was that the parent and host authorities shared responsibility for the supervision of the foreign banking establishments. The second stipulation stated that the host authorities had primary responsibility for supervision of liquidity. The third stipulation suggested that the solvency of foreign branches and subsidiaries was the primary responsibility of the home authority of the parent and the host authority. The second major contribution was a standard that would assist in (1) adequately measuring a bank's capital and (2) establishing minimum capital standards.

Although Basel II became effective in December 2006, it was not as widely embraced as the first Basel. The purpose of Basel II was to achieve the European regulators' goals of addressing shortcomings in the original accord's treatment of credit risk, incorporating operational risk, and harmonizing capital requirements for banks and securities firms. Although the banks in Europe have applied Basel II, regulators in the United States still have not embraced it. Although they share the same goal of addressing shortcomings in the original accord's treatment of credit risk, there is a belief that the existing bank supervision in the United States already addresses operational risk.

In addition, harmonization has never been a priority for U.S. regulators. Their perception is that Basel II is more relevant for international banking activities. Therefore, only 10 of the largest banks in the United States have applied Basel II, and an additional 10 banks have the option to join in. However, the other banks in the United States will remain subject to the current U.S. regulations, especially those rules that were adopted under the original Basel. The future of further implementation of Basel II remains unclear at this time. The Committee reorganized in October 2006, and is being operated by four main subcommittees. These subcommittees are the Accord Implementation Group, the Policy Development Group, the Accounting Task Force, and the International Liaison Group.

The Committee on the Global Financial System is responsible for monitoring developments in global financial markets for the central bank Governors of the G10 countries. The Committee on Payment and Settlement Systems serves as a forum for central banks to monitor and analyze developments in domestic payment, settlement, and clearing systems as well as in cross-border and multicurrency settlement schemes.

The Markets Committee was established in 1962 following the initiation of the Gold Pool. When the Gold Pool arrangements collapsed in 1968, members continued to meet at the BIS in order to exchange views. However, the focus has shifted toward coverage of recent developments in foreign exchange and related financial markets, an exchange of views on possible future trends, and consideration of the short term implications of particular current events for the functioning of these markets.

See Also: Basel Committee on Banking Supervision.

Bibliography. James C. Baker, *The Bank of International Settlements, Evolution and Evaluation* (Quorum Books, 2002); Permanent Court of Arbitration, *Bank of International Settlements Arbitration Awards of 2002 and 2003* (Asser Press, 2007); Gianni Toniolo and Piet Clement, *Central Bank Cooperation at the Bank of International Settlement, 1930–1973* (Cambridge University Press, 2007).

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Bank of America Corp.

Bank of America Corp. is a bank holding company headquartered in Charlotte, North Carolina. As of

December 2007, it had $1,716 billion in assets, and 210,000 employees, more than any other U.S. bank except Citigroup. Ranked by deposits, it is the largest bank in the United States, and by market capitalization, the fourth largest in the world. Although it has operations in over 30 countries, and provides an extensive range of global corporate and investment banking and asset management services, its core business has always been U.S. consumer banking. On revenues of $124 billion, it earned $15 billion in 2007, over half of which came from consumer deposits and credit cards.

Like many banks, Bank of America suffered an earnings decline in 2007 as a result of the subprime mortgage debacle in the United States. The bank was not hit as hard as some of its competitors, however, and used the occasion to continue a long-term process of growth by acquisition, most notably by buying Countrywide Financial, previously the nation's largest mortgage lender.

Between 1984 and 2004 the number of commercial banks in the United States was cut in half, mainly due to mergers. Bank of America is a leading example of this consolidation trend. The current bank was created when Nationsbank of North Carolina acquired San Francisco–based Bank of America in 1998 and adopted its name. The post-1998 group has made further acquisitions, including MBNA in 2005 (by which Bank of America became the country's largest credit card issuer).

Nationsbank was formed in 1991 out of the merger of North Carolina National Bank (NCNB) with Citizens and Southern. Subsequent acquisitions soon made it the largest bank in the American south. During this same time, Bank of America took over two large competitors, Security Pacific (1992) and Continental Illinois (1994).

For three decades after World War II, Bank of America had been the largest bank in the world, measured by assets, a position it achieved more by internal growth than by acquisition. Bank of America was originally formed out of several small southern California banks in the early 1900s, but a more important predecessor was A. P. Giannini's Bank of Italy, which acquired Bank of America and its name in the late 1920s. Among Giannini's signal achievements with Bank of Italy were the provision of financial services for the mass consumer market, and expansion by development of a branch network, although his ambitions to expand nationwide were thwarted by U.S. regulators. Nevertheless, under the leadership of Giannini and his successors, Bank of America spread rapidly across the large and fast-growing retail financial market in California. The bank also funded Walt Disney movies and the Golden Gate Bridge, and in 1958 introduced Bankamericard (predecessor of VISA), the first credit card widely licensed to other banks.

In the late 1970s and early 1980s, when rising interest rates on monies financing Bank of America's large portfolio of fixed-rate home mortgages weakened it relative to "money center" competitors, and a falling U.S. dollar slowed its growth relative to non-U.S. institutions, the bank fell below the top 10 worldwide. A spate of problem loans added further difficulties. After a period of restructuring in the late 1980s, growth then resumed and was followed by the rapid succession of mergers in the 1990s described above. Hugh McColl, head of NCNB and Nationsbank during these mergers, continued as chairman of the new Bank of America from 1998 until 2001, when he was succeeded by Kenneth Lewis.

In addition to its dominant position in consumer banking, Bank of America in 2007 was also among the top 10 mergers and acquisitions advisers, and one of the 10 largest investment managers in the United States. The bank's commitment to environmentally-friendly business is symbolized by the construction of a new office building in New York in 2008 that includes insulating glass and facilities for recycling water.

See Also: Citigroup; Financial Markets; Merrill Lynch; Mortgage Credit Crisis of 2008.

Bibliography. Bank of America Corp., *Annual Report for 2007*; Bloomberg.com, "Bank of America's Countrywide Purchase Boosts Stocks," www.bloomberg.com (cited March 2009); Gary Hector, *Breaking the Bank* (Little, Brown, 1988); Marquis James and Bessie R. James, *Biography of a Bank* (Bank of America, 1954, 1982); "The League Tables: Will BofA Get a Parting Gift?," *Wall Street Journal* (October 31, 2007).

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Bank of China

The Bank of China is one of China's four stated-owned commercial banks. Its businesses cover commercial banking, investment banking, and insurance. The Bank of China (Hong Kong), Bank of China International, and Bank of China Group Insurance are members of the Bank of China Group. It is ranked 187th in *Fortune* magazine's Global 500 companies in 2008 and ranked 9th among the world's top 1,000 banks in *The Banker* magazine in 2007.

In 1905 the government of the Qing Dynasty established the Treasury Bank, the first state bank in Chinese history. In 1908 the Treasury Bank changed its name to the Bank of Great Qing. With the approval of the government of the Republic of China, the Bank of China was formally established in February 1912 to replace the Ta Ching Government Bank. The Bank of China acted as the government treasury and handled the remittances of public funds. It served as the central bank, international exchange bank, and specialized foreign trade bank of the country at that time. It issued banknotes on behalf of the central government with the Central Bank of China, Farmers' Bank of China, and Bank of Communications. In 1928 the national government of the Republic of China set up its own central bank. Thus, the Bank of China became a commercial bank.

After 1949 the Bank of China split into two operations. One part of the bank relocated to Taiwan and was privatized in 1971 to become the International Commercial Bank of China. The other part of the bank became the mainland China state-designated specialized foreign exchange and foreign trade bank. The main functions of the bank include trade settlements and foreign exchange transactions settlements between local and foreign enterprises and banks, extension of credit to foreign currency, and renminbi (RMB) bonds and other marketable securities. It further engages in trust, financial leasing, and consulting businesses. The Bank of China group in Hong Kong and Macao is under supervision of the Bank of China. During the early stages of the reforms in mainland China in the 1980s, the Bank of China played a major role as the main channel through which China raised funds from abroad.

In 1995 the Chinese government introduced the Commercial Bank Law to commercialize the operations of the four state-owned banks: the Bank of China, the China Construction Bank, the Agricultural Bank of China, and the Industrial and Commercial Bank of China. The Bank of China specializes in foreign-exchange transactions and trade finance but is also a major domestic financial service provider. Its business scope covers commercial banking, investment banking, and insurance. The core business of the bank includes corporate banking, personal banking, and financial markets.

Personal banking makes up a third of the Bank of China's commercial banking business, and it leads in RMB credit cards.

The Bank of China was formally incorporated in Beijing as a state-controlled joint stock commercial bank in August 2004. In 2006 its revenue was US$17,645 billion and its net income was US$5.4 billion. In 2007 the total assets of the mainland China segment were US$674 billion, whereas the assets of the Hong Kong and Macao segments were US$163 billion at the end of the year, contributing about 40 percent of the whole group. Assets for the other overseas segments amounted to US$33 billion. The overseas segment only contributed 2.52 percent of the group's profits for 2007. Commercial banking is the core business of the bank and contributed 90 percent of the operating profit of the year. Corporate banking is the major business in commercial banking, which makes up 60 percent of the operating profit of the total commercial banking business. The personal banking business contributes one-third of commercial banking.

The Bank of China is the most internationalized bank on the mainland. It established its first overseas office, the London branch, in 1929. The bank successively opened branches all over the world. In addition to its mainland offices, it has nearly 700 branches in Hong Kong, Macao, and 26 countries and regions, with over 22,000 employees. The Bank of China listed on the Hong Kong Stock Exchange in June 2006. It raised US$9.7 billion in its H-share global offering.

Bank of China (Hong Kong)

The Bank of China started operations in Hong Kong in 1917 and became a note-issuing bank in 1994. In October 2001 the Bank of China incorporated with the merger of 10 members of the former Bank of China Group in Hong Kong. The Bank of China (Hong Kong) listed on the Hong Kong Stock Exchange in October 2002. The bank's headquarters in Hong Kong are located in the Bank of China Tower. It has an extensive service network of over 280 branches and 450 automatic teller machines, with another 15 branches and sub-branches in the Chinese mainland to provide cross-border services to customers in Hong Kong. It has also maintained its leading position in RMB credit cards.

The Bank of China (Hong Kong) has already been able to provide a comprehensive range of general banking products and services with the low to medium class of customer as its main targeted customer groups. Since Hong Kong's return to Chinese sovereignty in 1997, the Bank of China has further developed as a banking force, standing its ground against only two other note-issuing banks in Hong Kong, the HSBC and the Standard Chartered Bank.

See Also: Central Banks; China.

Bibliography. Bank of China Limited, Annual Report 2007, www.boc.cn (cited March 2009); Weidong Liu, "Development of Local Financial Systems in Mainland China," *Eurasian Geography and Economics* (v.49/2, 2008).

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Bankruptcy

Bankruptcy is the legal state of being unable to make good on one's debts. Originally a crime—the accusatory origins of the word are retained when we refer to someone as "morally bankrupt"—ideas about and practices concerning bankruptcy have evolved over thousands of years, changing as do economic systems. Though the negative connotations of the word remain, it is now a thing that can be entered into strategically, even to the benefit of all concerned parties.

History

The need to deal in some fashion with an individual's inability to pay his or her debts is as old as debt, as old as money. A wide variety of remedies developed in different economies. In ancient Jewish law, the debts of Jews are cleared every seventh year, and every 50th year is the Year of Jubilee, clearing all debts, Jewish and otherwise. At the other extreme, Genghis Khan prescribed the death penalty for anyone who had become bankrupt three times.

More widespread, with a good deal of variation, is the ancient Greek practice of debt slavery, in which families and their servants were forced to labor without recompense in order to pay off the debt of the head of household. Debt slaves were not "sold into slavery"—they had more rights than other slaves, and indentured servitude might be a more accurate term for the practice. "Debt slavery" continues to be used figuratively, to refer to the necessity of continuing to earn a certain amount in order to pay off one's debts—the lifestyle one is locked into when one has had to enter into debt in order to acquire necessary luxuries like a financed car, a mortgaged house, and a college education. However, in that modern figurative use, bankruptcy is the remedy (as it were) to debt slavery, rather than the other way around.

In the Middle Ages, individuals accused of bankruptcy (or operating businesses accused of bankruptcy) could be publicly flogged, a solution that helped no one per se but was intended as a deterrent and to satisfy the public need for the service of justice. In England, they could have their ears cut off, or nailed to a wall—punishments which, while more vicious than sending them to debtors' prison, did not prevent them from continuing to work to try to pay off their debts, nor did it add the cost of their upkeep to the state's bills.

The common thread here is that bankruptcy was a form of fraud. The debtor had agreed to pay a debt he proved unable to pay. The word *bankrupt* comes from the Latin *bancus ruptus*, broken table; a bancus (from which both *bank* and *bench* derive) was a table at which the ancient bankers sat in marketplaces and other public places. When he could no longer do business, he broke the table (or it was broken for him) as a sign that he was no longer doing business. From the start, then, *bankruptcy* has been a figurative term, used to refer to people who were as bereft as these broken bankers.

The modern form of clearing debts through the act of declaring bankruptcy dates from English law in 1705. As economic, political, and technological changes changed the nature of individual economic life, attitudes towards debt and bankruptcy shifted. In various countries, legal systems developed designed to liquidate assets and pay off debts, in part or in whole, when an individual or business went bankrupt; and as businesses became more sophisticated (and publicly held businesses accountable to shareholders came into being), laws and practices had to develop to accommodate them as well.

In the United States, the criminal associations of bankruptcy fell away in the 19th century, when a series of economic crises hastened the repeated softening of state and local laws, in part because of the growing awareness of circumstances in which a debtor could find himself bankrupt through no wrongdoing of his own—the "hard luck case." Chapter 13 bankruptcy was introduced in the aftermath of the Great Depression, in order to allow debtors to retain their property and residence while repaying their debts over a three-to-five-year period. Chapter 11 bankruptcy came in the 1970s during stagflation, designed to reorganize bankrupt businesses, and the farm crisis of the end of that decade brought about Chapter 12 bankruptcy to provide similar options for family farms.

In the 21st century, in most of the Western world the emphasis is neither on punishment nor liquidation, but on finding ways to resolve debts while maintaining the economic health of the debtor, whether a business or individual. Bankruptcy is more often declared than accused, and often is the operative word: the end of the 20th century saw the beginning of a boom time for bankruptcy, with 1 in 76 Americans filing for personal bankruptcy in 1997. Texaco and Continental Airlines, once robust giants, joined them in corporate bankruptcy, with the infamous cases of Worldcom and Enron following at the cusp of the new century.

Title 11 in the United States

In the United States, as in most countries, bankruptcy is a federal matter—in fact, it is specifically mentioned in the Constitution (Article 1, Section 8, Clause 4), which gives Congress the power to adopt "uniform laws on the subject of bankruptcies." Such laws form the Bankruptcy Code, Title 11 of the United States Code, which defines six types of bankruptcy, commonly referred to according to the chapter in which they appear: Chapter 7, Chapter 9, Chapter 11, Chapter 12, Chapter 13, and Chapter 15.

Chapter 7 liquidation or "straight bankruptcy," for which both individuals and businesses are eligible, is the oldest and most common form of bankruptcy filing, accounting for more than half of personal bankruptcies. In such liquidations, a bankruptcy trustee liquidates the debtor's property to create a pool of funds from which to pay the creditors. As long as the debtor is guilty of no fraud or other deceitful behavior, a certain amount of debt is forgiven regardless of the size of the pool of funds, but there are debts that cannot be discharged or reduced at all, such as child support, alimony payments, fines imposed by a court in answer to a crime, property taxes, income taxes less than three years old, and student loan payments. Certain property—typical a residence and vehicle—is exempt from being liquidated.

Though a declaration of Chapter 7 bankruptcy remains on an individual's credit report for 10 years, it is such a tempting maneuver for so many victims of debt that in recent years trustees have been much more aggressive in verifying that the filer is indeed entitled to file Chapter 7 rather than Chapter 13. False filing—declaring Chapter 7 when one is capable of filing Chapter 13—is called "abusive filing," and is contested in order to protect creditors. Anyone who is found to have falsely filed is forced into Chapter 13 bankruptcy. In the case of a business, Chapter 7 liquidation means suspending the business's operations unless the trustee resumes them.

The business is usually dismantled in the course of paying off its debts.

2005 Changes

The 2005 Bankruptcy Abuse Prevention and Consumer Protection Act, passed in response to the rise of bankruptcies, requires that any individual filing for bankruptcy receive a briefing from a credit counseling agency and complete an instructional course in personal financial management, prior to filing; the rationale for this is that it will reduce abusive filings. BAPCPA also made it extraordinarily difficult to discharge student loan debt through appeals, which had previously been uncommon but not unheard-of.

As the above implies, Chapter 13 is increasingly encouraged as the bankruptcy filing for individuals. Rather than a liquidation, this is a reorganization and rehabilitation of debt, creating a plan by which the debtor pays off his or her debts in a short time frame (three to five years). The debtor is responsible for proposing the plan, and there are codified limits—calculated according to an equation that accounts for the cost of living—on how much debt a debtor can possess when filing. A Chapter 13 filing remains on the debtor's credit record for seven years.

Chapter 11 is the equivalent for businesses, a reorganization filing. The business proposes a plan, and a bankruptcy court determines whether it is fair and equitable and complies with the goals of the relevant laws. This can result in canceling contracts the business could not otherwise cancel (such as union agreements) and usually causes it to be delisted from its primary stock exchange, if applicable—though in such cases, stocks always continue to be traded over-the-counter. The final outcome of a Chapter 11 plan often terminates shares in the company.

As of 2009, 12 of the 15 largest Chapter 11 bankruptcies had been filed in the 21st century, a result of the many disastrous misadventures of large corporations. Technically, individuals can file Chapter 11; in practice, this rarely occurs, and there is rarely any advantage to it compared to Chapter 7 or Chapter 13.

Other Types

Chapter 9 bankruptcy is less familiar to most people, and is a debt restructuring made available to municipalities. The most notable case of a Chapter 9 filing is that of Orange County, California, in 1994. Reasons for filing range from that of Millport, Alabama, in 2005, when the close of a factory meant a loss of sales tax revenue and income dropped below that necessary to pay off debts; to the Pierce County (Washington state) Housing Authority's 2008 filing because of a class-action lawsuit over mold. One reason Orange County's filing made headlines was because its losses had been the result of bad investments.

Chapter 12 bankruptcy is quite similar to 11 and 13, but is meant for family farms, which faced a significant economic crisis in the late 1970s and early 1980s when incomes failed to keep up with the massive size of the loans offered to farms, much like the more recent subprime mortgage crisis, albeit with stubbier tendrils of consequence. Compared to the thousands of Chapter 11s and hundreds of thousands of Chapter 7 and 13s filed each year, Chapter 12 filings number in the hundreds.

Chapter 15 codifies into federal law the Model Law On Cross Border Insolvency drafted by the United Nations Commission on International Trade Law, making provisions for dealing with cross-border bankruptcy, when a bankruptcy case involves both American and foreign jurisdictions.

Any of the above can constitute either voluntary or involuntary bankruptcies. Involuntary bankruptcies are filed by the creditors rather than the debtor, but are quite uncommon, particularly in the age of debt collection agencies.

See Also: Debt; Debt Rescheduling; Enron Corporation.

Bibliography. Douglas G. Baird, *The Elements of Bankruptcy* (Foundation Press, 2005); Brian A. Blum, *Bankruptcy and Debtor/Creditor: Examples and Explanations* (Aspen, 2006); Kelly DePonte, *The Guide to Distressed Debt and Turnaround Investing: Making, Managing and Exiting Investments in Distressed Companies and Their Securities* (Private Equity International, 2007); David G. Epstein and Steve H. Nickles, *Principles of Bankruptcy Law* (Thomson West, 2007); Scott A. Sandage, *Born Losers: A History of Failure in America* (Harvard University Press, 2006); James D. Scurlock, *Maxed Out: Hard Times, Easy Credit, and the Era of Predatory Lenders* (Scribner, 2007).

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Baoshan Iron and Steel

Baoshan Iron and Steel Co., Ltd., is one of China's largest and most strategically important companies. It is the publicly listed subsidiary of Baosteel Group, a Chinese state-owned enterprise headquartered in Shanghai. The subsidiary was established in February 2000. In December of that year, 1.877 billion common shares were issued and Baoshan Iron and Steel Co., Ltd., (abbreviated to "Baosteel" in English) was successfully listed on the Shanghai Stock Exchange, raising just under US$1 billion.

Baosteel is set for significant growth and expansion as a major player in the restructuring of the industry in China. The pace of Baosteel's growth and expansion will depend upon how it deals with the challenges of a slew of anticipated mergers and acquisitions, securing strategic iron ore resources, and developing the product and process innovations necessary to underpin sustainable competitiveness.

Baosteel is the largest and most advanced steel company in China and the sixth largest in the world specializing in high-tech and high-value-added steel products. The company produced approximately 20 million tons of iron and 23 million tons of steel in 2007. Baosteel has become China's main steel supplier to automobile, household appliance, oil exploration, oil and gas transmission, shipbuilding, pressure vessel, and container materials industries.

Baosteel's 2007 results showed an 18 percent increase in revenues to CNY191,6bn (US$27.4 billion) with a 2.7 percent fall in net profit to CNY12.7bn (US$1.8 billion). Sharp increases in the costs of raw materials and weakness in the stainless steel market were cited as the main reasons for the profit decline. In December 2007, Standard & Poor's revised the long-term credit rating of Baosteel from "BBB+" to "A-" with "stable outlook."

China's steel industry is in its golden age; however, it remains highly fragmented with Baosteel, the top producer, contributing only 12 percent of the nation's total output. China's Steel Industry Policy (2007) aims to consolidate the industry into several major players. A flurry of merger activity is imminent with Baoshan Iron and Steel Co., Ltd., expected to be a dominant player in the restructured industry.

Baosteel's dynamic capabilities, critical to its current position and future success, are underpinned by the scale and growth of the domestic market. Its strategy includes product differentiation, with increased focus on high-end products and high-strength value addeds, and cost reduction through increased productivity and improved management systems. Baosteel's strategy for market expansion includes establishing production bases abroad with the objective of increasing the contribution of overseas sales to 10–15 percent of the revenue base (currently around 3 percent) over the next five years.

In recent times, government policy has both helped and hindered Baosteel's operations. In June 2007 export tariffs were levied on more than 80 categories of steel products in order to curb exports and secure domestic supply. Then, in late 2007, Baosteel was said to have benefited from US$52 billion in government subsidies to the industry. The Chinese government is expected to play a key role in determining future mergers and acquisitions related to the new Steel Industry Plan. From Baosteel's perspective, the choice of targets and/or partners will have a significant impact on operations, trading, and global expansion plans.

Baosteel faces two major issues that will continue to place upward pressure on costs. China's exchange rate policy is subject to ongoing examination by the world financial community. Should the Chinese government bow to international pressure for a sharp revaluation of the Chinese renminbi, the consequences could be significant for Baosteel and for the entire Chinese steel industry.

The second cost issue is related to the supply of iron ore, the basic raw material for steel manufacture. In recent years, the three dominant suppliers of iron ore have negotiated price increases of 72 percent (2005), 19 percent (2006), and 30 percent (2007). It is widely anticipated that iron ore mining companies in Australia will achieve an increase of approximately 85 percent in 2008, exceeding the 65 percent rise secured by the key Brazilian mining companies. The Chinese government is currently considering a joint bid, including Baoshan Iron and Steel Co., Ltd., to acquire a key Australian supplier (Rio Tinto Group) in order to protect this strategic supply chain.

See Also: China; Manufacturing Strategy; Supply Chain Management.

Bibliography. Baoshan Iron and Steel Co., Ltd., *Annual Report* (2006); Baoshan Iron and Steel Co., Ltd., *Fact Book* (2006); People's Daily Online, "China's Steel Industry Ready for Change," www.english.peopledaily.com.cn (cited March 2009); Jonathan R. Woetzel, "Remaking China's Giant Steel Industry," *McKinsey Quarterly*, www.mckinseyquarterly.com (cited March 2009).

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Barclays

Barclays Bank was founded in 1896, but its precursors date back as far as 1690. The Barclay name became connected to the business when the bankers John Freame and Thomas Gould joined forces with Freame's son-in-law John Barclay in 1736. At the start of the 21st century Barclays, along with Lloyds, is one of the remaining Big Five English banks that previously dominated the City. During the 1980s and 1990s the other three original banks were absorbed by competitors and the merchant banks joined foreign banks. The history of Barclays provides an important case study for business strategies.

Barclays has long had a strong presence in Britain because of its early development as a large retail bank with outlets all over the country. Stiff competition from joint-stock banks equipped with capital and a network of branches drove what was once a small local bank on Lombard Street to merge with 19 other banks (including Bevan, Gurney, Goslings, and Backhouse) to set up a modern joint-stock bank in 1896. Barclay & Co. Limited then had 182 branches. The families who united forces conceived a durable strategy of organic and external growth along rules of steady entrepreneurship, and kept nonexecutive representatives on the board.

Barclays became one of the Big Five joint-stock banks of the City after it merged with several banks (Bolithos in 1905; United Countries Bank in the Midlands in 1916; London, Provincial & South Western Bank in 1918; Union Bank of Manchester in 1919; and, much later, Martins Bank in 1969). Among British banks in 1932 it was first in number of outlets (2,175) and, with Lloyds, second in deposits (£382 million) behind Midland. Its widespread middle-class customer base contributed to a continuous transformation into retail banking, which allowed Barclays to join the rally for mass banking beginning in the 1960s. Such growth fuelled its early innovations: the first British credit card in 1966, the Barclaycard, and then the first world cash machine or automatic teller machine, Barclaycash.

Barclays had taken over three institutions active overseas (Colonial Bank, Anglo-Egyptian Bank, National Bank of South Africa) to form Barclays Dominion, Colonial & Overseas, or Barclays DCO, in 1925. But this move was halted by the decolonization trend, and the bank had to rethink its international strategy. Barclays then expanded through commercial banking operations in continental Europe and the United States. The City had also regained its status in the worldwide banking market thanks to the Euromarket in the 1960s.

In 1976 Barclays tried to build a large investment bank to take profit from the demise of merchant banks. In 1983 it purchased several brokerage houses (De Zoete & Revan, Wedd Durlacher, and Mordaunt) to forge Barclays De Zoete Wedd in 1986; but like its competitors it had difficulty creating a new corporate culture linking commercial banking and investment banking. This led to the amalgamation of the mother and the daughter banks into a new organization where risks were more controlled.

From the 1990s, Barclays designed a diversified strategy. Retail banking was reinforced in the United Kingdom with, for example, the purchase of Woolwich in 2000. Barclays extended to other countries with both success (ABSA, the South African leader, in 2005; Banco Zaragozano in Spain in 2003) and failure (the merger with Dutch leader ABN-AMRO was foiled by rivals). It also asserted itself as a key player in credit cards (Barclaycard and business cards).

Solid investment banking and market banking activities (within Barclays Capital) gathered momentum in wholesale corporate banking and project financing. Barclays moved to compete with a few other European and worldwide banks in asset management (Barclays Global Investors, managing more than $2 trillion) and private banking (Barclays Wealth). While it lacks the financial might of London rival HSBC, Barclays, with 134,000 employees in 2007, still ranks with Halifax-Bank of Scotland, Royal Bank of Scotland, Lloyds, and HSBC, in the top British big banks. In the future, Barclays will have to ponder its strategy within the new frame of globalization, for example in central European or Asian emerging countries.

See Also: HSBC Holdings; Lloyds TSB Group; United Kingdom.

Bibliography. Y. Cassis, *La City de Londres, 1870–1914* (Belin, 1987); Y. Cassis and É. Bussière, eds., *London and Paris as International Financial Centres in the Twentieth Century* (Oxford University Press, 2005); N. Ferguson, M. Ackrill, and L. Hannah, *Barclays: The Business of Banking, 1690–1996* (Cambridge University Press, 2001); D. Kynaston, *City of London: A Club No More, 1945–2000* (Chatto & Windus, 2001); D. Kynaston, *City of London: Illusions of Gold, 1914–1945* (Chatto & Windus, 1999); W. Vander, *Falling Eagle: The Decline of Barclays Bank* (Weidenfeld & Nicolson, 2000).

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Barriers to Entry

A barrier to entry is any obstacle that prevents potential entrants from enjoying the benefits that accrue to incumbents (established firms). These obstacles may be classified as structural or strategic. The benefits that accrue to the established firms are usually defined in terms of long-run abnormal profits (price set above minimum long-run average cost), but may also include other advantages, for example, in research and development. The key point to emphasize about barriers to entry is that they yield rents that are only available to incumbent firms; such firms earn these rents precisely because they are established in a particular industry.

Structural Barriers

Structural barriers to entry depend on the factors that determine the competitiveness of an industry (for example, demand for a product and technology). Neither incumbent firms nor potential entrants can directly determine the size of these barriers. Examples of structural barriers include economies of scale, absolute cost advantages, and product differentiation. Economies of scale are defined as the rate at which long-run average costs of production fall as output is increased. The point at which these costs are minimized is the minimum efficient scale of production (MES). If the MES is very large in relation to market demand it may only be viable for one incumbent to exist in this industry.

Absolute cost advantages exist when the incumbent's long run average cost is below that of the potential entrant's for all levels of output. In other words, and unlike the case of economies of scale, the scale at which the potential entrant chooses to enter does not affect the cost disadvantage it experiences with respect to the incumbent. Exclusive access to superior technology via patents is one way in which absolute cost advantages are realized.

Product differentiation means that the output of one firm is not perceived by consumers to be a perfect substitute for the output of other firms. This, too, is another type of structural barrier to entry. For example, if consumers are loyal to established brands it can be very difficult (and expensive) for potential entrants to attract customers. Other factors that influence product differentiation barriers to entry include customer inertia, switching costs, product reputation, and established dealer systems.

Strategic Barriers

The major weakness of structural barriers is that they provide little information on how incumbents would respond if entry occurred. This is important because structural barriers may not in themselves be sufficient to deter entry. For example, a new entrant may be able to undercut the monopoly price of the incumbent and force the latter to exit the industry. To overcome this problem a variety of alternative theories of barriers of entry have been developed, which are classed as strategic. Strategic barriers to entry are the actions taken by incumbents to influence the behavior of potential entrants. A key insight of such theories is that actions taken by the incumbent pre-entry alter the post-entry returns available to the potential entrant. Recognizing that ex post returns are less attractive than was anticipated, the potential entrant does not enter.

Pricing policy and commitment are two types of strategic entry barrier that figure prominently in the literature. Limit pricing was one of the earliest theories used to examine the way in which the pricing decisions of an incumbent could deter entry. The limit price is the highest the incumbent believes it can charge without attracting entry. Two assumptions underlie this theory. First, the incumbent has exhausted economies of scale and therefore produces at the minimum of long-run average cost. Second, potential entrants believe that the incumbent will maintain its output at the pre-entry level even after entry. Effectively, the decision to enter will depend on whether it is profitable for the potential entrant to supply the residual demand function (that not met by the incumbent). However, the belief that the incumbent will not change output after entry has been questioned. For example, if entry occurred there is no guarantee that only the potential entrant would incur losses. Recognizing this, the incumbent may allow entry and collude in a market-sharing agreement with the new entrant. Alternatively, it may be more profitable for the incumbent to sell at the monopoly price and permit entry to occur.

Predatory Pricing

Predatory pricing is a strategy by which the incumbent reduces (or threatens to reduce) price to unremunerative levels when faced with actual (or potential) competition. Such a tactic is predatory because it conflicts with short-run profit maximization. However, if the use of this tactic is successful, the incumbent can continue to earn monopoly profits in the long run. Predatory pricing has a long history: in the United States, for example, one of the most famous cases involved Standard Oil in 1911.

The success of predatory pricing depends on a number of factors. For example, for it to be profitable, short-term losses must be less than long-term monopoly profits, but calculating these accurately is difficult; if the result is positive there still remains the problem of communicating the credibility of such action to a potential entrant. If the incumbent faces just one potential entrant, an aggressive pricing policy may succeed, but this outcome is less certain when a number of potential entrants are encountered: For example, while an aggressive response by the incumbent may deter the first potential entrant and all subsequent entrants, it is also possible that a sequence of costly price wars damage the financial resources of the incumbent to such an extent that the threat of an aggressive response is no longer perceived as credible by potential entrants.

Commitment Strategies and Product Proliferation

The basic premise of commitment strategies is that before entry occurs the incumbent has the opportunity to make irreversible decisions that alter the payoffs in the post-entry game. These commitments affect the incumbent's response post-entry while simultaneously signalling to potential entrants the desirability of entering ex ante. For example, the decision by the incumbent to invest in extra capacity will reduce its unit cost of production and this will allow it to pursue an aggressive pricing/output policy post-entry. Observing this, potential entrants will realize that they cannot profitably enter the industry.

Irreversible decisions involve sunk costs: Costs that cannot be recovered if the decision is made to exit the industry. Examples of these irreversible decisions include advertising, investment in large sunk production capacity, and product proliferation. Advertising is a type of promotional campaign designed to increase the demand for a product. One way in which advertising can act as a barrier to entry is by creating a cost asymmetry between the incumbent and the potential entrant. Advertising helps to create goodwill for a product: An advertising campaign today will continue to generate demand in the future even if no further advertising expenditure is undertaken. This cumulative effect of advertising means that in order to attract the same level of demand as an incumbent, the potential entrant needs to spend more on advertising.

The fact that advertising expenditure is a completely sunk cost may increase the difficulties experienced by potential entrants attempting to raise external funds to finance an advertising campaign: In the event of unsuccessful entry, physical plant has some salvage value that can be used as security for a loan, but a failed advertising campaign has no such value.

The established position of incumbents is reinforced if economies of scale in advertising are important. Such economies can arise from threshold effects (a minimum number of advertising messages are required to influence consumers) and also because as a sunk fixed cost, average costs decline as the volume of advertising increases. With large sunk capacity the incumbent incurs higher fixed costs to obtain lower marginal costs of production, and these, in turn, require larger outputs for profit maximization. Large sunk capacity commits the incumbent to a 'tough' strategy when confronted with entry because large-scale output is the profit-maximizing strategy irrespective of entry. Entry is deterred because the output decision of the incumbent reduces the demand available to the potential entrant. In these models, the barrier to entry is also a barrier to exit.

Product proliferation is the strategic decision by an incumbent to preempt entry by creating brands that satisfy every product niche (meaning there is little demand left for a new brand) and to enter profitable market niches before a potential entrant (which rules out profitable entry). Classic examples of industries in which there is significant product proliferation include laundry detergents, bathroom soap, and toothpaste.

Effects

Judgements on the welfare effects of barriers to entry are difficult and need to take account of a variety of factors. For example, significant scale of economies will mean that only a few firms can exist in an industry and be productively efficient. The fact that high profits are being earned in a concentrated industry might indicate the abuse of monopoly power, but such profits are also consistent with incumbent firms having superior technology compared to potential entrants.

The short-run disadvantages of barriers to entry need to be weighed against long-term benefits. For example, the existence of barriers to entry may allow incumbents to charge higher prices compared to a competitive industry and to make significant profits, but these profits may be used to finance research and development into cures for diseases. In this example, removing barriers to entry will make the industry more competitive and lead to lower prices and competitive rates of profit, but these profits may be insufficient to finance research and development.

In many countries the responsibility for investigating barriers to entry and determining whether they are legal or not rests with official bodies. In the United States, for example, the Federal Trade Commission is responsible for these inquires; in the United Kingdom, investigations have been conducted by the Office of Fair Trade.

See Also: Absolute Advantage; Advertising; Brand Loyalty; Economies of Scale.

Bibliography. D. W. Carlton and J. M. Perloff, *Modern Industrial Organisation* (Pearson/Addison-Wesley, 2005); R. Schmalansee and R. D. Willig, eds., *The Handbook of Industrial Organisation,* vol.1 (North Holland, 1989).

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Barter

Barter is a form of countertrade where goods and/or services are exchanged simultaneously without using money or similar monetary instruments. This type of trade refers to a single contract between two parties who are fully compensated by the traded nonmonetary items. This clearly distinguishes barter from other forms of countertrade that may include a third party or allow for partial monetary compensation, such as counterpurchase or buy-back deals. Among all forms of trade, barter can be considered as being the simplest and oldest implementation of it. From an anthropological perspective, barter is seen as a natural tendency of human beings distinguished from gift-giving. While the latter implies trust and credit, which are necessary for future cooperation, barter is seen as a one-off action with no implications for future collaboration.

Through barter, companies can increase their sales volume and sell excess production or resources more easily. In international trade, barter allows circumvention of certain trade barriers such as unfavorable regulations concerning international monetary transactions or overcoming economic restrictions to trade. However, there are also some severe drawbacks related to this type of trade. Barter assumes a double coincidence of wants and needs of the organizations involved. Apart from that, barter assumes that traded goods are arbitrarily divisible in order to match their underlying value. These circumstances may not always be the case. Compared to monetary trade, barter involves negotiations for two goods and/or services and requires two simultaneously concluded and fulfilled delivery contracts. Therefore, barter can be more time-consuming and expensive. It also reduces the flexibility of both companies involved to react quickly to new market conditions. As only a limited range of products can be provided by the contractual parties, goods and services may not be related to one's own business and therefore other markets have to be found where these products can be resold to third parties. This may also take time and cost money.

Generally, barter transactions are not superior to monetary trade and are only implemented if external requirements and circumstances make agents prefer nonmonetary operations. At times of communist power, a bulk of transactions between Western and Eastern countries included barter. Austria played a key role as a mediator in these transactions. In 1993 43 percent of Austria's transit exports were delivered to eastern European countries and 33 percent of them to western Europe. One of the reasons for barter trade was the lack of hard foreign currency and trade barriers. Therefore the direct transaction of goods and services was favored.

For trade with Third World countries, barter also played an important role because they had no cash to pay for the goods needed and imported. As a consequence, their creditworthiness was low. Therefore they gave resources in exchange in order to meet their debts and to overcome their liquidity problems. Compared to money, goods better collateralize future payments/compensations than money, because claims on property rights on physical items can more easily be enforced than claims on future cash flows.

In Russia, an explosive growth of barter dealings was reported in the early 1990s. This trend has been described as "re-demonetization" and was caused by a high rate of inflation. In the 20th century many European and Latin American countries suffered from a devaluation of their currencies. As a result, people engaged in barter transactions as prices increased and trading partners lost their confidence in money. It can be said that high inflation is a driver for barter transactions that limit the effects of a devaluing currency as the intrinsic value of one good/service, in terms of other goods/services, does not change. In other words, barter locks out the exchange rate risk.

Finally, organizations tend to barter if the tax system in a country does not favor their operations. In Russia, tax officials were allowed to block the bank account of those companies or individuals that were in tax arrears. Consequently, it was not possible for those people to withdraw money from their accounts and pay their debts for goods and services received. As a result, nonmonetary trade increased, which enabled circumventing this barrier to trade.

Modern bartering is often conducted through bartering clubs or bartering networks, such as the Swiss Wirtschaftsring (WIR) or the International Reciprocal Trade Association (IRTA). Members of such networks pay fees in order to get listed to be considered for barter transactions. Such clubs increase the likelihood of double coincidence as they match supply and demand.

Counterpurchase and buy-back deals are special forms of barter that may include third parties, such as banks, which reliably arrange payment flows, and traders, who are willing to resell exchanged goods. Import certificates that give the right to import a certain value of goods increase the flexibility of barter operations. They allow separating the import and export transaction from each other. Counterpurchase, buy-back, and import certificates imply cross-subsidization from a foreign exporter to a domestic importer or vice versa. In the former case, the foreign exporter could generate considerable profits that cannot be realized due to low purchasing power in the domestic country. The domestic importer, in contrast, would lack purchasing power without being supported by the foreign exporter. In the latter case, a foreign importer would subsidize a domestic exporter by purchasing import certificates. Otherwise the domestic exporter would not be able to sell its products at the given market price and exchange rate.

See Also: Countertrade; Gift-Giving.

Bibliography. W. E. Buffett, "Why I'm Not Buying the U.S. Dollar," *Fortune* (July 21, 2008); T. Hammond, *Countertrade, Offsets and Barter in International Political Economy* (Palgrave Macmillan, 1990); B. Malinowksi, *Argonauts of the Western Pacific* (Routledge, 1922); P. Mayerhofer, "Change in the Service Trade Regime with CEE Countries," *Austrian Economic Quarterly* (WIFO 1/1999); J. Noguera and S. J. Linz, "Barter, Credit and Welfare, A Theoretical Inquiry into the Barter Phenomenon in Russia," *Economics of Transitions* (2006).

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Basel Committee on Banking Supervision

The Basel Committee on Banking Regulation and Supervisory Practices (Basel Committee), founded in 1974 by the central bankers from G10 countries, serves as a forum for banking supervisory matters. Current members of the Basel Committee come from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The committee's secretariat is situated at the Bank for International Settlements in Basel, Switzerland, and consists of 15 people who are mostly professional supervisors on temporary assignment from their home institutions.

The committee does not possess any formal authority, and its developments do not have legal force. Rather, it attempts to formulate broad guidelines and recommends codes of best practices that deal with issues such as capital adequacy, the functioning of payment and settlement systems, and other aspects of banking supervision. Central banks then incorporate these guidelines and practices into national regulations of their respective countries.

The committee includes four main subcommittees, around which the work is organized: the Accord Implementation Group, the Policy Development Group, the Accounting Task Force, and the International Liaison Group. The latter provides a platform for nonmember countries to contribute to the committee's current and new initiatives. The committee circulates the papers in which the results of its research are presented to banking authorities around the world.

The Basel Committee aims to encourage convergence toward common standards and approaches in banking supervision. The need for such unification comes from the increasingly global nature of financial markets and a strikingly broad scale of the recent financial crises. Over the years, the committee has implemented various guidelines on the amount and substance of banking supervision. In 1988 the committee adopted a package of standards related to capital adequacy—the so-called Basel Capital Accord, or Basel I. Basel I has become an important international standard in the field of banking supervision.

In 1999 the committee proposed a New Capital Adequacy Framework, also known as Basel II. It is meant to replace the 1988 document. Basel II Framework emphasizes an incentive-based approach toward financial regulation in contrast to the rule-based regulation that was in place before. Many countries, including nonmembers, have included the Basel standards in some form into their national regulation for various reasons, such as a wish to improve the soundness of their banking systems, to raise their credit ratings and country's standing in the international arena, and to benefit in other ways by complying with a universally recognized standard.

Another important document produced by the Basel Committee is called "Core Principles for Effective Banking Supervision." The document, along with the "Core Principles Methodology," has been used by countries as a benchmark for assessing the strength of their supervision systems and for identifying specific steps to be taken to achieve baseline quality of their practices.

The work of the Basel Committee is largely based on personal contacts and is operated by consensus. The decision-making process is nontransparent. Some criticize the committee for its secrecy and a lack of accountability. Although regulations produced by the committee are voluntary and nonbinding, in practice countries face strong pressure to adopt the Basel proposals. For example, the International Monetary Fund (IMF) often requires compliance with the Capital Accord as a condition for receiving financial aid.

The major obstacle to negotiation of binding international agreements lies within the area of so-called sovereignty costs—potential reduction of national autonomy as a result of entering the agreement. Soft laws, on the other hand, allow sufficient flexibility to take national interests and local context into account. The Capital Accord is meant to be a soft piece of regulation, but does not always work like this in practice.

Recent efforts of the committee have concentrated on the implementation of the Basel II Framework, particularly such issues as the coordination between home and host supervisory authorities (global risk management, diversification effects, risk concentrations). A significant number of countries have already implemented Basel II Framework (fully or partially), whereas others are working on the creation of necessary infrastructure (legal, regulatory, and technical). Basel II significantly influences financial institutions, since they have to create new departments, modeling techniques, policies, and information technology systems.

See Also: Bank for International Settlements; Capital Adequacy; Credit Ratings; Regulation; Risk Management.

Bibliography. Kern Alexander, Rahul Dhumale, and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press, 2006); Bank for International Settlements, www.bis.org (cited March 2009); Marie-Laure Djelic and Kerstin Sahlin-Andersson, eds., *Transnational Governance: Institutional Dynamics of Regulation* (Cambridge University Press, 2006); Steven Sloan, "Basel Guidelines on Calculating Risk," *American Banker* (v.173/141, 2008).

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BASF

BASF AG (Badische Anilin-und Soda-Fabrik) is the world's largest chemical company (in terms of both net sales and number of employees). The company has its headquarters in Ludwigshafen am Rhein (Rhineland-Palatinate, Germany). BASF handles a diverse, yet interrelated, portfolio of products, including chemicals, plastics, agricultural products, fine and specialty chemicals, petrochemicals, and fossil fuels and materials. As of December 2007 BASF had net sales of nearly $70 billion and employed over 95,000 people.

BASF, along with Bayer and Hoechst, was one of the important German chemical companies of the late 19th and 20th centuries. Its history of technological achievement—particularly between the 1870s and the 1940s—is unprecedented. BASF's early achievements revolved around coal-tar processes and high pressure synthesis and catalytic processing. Its successes, through international technology transfer to the United States, helped to revolutionize the modern petroleum refining and petrochemicals industries.

BASF was founded in 1865 by Friedrich Engelhorn in Mannheim, Germany. As with the other major German chemical companies of the late 19th century, BASF's success was based on advanced scientific and technical research in the synthesis of coal-tar-based organics. BASF's first important commercial products were coal-tar dyes for use in the textile industry. Indigo dye was its first important commercial technology. Profits from its synthetic dyes went into financing expansion of the company into the heavy chemical business. Prior to World War I, BASF employed approximately 10,000 people and had built its largest facility across the Rhine from its Mannheim plant, at Ludwigshafen.

At this time, BASF expanded beyond synthetic dyes to high-pressure synthesis. Under the technical direction of Fritz Haber and Carl Bosch, BASF developed two of the most important technologies of the 20th century chemical industry: a continuous sulfuric acid process and the famous high-pressure synthetic ammonia-methanol method. With these critical innovations, BASF could make the basic heavy chemicals cheaply, in mass quantities, and using inexpensive, abundant raw materials (e.g., nitrogen from the air to make ammonia).

During this period, the United States and European countries considered BASF the world's most important chemical company. BASF leveraged its technological superiority into market growth through strict patent control and predatory pricing strategies. Thus, BASF sold dyes, ammonia, and methanol at "below market prices" to U.S. firms to dissuade the U.S. chemical industry from expanding production at home. BASF played a prominent role for Germany during World War I since its technologies assured Germany of ready supplies of coal-tar dyes and drugs as well as explosives (for weapons and construction) and fertilizers (for food production) to carry on the war effort.

Even following Germany's defeat, it did not take long for BASF to resume production of its prewar product line and reestablish its market networks internationally. Its power and influence would soon grow within Germany when in 1925 it, along with Bayer, Hoechst, and other German-based chemical companies, joined in membership in the giant chemical cartel I. G. Farbenindustrie (IG Farben). By the late 1930s, the Nazis elevated IG Farben as its technical (and financial) right arm. During World War II, BASF remained the technological center of the cartel, developing the field of high-pressure hydrogenation that produced needed supplies of aviation and automotive fuels and synthetic rubber for the war effort. Following the defeat in Germany, members of Bayer's board of directors were convicted of war crimes, but were given relatively lenient sentences of no more than four years. Under Allied supervision for seven years, IG Farben itself was finally broken up by the Allies in 1952 into its component corporate parts.

The post–World War II period presented difficult challenges, and offered unprecedented business opportunities, to the former IG Farben companies. This was certainly the case with BASF, which now had to go it alone, as it had done before the formation of the cartel. In an ironic twist, the economic difficulties of West Germany in the 1950s helped propel the company back into the limelight; without money to import chemicals from the United States and other countries, BASF became an important supplier of chemical intermediates and products domestically. By the late 1950s, the company produced nitrogen, ammonia, and related products very near wartime levels.

BASF deftly steered its way into an impressive growth cycle during the next half century. Indeed, BASF, like Dow Chemical, was one of the larger chemical companies that remained in the field as a competitor to the oil companies, which had integrated backward into petrochemicals. BASF realized its growth by using a strategy similar to that embraced by companies such as the American company Dow Chemical.

In 2007 the German chemical giant BASF had net sales of nearly $70 billion and employed over 95,000 people.

Recent Strategies

BASF has continued to embrace an active research and development program and linked this work with an aggressive capital expenditures strategy. BASF has in the past dedicated part its its research and development (R&D) budget for developing new, high-value products, such as pharmaceuticals, crop protection agents, fertilizers, and coatings. However, in the 1990s, the company sharply reduced its activities in consumer product lines. As is the case with Dow, BASF excels in improving economies of production (and finding cheap raw materials and feedstock).

Throughout the period from the 1960s to the present time, BASF R&D worked to design larger, more integrated, high-efficiency plants within Germany and worldwide making existing products—e.g., nylon, polypropylene, the amines, polystyrene, and a variety of petrochemical intermediates—cheaply and in mass quantities that effectively competed in their designated markets. The culmination of this strategy came in 2001 when BASF, in partnership with ATOFINA Petrochemicals, completed work on the world's largest steam cracker located in Port Arthur, Texas, to provide a wide range of petrochemical intermediates at low cost to the United States and the global chemical industry.

BASF also has proven itself very flexible in modifying its organizational structure as made necessary by economic circumstances and internal growth. In part, this strategy entailed divestitures of underperforming business units, such as (in the 1990s) flavors and fragrances and advanced materials. It also meant creative reorganization to rationalize operations and streamline the company's operations and to create maximum synergies with its R&D activities. In the 1980s, for example, BASF consolidated all of its North American operations under a newly created subsidiary, BASF Corporation. This consolidation generated substantial economies across the organization. This subsidiary now generates one-fifth of all company sales, with 90 percent of all sales by the corporation coming from plants operating within North America.

In 2001 BASF reorganized its core businesses into its five product segments—chemicals, plastics and fibers, performance products, agricultural products, and oil and gas—and these segments divided into 12 operating divisions. This new organization rationalized and maximized the functioning of value-added chains through the economies arising from "bundling" together products with common properties, production processes, and markets.

Equally important, BASF continually expanded internationally in order to sidestep the problems of restricted markets and cyclical downturns that the German economy as a whole, and the German chemical industry in particular, faced during the 1980s and 1990s. As with its competitor Dow Chemical, BASF internationalized through the strategic use of mergers, acquisitions, and joint ventures. Through the 1970s and 1980s, BASF's strategy was to expand its business and production capacity in North America through the construction of Greenfield plants as well as targeted acquisitions and selected joint partnerships. This expansion culminated in the consolidation in 1986 of all North American operations under a new subsidiary.

This period also saw the company begin operating in other strategic locations as well, including western Europe (Belgium, France, Spain, Denmark, the United Kingdom, Italy), Latin America (Argentina, Brazil, Mexico), Asia (Japan, India, China, South Korea), Australia, Africa (South Africa), and eastern Europe. By 2007 BASF entered into approximately 160 subsidiaries and joint ventures and operated more than 150 plant facilities worldwide.

See Also: Bayer; Dow Chemical; Germany; Research and Development.

Bibliography. F. Aftalion, *A History of the International Chemical Industry,* 2nd ed. (Chemical Heritage Press, 2001); A. Arora, E. Landau, and N. Rosenberg, eds., *Chemicals and Long-Term Economic Growth* (John Wiley & Sons, 1998); BASF, *Annual Report* (2007); J. Beer, *The Emergence of the German Dye Industry* (University of Illinois Press, 1959); A. Findlay, *A Hundred Years of Chemistry*, 3rd ed. (G. Duckworth, 1965); FundingUniverse.com, "BASF, AG" (2007); M. Goran, *The Story of Fritz Haber* (University of Oklahoma Press, 1967); L. Haber, *The Chemical Industry, 1900–1930: International Growth and Technological Change* (Oxford University Press, 1971); P. Hohenberg, *Chemicals in Western Europe, 1850–1914: An Economic Study of Technical Change* (Rand-McNally, 1967); P. Spitz, *Petrochemicals: The Rise of an Industry* (John Wiley & Sons, 1989); F. Taylor, *A History of Industrial Chemistry* (Abelard-Schuman, 1957).

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Basis Points

A basis point is a unit of measurement in the market for loan finance used by the market participants in relation to interest rates and bond yields. One basis point is one percent of one percent. The system of basis points is, therefore, grounded in the decimal system (Base 10). Interest rates are frequently quoted to three or four decimal points. One basis point equals 0.01 percent, 100 basis points equal 1.0 percent. For instance, if an interest rate changes from 4.65 percent to 4.67 percent it has changed by 2 basis points. A change from 4.6525 percent to 4.6757 percent would represent 2.32 basis points.

In relation to large principal sums, the money value of a basis point can be significant. For some transactions involving very large sums and very fine rates, even a basis point may be too large for practical purposes. In some instances hundredths or, even thousandths, of a basis point may be appropriate. For example, in a debt issue of $5 billion a hundredth of a basis point would be worth half a million dollars.

Basis points have become established as a common terminology that is useful for expressing small differences in interest rates, and they indicate the low order of magnitude at which the financial markets work. The term is usually abbreviated in use to BP, bp, or bip. It is more convenient, for example, to talk of 25 basis points rather than 0.25 percent, which offers potential for ambiguity and confusion. Given the small changes in interest rates with which the financial markets deal, it is appropriate to have a suitably calibrated measurement. The change in money value of a bond price in relation to a one basis point change in its yield is referred to as the *basis point value*. The term *basis point* should not be confused with *basis*, which is the term used to describe the difference between a futures contract price and a spot price.

Basis points are used to express a spread over a benchmark interest rate for a particular borrower. For fixed interest rates the benchmark will usually be a government bond rate and for floating (variable) interest rates a benchmark such as LIBOR (London Interbank Offered Rate) will be used. A company might, for example, arrange a 10-year floating-rate loan at LIBOR+ 75 basis points. If LIBOR were 4.375 percent, this would represent a rate of 5.125 percent. The spread in basis points will remain constant but the variability of the rate will be derived from the movement of the benchmark rate, which will change. The floating rate the company pays would vary with movements in LIBOR and the rate would be changed at agreed intervals, perhaps every six months.

Basis points are also used in pricing certain derivative instruments. For example, the premium for a credit default swap (CDS) will be expressed in basis points, representing the annual payment the bondholder will make to the seller of the swap, who assumes in return the default risk on the bond. The premium will be calculated as basis points of the face value of the bond. In the market for exchange-traded interest rate futures contracts, the minimum interest rate movement allowable is expressed in a unit known as a "tick," which is denominated in terms of basis points of interest. The tick size will vary from contract to contract. For example, the tick size for a three-month eurodollar interest rate futures contract traded in Chicago will be one basis point, whereas for a three-month euro LIBOR futures contract traded in London the tick size will be half a basis point.

See Also: Arbitrage; Bid/Ask Spread; Credit Ratings; Debt (Securities); Financial Markets; Futures Markets; Government Bonds; Interest Rates; LIBOR.

Bibliography. D. Blake, *Financial Market Analysis* (John Wiley, 2001); M. Durbin, *All About Derivatives* (McGraw-Hill, 2006); S. Valdez, *An Introduction to Global Financial Markets* (Palgrave Macmillan, 2007).

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Bayer

Bayer AG is a German chemical and pharmaceutical company founded in Barmen, Germany, by Friedrich Bayer in 1863. Bayer has its headquarters in Leverkusen, North Rhine-Westphalia, Germany. It is currently the third largest pharmaceutical company globally. Bayer was one of the important German chemical companies of the late 19th and 20th centuries. Its signature product was aspirin made from coal tar. The company in 2008 is a considerably different corporate entity. Since a major reorganization in 2003, it has become the strategic management holding company for the Bayer Group.

Bayer AG is composed of five main divisions: Healthcare, Crops Science, Materials Science, Technology Services, and Business Services. Bayer's Healthcare activities involve innovation and development in pharmaceutical and medical products; Bayer Crop Science deals with chemical products and services related to crop protection and nonagricultural pest control; Bayer Materials Science focuses on research and development of advanced and high-performance industrial chemical materials such as polycarbonate, polyurethane, and advanced organic polymers, advanced coatings, and such cutting-edge materials as nanotube systems and technology; Bayer Technology Services is Bayer's process and plant development arm, and includes plant design, engineering, construction, and optimization; and Bayer Business Services is Bayer's center for information technology (IT) design, development, and implementation in such areas as infrastructure and applications, procurement and logistics, human resources and management services, and finance and accounting.

In addition to these activities, Bayer has formed the company Currenta, a joint-venture service company with Lanxess that offers a variety of services dedicated to the chemical industry, including utility supply, waste management, infrastructure, and safety and security. As of December 2007 Currenta operates the CHEMPARK sites in Leverkusen, Dormagen, and Krefeld-Uerdingen, Germany.

Bayer AG has four major sales regions. In descending order of sales, these are Europe, North America, Asia/Pacific, and Latin America/Africa/Middle East. The year 2007 was a profitable year for the company. Sales rose by 12 percent to €32.4 billion. Between 2007 and 2008, Bayer experienced increased sales across all divisions and geographical regions.

History

As with the other major German chemical companies of the late 19th century, the company's success was based on advanced scientific and technical research in the synthesis of coal-tar-based organics. Bayer's first important commercial products were coal-tar dyes for use in the textile industry. Because of the chemical linkages between these compounds and pharmaceutical products, Bayer moved into biochemical research and innovation. By the start of World War I, Bayer, under the technical leadership of chemist Felix Hoffmann, discovered and brought to market such landmark pharmacological products as aspirin, sulfa drugs, and anesthetics.

During this period, Bayer became famous for holding tightly onto its patents to gain commercial advantage or as political leverage for German colonial interests. This policy was criticized by humanitarian groups at that time for the delays it caused in the delivery of life-saving drugs in Europe (e.g., to fight pneumonia) and less developed regions, such as Africa (e.g., to use against cases of sleeping sickness). Bayer also developed "mustard gas" that was used by the German military in World War I. As part of its reparations requirements following the war, Bayer's assets—including patents and trademarks—were confiscated by the United States and its allies. These assets were eventually acquired and freely worked by selected chemical firms in the United States, Canada, and other countries.

In 1925, as nationalistic calls for material self-sufficiency spread, the German chemical industry combined into the conglomerate IG Farbenindustrie (IG Farben), which soon became the technical (and financial) hub of the Nazi regime. Bayer was a central part of IG Farben, which owned 42.5 percent of the company. During World War II, IG Farben in general, and Bayer in particular, became an integral part of the Nazi war machine. As such, it played an active role in Nazi atrocities. It developed the chemical Zyklon B, used in the gas chambers at Auschwitz and other German concentration camps, and made extensive use of slave labor in factories associated with the camps. In 1947, members of Bayer's board of directors, indicted for war crimes, were convicted and sent to prison for up to eight years.

But Bayer, as did other firms of the IG Farben conglomerate, would in a short time rise from the ashes of war. In the postwar years, Bayer underwent significant change and expansion during the decades of globalization. With IG Farben ordered dismantled by the Allies, Bayer was once again an independent company. With the company allowed to continue operating its sites at Leverkusen and Elberfield, Bayer refurbished its plants, replacing outdated equipment and machinery, making full use of the newest American chemical engineering. The company developed new products, including plastics, fibers, and insecticides and, through acquisition of AGFA, entered into photographic products. Bayer proved itself resilient and grew rapidly through the 1950s. During the decade, American investors, increasing impressed with the company's success, held up to 12 percent of the company's stock. During the 1960s, Bayer's domestic production grew 350 percent.

Recent Strategies

Bayer's success in the postwar period, and especially after 1970, has depended on the adoption of three distinct but closely interrelated strategies. First, it captured competitive differentiation in the market through original R&D through which it achieved "new product development, proprietary product technology, and low manufacturing cost." Second, Bayer has been adept at identifying and negotiating the creation of strategic merger and acquisition deals and, as critically, partnering and joint-venture arrangements. These have been primary instruments by which Bayer has been able to expand its pharmaceutical, healthcare, agrichemical, and advanced materials businesses, which the company considers the major drivers of its present and future growth. Third, and most important, the company has been successful in leveraging its first two strategies to embrace and exploit the globalization movement to maximum advantage.

The 1950s and 1960s ushered in the first wave of international expansion for the company. By the early 1960s, Bayer operated production plants in eight countries in Europe, Asia (India and Pakistan), and North America. The international expansion strategy of Bayer at this time focused on "final stage processing" by which the more expensive ("active") chemicals were made in Germany and then shipped abroad to be mixed in Bayer facilities (or by subcontractors) with less expensive, inert materials that would be prohibitively expensive to transport over long distances. These arrangements meant that Bayer could profitably manufacture and market products such as agrichemicals and pharmaceuticals in developing countries.

The 1960s and 1970s saw rapid growth for Bayer's presence in the U.S. market, not only exports but, even more significantly, foreign direct investments in the form of new and refurbished plants. The postwar economy was booming in the United States and, at the same time, U.S. tariffs were on the rise. Moreover, relatively high costs of labor and energy and limited markets in Europe meant that it made strategic sense for Bayer to dedicate direct investment money in the United States.

Important innovations from Bayer that were crucial for its market growth in the United States were the polyurethanes, dyestuffs, and engineering plastics. Through the 1970s, Bayer's foreign investment in the United States increased from $300 million to over $500 million. In the 1980s as well, Bayer actively pursued the spending of foreign direct investment in South America, taking advantage of the benefits afforded to foreign business by Mercosur, which induced privatization of government-held petrochemical holdings. Overall, by the late 1980s, about three-quarters of Bayer's total sales originated from outside Germany. By the 1990s, Bayer had advanced in Asia. Through the formation of strategic joint ventures and partnerships, Bayer has established a presence in China and Taiwan, as well as other parts of Asia. Beyond 2008, Bayer anticipates continued leveraging of its research and development work in the formation of joint ventures and strategic partnerships within its business areas over a growing number of international markets.

See Also: BASF; Foreign Direct Investment, Horizontal and Vertical; Germany; Research and Development.

Bibliography. F. Aftalion, A *History of the International Chemical Industry,* 2nd ed. (Chemical Heritage Press, 2001); A. Arora, E. Landau, and N. Rosenberg, eds., *Chemicals and Long-Term Economic Growth* (John Wiley & Sons, 1998); Bayer AG, *Annual Report* (2007); J. Beer, *The Emergence of the German Dye Industry* (University of Illinois Press, 1959); A. Findlay, *A Hundred Years of Chemistry*, 3rd ed. (G. Duckworth, 1965); FundingUniverse.com, "Bayer AG," (2007); L. Haber, *The Chemical Industry, 1900–1930: International Growth and Technological Change* (Oxford University Press, 1971); P. Hohenberg, *Chemicals in Western Europe, 1850–1914: An Economic Study of Technical Change* (Rand-McNally, 1967); P. Spitz, *Petrochemicals: The Rise of an Industry* (John Wiley & Sons, 1989); F. Taylor, *A History of Industrial Chemistry* (Abelard-Schuman, 1957).

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Behavioral Economics

The standard theoretical model of economic behavior presents human beings as calculating, rational agents who (a) are motivated by self interest and make clear and logical decisions based upon their preferences and incentives, and (b) possess an unlimited capability to process information. Although intuitively appealing, this model of consumer decision making has been criticized by many for its highly stylized presentation of reality that systematically fails to explain specific behavior. For some, the rational choice model has simply collapsed under the weight of contradictory evidence. Behavioral economics seeks to provide economic analysis with a more realistic, psychological foundation by examining the ways in which various aspects of individual and collective psychology influence economic decision making.

It is impossible, in the space available, to consider the full range of ideas associated with behavioral economics and its empirical findings. The following will therefore concentrate on outlining a number of key areas. The first point to consider is the notion of "bounded rationality." This refers to the view that economic agents are incapable of fully comprehending the complexity of the world in which they live, implying that they do not possess an unlimited capability to process information. A desire for cognitive simplification leads individuals to employ a number of techniques or rules-of-thumb, sometimes referred to as "cognitive heuristics" or "heuristics rules" in order to process information, evaluate outcomes and so make decisions and choices.

These "heuristics" highlight the human tendency to rely heavily upon specific reference points such as the use of memories, ideas they are familiar and comfortable with, and things that they have seen or heard in everyday life. If an unemployed worker is questioned about the total unemployed labor force in the economy, it is probable he or she will overestimate the figure due to the frequency of their contact with other unemployed workers. "Heuristics" are extremely important in economic decision making as they can lead to systematic errors such as overconfident assessments of future events. A famous example of this is the "gambler's fallacy," which highlights people's intuitions about probabilities and the erroneous belief that because a particular event has not been observed in a number of repeated independent trials it is likely to occur in the future.

Another key feature of behavioral economics is "framing" and the view that decisions or preferences are heavily influenced by the ways in which a choice is presented. This idea contradicts the predictions of the standard model of economic rationality and can be illustrated by means of the following example. Assume than an epidemic is predicted to kill 10,000 people. Two different programs, *A* and *B*, are proposed to deal with the problem, and it is left to the government to decide which to implement. If the government selects program *A*, 4,000 people will survive; if it selects program *B*, there is a 40 percent chance that 10,000 people will survive and a 60 percent that nobody will survive. Based on this information, research suggests that a majority of people would select program *A*. Let us now alter the way in which the choice is "framed" and suggest instead that the selection of program *A* will lead to 6,000 people dying, while under program *B* there is a 40 percent chance that nobody will die, and a 60 percent chance that 10,000 people will die. Even thought the second decision problem is identical to the first, research suggests that people will actually reverse their initial preferences and now select program *B*. By "framing" the decision problem in a different way, individuals have switched from being risk averse to exhibiting risk-seeking behavior.

Behavioral economics deals with other important ideas, ranging from the altruistic aspects of human nature (a view that runs counter to standard economic theory) through to issues involving self-control and willpower. The implications of this latter point are worthy of examination. The rational choice model predicts that economic agents will be better off the more choices and opportunities that are available to them. Yet evidence of the self-control problems faced by many people contradicts this view. One example of this would be addictive behavior (such as over-dependence on alcohol or tobacco) that highlights people making choices and decisions that conflict with their long-term interests. This suggests that people may actually be worse off if the number of choices available to them increases, so indicating an important role for government to impose control mechanisms.

Behavioral economics is a rapidly developing, interdisciplinary discipline that draws heavily on research from, among other areas, anthropology, psychology, and sociology. Of growing interest is the new field of neuroeconomics, which employs brain scan technology to examine how the innate structure of the mind influences decisions. By seeking to gain greater insights into the decision-making process of both individuals and institutions, the study of behavioral economics has important implications for a number of subject and policy areas including the study of financial markets, development economics and international poverty, labor economics, health economics, and policies directed toward tackling environmental catastrophe.

See Also: Behavioral Finance; Neuroeconomics.

Bibliography. C. Camerer, G. Loewenstein, and M. Rabin *Advances in Behavioral Economics* (Russell Sage, 2004); P. Diamond and H. Vartiainen, eds., *Behavioral Economics and its Applications* (Princeton University Press, 2007); D. Kahneman and A. Tversky, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* (v.47/2, 1979); D. Kahneman, J.L. Knetsch, and R. H. Thaler. "Fairness as a Constraint on Profit Seeking," *American Economics Review* (v.76/4, 1986); A. Lewis, ed., *The Cambridge Handbook of Psychology and Economic Behaviour* (Cambridge University Press, 2008); M. Rabin, "Psychology and Economics," *Journal of Economic Literature* (v.36/1, 1998); R. T. Thaler, *Quasi-Rational Economics* (Russell Sage, 1991); N. Williamson, *An Introduction to Behavioral Economics* (Palgrave Macmillan, 2007).

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Behavioral Finance

Behavioral finance is closely related to the study of behavioral economics and seeks to integrate cognitive psychology into the study of financial markets and institutions. Due to the availability of data, behavioral finance is the branch of economics were the application of behavioral ideas has had its greatest impact.

Behavioral finance argues that individuals attach different levels of satisfaction to gains and losses (a concept referred to in the literature as "prospect theory"). Strong risk aversion among individuals suggests that they view losses as significantly more painful than equivalent gains. Such behavior may therefore manifest itself in a strong unwillingness to sell failing investments since it would force the individual to realize real losses. A further development on this, referred to as "mental accounting," suggests that people evaluate the effects of financial decisions by separating gains and losses, implying that satisfaction is dependent on the ways in which gains arise rather than their effects on final, overall wealth.

A second aspect of behavioral finance is the belief that investment behavior is heavily influenced by simplifying forecasting strategies ("heuristics") that assist market participants in making investment decisions. Whereas standard theory argues that it is useless to form such decisions based on an extrapolation of past exchange rate movements, stock price movements, or earnings trends, research suggests that investors actually do employ this simple technique. "Heuristics" can lead investors to have a disproportionate view of their abilities, possibly make them believe they can directly influence outcomes, and so make decisions without adequate information. Such cognitive biases have the potential to generate systematic errors and can, in extreme cases, generate stock market bubbles or crashes.

A third aspect is the view that investors do not engage in full portfolio diversification, but overinvest in areas they understand or are comfortable with ("familiarity breeds investment"). Furthermore, individuals who regularly deal with financial risk may be unable to fully comprehend the risks associated with different investments, so leading them to attach higher risk premiums to certain investments. A limited knowledge of foreign markets, for example, may lead investors to place a higher risk premium on foreign investments over domestic investments.

Behavioral finance draws upon a large body of research that highlights the inability of standard models to explain a number of financial phenomena. Historical data has highlighted a dramatic disparity between actual share price movements when compared with those calculated via the dividend discount model (which calculates the value of a share price, at any moment in time, as being equal to the sum of discounting future dividends). Such evidence has led many behavioral economists to conclude that cognitive psychology must play an important role in determining stock market volatility. For example, cognitive biases can exert powerful effects on asset prices, with investors under reacting or over reacting to new information. Research on the behavior of stock prices suggests that investors may push prices too high in response to good news, or push them too low in response to bad news.

Attempts have been made to salvage the idea of rational and efficient capital markets by arguing that the existence of only a few rational agents in the market will negate the effects of behavioral factors. A simple example will illustrate this idea. Assume that there are two kinds of agents in the market, those who conform to the standard model of economic rationality, group *R*, and those who do not conform to the standard model and who instead employ some heuristic rule in forming their decisions, group *H*. If, via the use of their heuristic rule, group *H* drive the exchange rate above its fundamental value, it is argued that group *R* will response to the profit opportunity and bring to rate back down. The outcome, in other words, is seen to be consistent with the rational economic model even through some of the participants are following simplifying rules-of-thumb to make their decisions. Such arguments do not appear to be borne out by the available evidence however, and some economists have argued that it may take a significant number of group *R* traders to eliminate the actions of group *H* traders.

By seeking to place the human element firmly at the center of the investment decision-making process, the study of behavioral finance has important implications for policy regulation of financial markets.

See Also: Behavioral Economics; Neuroeconomics.

Bibliography. W. M. F. De Bondt and R. Thaler, "Does the Stock Market Overreact?" *Journal of Finance* (v.40/3, 1985); P. De Grauwe and M. Grimaldi, *The Exchange Rate in a Behavioral Finance Framework* (Princeton University Press, 2006); A. Schleifer, *Inefficient Markets: An Introduction to Behavioral Finance* (Oxford University Press, 2000); R. Thaler, ed., *Advances in Behavioral Finance* (Russell Sage, 1993).

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Belarus

The Republic of Belarus (also Byelorussia) is an eastern European country, which was formerly the most western of all Soviet Union republics. It became independent in 1991, although it largely aligns its foreign policy with its eastern neighbor, the Russian Federation. Although the country had a very solid industrial base in the last years of the Soviet Union, it has lost much of its advantage with the breakup of the Soviet Union and the loss of the former Soviet internal market. Its advantage has also weakened under an authoritarian political regime largely dominated by the president.

Belarus regained its independence in 1991 with the agreed breakup of the Soviet Union. It is, however, a member of the Commonwealth of Independent States (CIS), a treaty-based organization bringing together a number of the former Soviet republics. The Russian Federation plays a pivotal role in the CIS leadership. Historically Belarus, as such, was never independent and sovereign in the past. During World War II, there was an attempt to create a Nazi-supported puppet state, but to a large extent the area of Belarus was directly controlled by the Germans, and many people suffered.

It has been reported that every fourth person in Belarus was killed in World War II. The war devastated the national economy, as those factories that were not affected by military operations were relocated to either Russia or Germany. It is estimated that more than half of the pre–World War II economy was destroyed or relocated. Interestingly, Belarus is a founding member of the United Nations (UN), although in 1944 it was a constituent republic of the Soviet Union (together with Ukraine). This inconsistency gave the United States more than one vote in the General Assembly of the UN, but this right has never been exercised.

The economy of Belarus recovered very well in the postwar period, and it became a major industrial base in the region. This was supported by the promotion of immigration to Belarus of professionals and others who would spur economic growth. To a large extent the industrialization plan worked well, and achieved steady positive results until the breakup of the Soviet economy. In the model of a centralized economy, cross-republic (cross-jurisdiction) economic collaboration and integration were one of the major tasks. Therefore, the factories in Belarus depended largely on the raw material produced in other Soviet republics, and all the plans were made when energy prices were more or less centrally fixed (capped) regardless of the movements in the international market for energy.

With the breakup of the federal common market and liberalization of input prices, Belarus factories lost regular supplies and most of them are de facto bankrupt, although on paper they may still be in existence and operational. One of the possible solutions is the renting of factory premises (usually fractionally) to individual entrepreneurs, where they accept the obligation to employ some of the de facto laid-off workers of the state-owned factory. However, these attempts have not yielded long-term stability.

The economy of Belarus has recorded high growth rates in the last few years. This is mainly due to the fairly low starting base. The Republic of Belarus is regarded as a nondemocratic country, where elections are not universally recognized. The officially reported growth rates are just below 10 percent, and this certainly would have put Belarus on the map of economic successes if it were not such an isolated country. The regime of President Aleksandr Lukashenka is regarded as extremely autocratic (dictatorial) and stifling of any form of societal innovation. On a few occasions, foreign nationals have been evicted from Belarus, or simply advised to leave.

The major industries in Belarus are production of heavy industrial track, heavy chemical industries (usually the most "dirty" ones), and some energy production. The computing industry is growing, as well as the services sector. Agriculture is still rather intensive. Some attempts have been made to privatize companies, but success was not reported. However, it is possible that silent nomenclature privatization has taken place, although not made public as yet.

In line with countries with similar political regimes, the nomenclature privatization model is most likely to have taken place. This process is usually supported by purposely initiated high (hyper-) inflation, which was recorded in Belarus in the late 1990s and early 2000s. At present, the nominal inflation is still higher than reported economic growth, and overshoots it by about 2 percent. The overall economic climate for entrepreneurs and foreign direct investments is not regarded as very good, and most likely it will remain so in the foreseeable future.

See Also: Russia; Transition Economies; Ukraine.

Bibliography. A. Axell, *Russia's Heroes, 1941–45* (Carroll & Graf, 2002); S. M. Birgerson, *After the Breakup of a Multi-Ethnic Empire* (Praeger/Greenwood, 2002); K. D. Martinsen, *The Russian-Belarusian Union and the Near Abroad* (Norwegian Institute for Defence Studies/NATO, 2002); J. Zaprudnik, *Belarus: At a Crossroads in History* (Westview Press, 1993).

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Belgium

Belgium (11,787 sq. mi., population 10,666,866 in 2008, GDP $377 billion in 2007) is one of the founding members of the European Union (EU), and a key participant in the history and economics of Europe for centuries. Along with the Netherlands and Luxembourg, Belgium is part of the Benelux group of states, which together formed the Low Countries in the Middle Ages and early modern era. The so-called battlefield of Europe, the area that became Belgium was the site of major battles among European powers from the beginning of the 17th century until Belgian independence was declared in 1830.

Due to its location and intermingled history with surrounding nations, Belgium has three official languages: Dutch, French, and German. Flemish is the common term both for the Belgian Dutch dialect and the Belgian Dutch people, and the Flemish masters are among the great Renaissance and Baroque painters. Because the Belgian Revolution that led to the nation's independence began with the poor treatment of French-speaking Catholics in what was then the United Kingdom of the Netherlands, Catholicism has played an important role in Belgian culture and politics since the state's inception.

The country has a number of major political parties—thanks to its linguistic heritage, Belgium's political parties tend to be divided by linguistic lines as well as political ones—among which Christian Democrats have long been prominent. The basic tenets of Christian Democracy call for applying Christian principles to public policy; Christian Democratic parties tend to be socially conservative but otherwise left of center with respect to economic and labor issues, civil rights, and foreign policy. From 1958 to 1999, the Christian Democrats remained in power in Belgium, until public outcry over a food safety scandal mobilized the "rainbow coalition" of the Dutch and Francophone Greens, Liberals, and Social Democrats.

Various party coalitions have been in power in the decade since, and as of 2008 Belgium is in a political crisis due in large part to the disagreement between Dutch and Francophone parties over constitutional reform, after a series of liberal legal reforms decriminalizing certain drugs and legalizing same-sex marriages. Pressure from the king has been insufficient to resolve differences between the parties to form a government coalition.

The king (currently Albert II, b. June 6, 1934) is Belgium's head of state and appoints various governmental ministers who compose the federal government, including the prime minister. The Belgian Constitution preserves an equal ratio of Francophone and Dutch ministers. The bicameral parliament consists of a Senate made up of seven representatives appointed by each of the three language-group community parliaments, 40 directly elected representatives, and 10 "senators by right" (which include the king's children) who by tradition abstain from voting; and a Chamber of Representatives with 150 members elected from 11 electoral districts. Voting in Belgium is compulsory.

Belgium is highly industrialized, with a long tradition of supporting free market policies and an open economy. Compared to other countries, it ranks among the highest in the world in terms of exports per capita, and its principal exports are automobiles, food products (such as the legendary chocolate), metals, textiles, petroleum products, and diamonds, exports that speak both to its industrial and industrious natures and to its long history as one of Europe's cultural epicenters. The Flemish regions historically outpace the Walloon (French-speaking) regions economically and in manufacturing in particular. The first country on the continent to adopt the principles and technologies of the Industrial Revolution, Belgium was riddled with mines and mills throughout the first half of the 19th century, and remained one of the leading industrial nations (behind only the United Kingdom and later the United States) until shortly before World War I. Like much of Europe, it felt the blows of the Great Depression in the 1930s and the oil crises in the 1970s.

In the aftermath of World War II, the Benelux economic union—taking its name from the first letters of Belgium, Netherlands, and Luxembourg—was formed between those three nations for common trade, and is now sometimes used to refer rather more generally to those countries which once were "Low." The precursor to Benelux is the Belgium-Luxembourg Economic Union, an economic and monetary union between those two nations, which now occupies itself with fairly specific points of procedure since its major aims have been subsumed by the EU. The Benelux states were major players in the formation of the EU from the very start.

See Also: European Monetary Union; European Union; Luxembourg; Netherlands.

Bibliography. Paul Arblaster, *A History of the Low Countries* (Palgrave Macmillan, 2005); J. C. H. Blom and Emiel Lamberts, eds., *History of the Low Countries,* James C. Kennedy, trans. (Oxford, 1999); Bernard A. Cook, *Belgium: A History* (Peter Lang, 2005); John Fitzmaurice, *The Politics of Belgium: A Unique Federalism* (Westview Press, 1996).

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Bel-20 Index (Brussels)

The Bel-20 Index is a real-time (computed in principle every 15 seconds) basket of minimum 10 and maximum 20 stocks (listed on Euronext Brussels and meeting some specific criteria) that exhibits the highest free float adjusted market capitalization. The market capitalization is the public consensus on the value of a company's equity (computed by multiplying the share price by the number of shares outstanding) and the "free float" represents simply the percentage of the stocks that is freely tradable on the market. The stocks composing the Bel-20 Index are also weighted according to their market capitalization adjusted by the free float.

In finance, an index is essentially a virtual portfolio of securities representing a specific (sub-) market. Each index has its own computation methodology. The index value is meaningless (indeed it is expressed in "points"), but its changes are informative. It is not possible to invest in an index; nevertheless, one can invest in a fund (exchange-traded fund, index fund) that replicates the index (returns) as closely as possible. Different indexes need to be composed to represent the financial markets in diverse ways and to compute risk and performance measures. Indeed, a risk or performance measure alone has no value if it has not been adjusted to a pertinent benchmark.

The Bel-20 Index was launched in late December 1990 at an arbitrary level of 1,000 points (called its base value). The Bel-20 is a market value–weighted index and consists of the stocks of approximately 20 of the leading Belgian companies traded on Euronext Brussels. The Bel-20 Index is the major benchmark index of Euronext Brussels and represents the main part of the Belgian stock market. In fact, the principal objective of this index is exactly the replication of the Belgian equity market.

Its composition is reviewed annually (except for exceptional cases). This review is based on the information as of the end of December and is effective the first trading day of March. However, after a recent reform (2008), the reviewing delay can be reduced to one month (instead of one year) when the index integrates less than 20 stocks. This reform has also relaxed some selection criteria (some stocks taken over by a foreign group can remain in the index) and the weight of a Bel-20 component cannot exceed 12 percent at review time (instead of 15 percent before the reform).

In June 2008 the 20 companies composing the Bel-20 were Ackermans, Agfa-Gevaert, Bekaert, Belgacom, CNP, Cofinimmo-Sicafi, Colruyt, Delhaize Group, Dexia, Fortis, GBL, Inbev (Ex. Interbrew), KBC, Mobistar, Nyrstar, Omega Pharma, Solvay, Suez, UCB, and Umicore. The three main components were Suez (16 percent), KBC (12 percent), and Inbev (12 percent).

To improve the visibility of the Belgian equity market, Euronext Brussels integrated two other benchmarks in 2005: the Bel-Mid (composed of approximately 33 companies) and the Bel-Small (composed of approximately 46 companies) Indexes. Their composition is reviewed each quarter (which is generally more frequent than the Bel-20 Index) and these two indexes are also continuously quoted. Together, the three indexes (Bel-20, Bel-Mid, and Bel-Small) cover about 70 percent of the Belgian listed companies. There are an increasing number of financial products that derive their value from the Bel-20 Index. Indeed, investors can buy futures contracts, options contracts, and other more complex derivatives on the Bel-20 Index.

Euronext Brussels has launched a new index called the "Bel-20 Volatility Index" to measure the implied volatility of the option prices. This index intends to offer the needed tools to monitor the option prices. The markets can use this volatility index as a real barometer: A high level means that the markets will expect more volatility in the underlying, and inversely. The Bel-20 Volatility Index follows the traditional VIX methodology (an American indicator based on the options contracts traded on the S&P 500 Index and quoted on the Chicago Board Options Exchange). The Euronext board hopes that this index integration will improve the accuracy of professionals' perceptions about the Belgian market.

The Bel-20 Index has different reported codes (or ticker symbols) depending on the data provider considered. The main codes are the following: the Mnemonic code is "BEL20," the ISIN code is "BE0389555039," the Reuters code is ".BEL20," and the Bloomberg code is "BEL20."

See Also: ATX Index; Belgium; CAC 40 Index (Paris); DAX Index (Germany); Fortis; S&P 500 Index; Swiss Market Index; Taiwan Weighted Index.

Bibliography. "Consultation Paper: Bel-20 Index" (NYSE Euronext, 2008); "Rules for the BEL-20 Index" (Euronext, August 2006).

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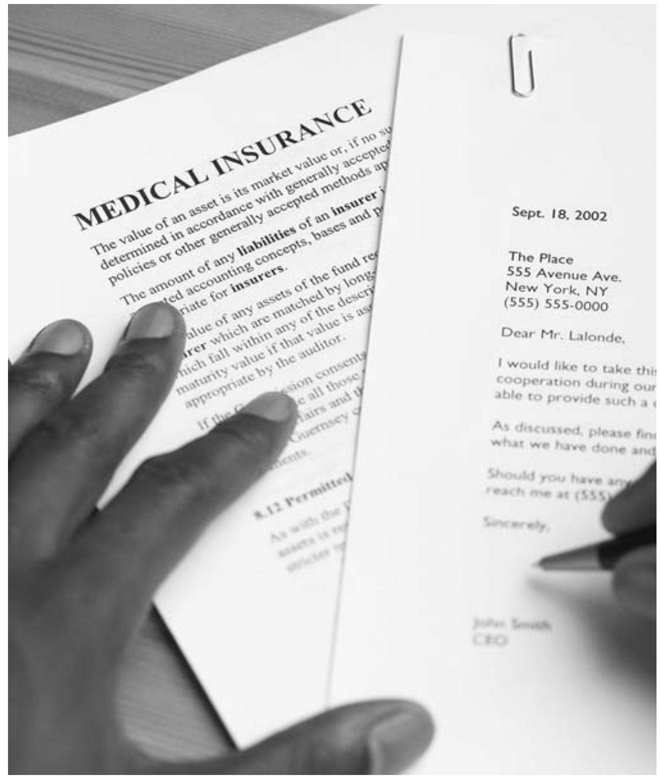
Benefits

Benefits are payments or entitlements that are provided by an employer and offered to its employees. Benefits are also referred to as company benefits, employee benefits, and fringe benefits. In most cases, benefits are promised to an employee as part of an employment agreement. Benefits can also be extended via the government. In this situation, people are provided payments or entitlements based on being a citizen of that country.



In countries without national healthcare, employers are often burdened with offering health insurance in benefit packages.

Some types of benefits include health insurance, life insurance, paid vacation and sick leave, maternity and paternity leave, 401(k) contributions, pensions, profit-sharing, bonuses, and stock options. Companies also provide nonfinancial benefits like employee wellness programs, weight loss programs, and exercise facilities. In many cases, the employer will provide access to the benefit and make payments on behalf of the employee. For example, many companies will provide employees with health insurance. This usually includes providing access to the healthcare and paying a portion of the premiums on behalf of the employee.

The purpose of providing these entitlements or benefits is to attract and retain employees. Typically, companies will offer benefits along with a salary as part of an employment contract. Some companies are able to secure and maintain more qualified employees because of the benefits that they offer. In many cases, the organization will increase the value of the original benefits package over time. For example, in some companies, employees are not eligible to participate in 401k profit-sharing programs until they have completed two years of employment with the company. After an employee is eligible for the program, they are only partially vested in the beginning and become fully vested over time.

Generally, the employer bears all or the majority of the cost for the company benefits. For benefits like paid vacation time and sick leave, the employer bears all of the cost. However, many benefits, like healthcare, require a shared cost that is split between the employer and the employee. For healthcare, the employer typically pays the major portion of the premiums, while the employee pays a smaller portion. Providing benefits to employees can be quite costly. As the cost of healthcare continues to rise in most countries, providing employees with paid vacation time, stock options, healthcare, and other benefits has become quite expensive. Therefore, most companies try to limit these expenses. If not managed properly, the costs associated with company benefits can become a financial burden for the organization.

Company benefits are not always offered to all employees. The cost associated with providing benefits is a major factor influencing why benefits are not extended to all employees. Generally, company benefits are extended to employees who are considered full-time and/or salaried. Although some organizations provide benefits to part-time or hourly employees, these benefits are usually limited and not comparable to the benefits provided to full-time employees. In most cases, part-time or hourly workers are provided very few, if any, benefits at all.

Cultural Influence

Providing employees with company benefits has become customary in many countries around the world. Cultural influences and laws have a direct impact on what benefits a company can and will provide its employees. As a result, the benefits that are offered to an employee can vary significantly from one company to another. Most companies end up offering a unique package of benefits that is based on its country's customs and laws, the size and type of organization, and its financial situation. Some other factors that can directly impact which benefits a company offers an employee can include things related to the employee, like educational background, skill level, job title, and length of time the employee has worked for the company.

Where a company is located has a major effect on the benefits that it offers its employees. That's because a company's location can influence which benefits it can legally provide, the company's culture, and employee expectations. This influence can be significant and tends to vary greatly by country. Countries have laws and cultural norms with different beliefs regarding basic rights and what citizens are entitled to have provided by the government. Some countries have cultures and governments where the government provides very few benefits to its citizens, while some countries have governments that provide a lot of benefits to its citizens. This has a direct impact on the benefits that a company provides to its employees.

Many countries believe that their citizens are entitled to basic healthcare. Therefore, these countries will have national healthcare that provides all or a portion of the healthcare to its citizens. If a company is located in a country that provides healthcare to its citizens, then there is less burden on the company to provide healthcare benefits to its employees. In countries like Great Britain, Canada, and Botswana, the government provides all or some portion of the healthcare for its citizens. As a result, the companies that are located in these countries have less of a burden when it comes to providing basic benefits like healthcare to its employees.

If the company is located in a country where the government does not provide some of these basic benefits to its citizens, then there is typically a greater burden on the company to provide these types of benefits to its employees. In the United States, there is no national healthcare. Therefore, the majority of the people have to work to get access to healthcare. In a country like this, the companies that provide employment tend to provide healthcare as part of the benefits package for employees and bear a greater cost burden.

Some countries provide other benefits to their citizens like social security, pension plans, and disability insurance, which can also impact the benefits that a company offers to its employees. Similarly, a country's laws can have a significant impact on what benefits a company is required to offer its employees. In many countries, there are laws that require the companies to offer benefits like paid time off, paid sick leave, maternity leave, etc. For example, when compared to many other countries, Germany has employment and labor laws that are very favorable to employees, so companies that are located in Germany are required to offer fairly generous benefits because of the employment and labor laws in that country. These laws require the employers in Germany to provide a lot of benefits to the employee; employees are required to receive benefits like generous paid vacation and sick leave. These types of laws place a greater burden on the companies that are located in Germany versus companies that are located in other parts of the world.

As stated previously, benefits are entitlements or payments that are granted to an employee via an employment contract with an employer. The types of benefits that are offered by a company are influenced by many factors, including the laws, culture, and government benefits offered in the country where it is located. Although providing employee benefits is customary, it can be quite costly and create a burden for the company. For this reason, benefits are generally not offered to all employees. However, companies will extend benefits to retain and maintain qualified employees.

See Also: Employer–Employee Relations; Family Leave; Healthcare Benefits/Systems; Holidays; Maternity Leave; Perquisites; Work/Personal Life Balance.

Bibliography. M. Ala and B. Brunaczki, "Online Benefits Solutions—A New Trend in Managing Employee Benefits Programs," *Journal of Health Care Finance* (2003); S. Collins, "Employer-Based Health Insurance Past, Present, and Future," *Healthcare Financial Management* (2007); M. Danis et al., "Low-Income Employees' Choices Regarding Employment Benefits Aimed at Improving the Socioeconomic Determinants of Health," *American Journal of Public Health* (2007); R. Gisonny and S. Douglas, "Nationwide Savings Plan Automatic Enrollment Getting Associates Prepared for Retirement," *Benefits Quarterly* (2008); B. McGuinness, "The Change in Employee Loyalty," *Nursing Management* (1998); "The New Equilibrium: Work/Life Balance," *Benefits Quarterly* (2008); Christopher G. Reddick and Jerrell D. Coggburn, *Handbook of Employee Benefits and Administration* (CRC publishing, 2008).

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Bent Measuring Stick (or Performance Appraisal)

As perhaps the most central of human resources (HR) systems, performance appraisal has commanded the attention of organizational scientists for many years. In the organizational context, performance is usually defined as the extent to which an organizational member contributes to achieving the goals of the organization. Performance appraisal is defined as the process of identifying, evaluating, and developing the work performance of the employee in the organization, so that organizational goals and objectives are effectively achieved while, at the same time, benefiting employees in terms of recognition, receiving feedback, and offering career guidance. The terms *performance assessment*, *performance evaluation*, and *performance management* are also used to describe the process.

Performance appraisal is an inseparable part of organizational life. Formal performance appraisals are required to justify a wide range of HR decisions such as selection, compensation, promotion, and training. Performance appraisal characteristics include target (individual, team), type (outcome-, behavioral-, or competency-based), and data source (manager or multirater). Especially in team-based organizations there is a critical need for effective leadership in designing and implementing performance appraisal systems. Performance appraisal systems must move from a focus on the outcomes, behaviors, and competencies of teams to those of individuals.

Ineffective appraisal systems can bring many problems including low morale, decreased employee productivity, and a lessening of an employee's commitment and support for the organization. If employees are confident in the fairness of the appraisal process, they are more likely to accept performance ratings, even adverse ones, because they perceive a fair decision making process. On the other hand, if the employees perceive the process as unfair and not systematic, it is unlikely that they will accept the outcome of the appraisal process.

One way to enhance appraisal system fairness, reach organizational justice, and face subjectivity is 360-degree appraisal system design, which requires obtaining information from all sources including supervisors, subordinates, peers, suppliers, clients, and consultants.

In general, anyone who has useful information on how an employee does the job may be a source in the 360-degree appraisal. On another but related issue, participation gives an opportunity to the employees to raise their voices into the appraisal process. Greater employee participation (i.e., goal-setting process, performance standards, qualitative and quantitative evaluation criteria, self-evaluation) increases employee satisfaction and generates an atmosphere of cooperation and support, reducing rater-ratee conflicts, especially during the performance appraisal interview.

The performance appraisal interview is a potentially important part of any organization's performance appraisal system. The appraisal interview might function in several important ways: Providing feedback to employees, developing employees, and discussing compensation, job status, and disciplinary decisions. The interviewer must be sensitive to employee needs for privacy and confidentiality. It is very important to provide undivided attention during the interview and reserve adequate time for discussion.

Management's feedback is essential in gaining the maximum benefits from goal setting. Without feedback, employees are unable to make adjustments in job performance or receive positive reinforcement for effective job behavior. Effective performance feedback is timely, specific, behavioral in nature, and presented by a credible source. Performance feedback is effective in changing employee work behavior and enhances employee job satisfaction and performance.

In general, the superior's knowledge of the subordinate's job and performance, superior's support of the subordinate, and welcoming the subordinate's participation are key factors for producing effective interviews. The appropriate function, frequency, and format of the interview, as well as goal setting and actual subordinate participation, depend on characteristics of the employee and the job.

As stated, most performance appraisal systems depend heavily on subjective ratings of performance provided by supervisors, peers, subordinates, and job incumbents. Despite a heavy reliance on performance ratings, it is generally acknowledged that they are too often contaminated by systematic errors (leniency, central tendency, halo, and contrast errors). Rater training programs can have positive effects on the psychometric quality of performance ratings. Methods used to provide training are lectures, group discussion, and practice and feedback. In general, the more involved raters become in the training process the greater the outcome. Providing raters with the opportunity to participate in a group discussion along with practice and feedback exercises produces better results than presenting training material to them through a lecture. Practice and feedback exercises appear to be a necessary ingredient for increasing accuracy in ratings.

Today, organizations face environments characterized by increasing dynamism and competition, and sustainable fit can be achieved only by developing a flexible organization. The importance of developing and applying HR practices aimed at achieving fit is crucial. HR systems such as performance appraisal systems have relatively strong universalistic relationships with important measures of organizational performance.

See Also: Commitment; Employer–Employee Relations; Empowerment; Leadership; Motivation.

Bibliography. Amy Delpo, *The Performance Appraisal Handbook: Legal & Practical Rules for Managers* (NOLO 2007); Christoph Demmke, *Performance Assessment in the Public Services of the EU Member States: Procedure for Performance Appraisal, for Employee Interviews and Target Agreements* (European Institute of Public Administration, 2007); Clive Fletcher, *Appraisal, Feedback and Development: Making Performance Review Work* (Routledge, 2008); Margaret Foot and Caroline Hook, *Introducing Human Resource Management* (Prentice Hall/Financial Times, 2008); Martin M. Greller, "Subordinate Participation in the Appraisal Interview," *Journal of Applied Psychology* (v.60/5, 1975); I. M. Jawahar, "The Influence of Perceptions of Fairness on Performance Appraisal Reactions," *Journal of Labor Research* (v.28/4, 2007); Susanne G. Scott and Walter O. Einstein, "Strategic Performance Appraisal in Team-based Organizations: One Size Does Not Fit All," *Academy of Management Executive* (v.15/2, 2001).

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BERI

International market entry always warrants a careful assessment of the risk associated with foreign target countries. In evaluating and selecting foreign markets, companies may choose to follow a highly customized country-by-country approach or to work with established country-comparisons. One such established comparison is BERI. BERI, or Business Environment Risk Intelligence, is a company providing ratings, analyses, and forecasts for more than 140 countries. BERI's services are designed to assist executives in risk assessment when making decisions about entering foreign markets or establishing operations abroad. Their most widely known service, Business Risk Service (BRS) is published three times per year. For each country it provides a general outlook outlining opportunities and problems, economic and financial indicators, political information including a future probable scenario, and a composite score, called the Profit Opportunity Recommendation, that consists of the Political Risk Index (PRI), the Operations Risk Index (ORI), and the Remittance and Repatriation Factor (R-Factor).

The PRI provides an assessment of a country's political risk. It is based on the qualitative judgments of 10 political and social factors—six internal causes of political risk (fractionalization of the political spectrum; fractionalization by language, religion, or ethnicity; coercive measures; mentality; social conditions; organization; and strength of forces for a radical government), two external causes of political risk (dependence on a major hostile power; negative influences of regional political forces), and two symptoms of political risk (societal conflict; instability as perceived by nonconstitutional changes, assassinations, and guerrilla wars). Calculated on a scale from 0 to 100 points, countries above 70 points are considered low-risk countries, while countries with a score of less than 40 are considered to be of prohibitive risk.

The ORI is the weighted average of scores on a list of 15 different political, economic, financial, and structural variables. These are policy continuity, attitude toward foreign investors, degree of privatization, monetary inflation, balance of payments, bureaucratic delays, economic growth, currency convertibility, enforceability of contracts, labor cost/productivity, professional services and contractors, communications and transportation, local management and partners, short-term credit, and long-term loans and venture capital. The ORI is provided on a scale from 0 to 100 points with points above 70 indicating stable countries with a favorable business climate and points below 40 indicating nonacceptable countries.

The R-Factor gives an indication of the risk that profits and capital cannot be transferred out of a country or that access to convertible currencies is barred. It is calculated using a vast amount of data, which are categorized into four sub-indices—Legal Framework, Foreign Exchange Generation, Accumulated International Reserves, and Foreign Debt Assessment. The three indices are then combined into the Profit Opportunity Recommendation (POR). The POR is a measure of general country risk and classifies countries into four categories—fit for foreign direct investment, suitable for medium to long-term contractual relationships, ideal for transaction-by-transaction trade, or not suited for any business activity. It is calculated for the present, for one-year, and for five-year forecasts.

BERI derives its data from two independent expert panels that provide country ratings and qualitative observations. One panel judges political conditions in countries, while the other offers perspectives on the operating environment. The members of each panel are more than 100 senior bank and corporate executives as well as government officials. In addition to BRS, BERI offers other services, including the Financial Ethics Index, the Quality of Workforce Index, Lenders Risk Ratings, and Mineral Extraction Risk Assessment. Founded in 1966 by F. T. Haner, BERI operates globally and is headquartered in the United States.

Other indices similar to BRS, albeit less widely known, include the International Country Risk Guide (ICRG), S. J. Rundt's Country Reports, the Peren-Clement-Index, the Economist Intelligence Unit's Country Risk Service (CRS), Euromoney's Credit Rating Score, Reuters & Oesterreichisches Kontrollbank's CEE Business Climate Index, Institutional Investor's Country Creditworthiness, and the World Bank's Ease of Doing Business Ranking.

See Also: Corruption; Country Screening; Foreign Direct Investment; Risk Management.

Bibliography. Business BERI, "Risk Service," www.beri.com (cited March 2009); Jean-Claude Cosset and Jean Roy, "The Determinants of Country Risk Ratings," *Journal of International Business Studies* (v.22/1, 1991); F. T. Haner and John S. Ewing, *Country Risk Assessment: Theory and Worldwide Practice* (Praeger, 1985); Suhejla Hoti and

Michael McAleer, "An Empirical Assessment of Country Risk Ratings and Associated Models," *Journal of Economic Surveys* (v.18/4, 2004); Llewellyn Howell, *The Handbook of Country and Political Risk Analysis* (PRS Group, 2007); Llewellyn Howell, *Political Risk Assessment: Concept, Method, and Management* (PRS Group, 2001).

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Berkshire Hathaway

Berkshire Hathaway, Inc. (Berkshire) is a holding company incorporated in Delaware that owns a diverse set of subsidiary businesses. Its corporate headquarters is located in Omaha, Nebraska. As of the end of 2007, Berkshire and its subsidiaries employed about 233,000 persons. Berkshire is a unique company in two ways: (1) by its success with its investments in stocks, bonds, and cash equivalents, which are overseen by its chairman, Warren E. Buffett, and its vice chairman, Charles T. Munger; and (2) by its extraordinarily decentralized management style as evidenced by minimal involvement by its corporate headquarters in the day-to-day operations of its subsidiaries.

Berkshire has a portfolio of investment in common stocks with a market value estimated at about $74.9 billion. This group of stocks is closely followed by the financial community. Berkshire has significant holdings (valuations in excess of $4 billion) in the following companies (in descending order of investment): Coca-Cola Company, Wells Fargo & Company, American Express Company, Procter & Gamble Company, Burlington Northern Santa Fe, Johnson & Johnson, and Kraft Foods, Inc.

Berkshire looks to invest in companies that show improvements in earnings and companies that possess superiorities that "make life difficult for their competitors." Berkshire acquires and operates companies based on the following criteria: first, large purchases generating at least $75 million in pre-tax earnings; second, companies with demonstrated consistent earnings power; third, businesses earning good returns on equity while employing little or no debt; fourth, management already in place; fifth, businesses that are simple to understand; and finally, businesses with a known offering price (and a friendly takeover). The following sections describe the business sectors and operating businesses of Berkshire.

Insurance and Reinsurance

Berkshire's 60-some insurance businesses are its most important subsidiaries and operate in both the U.S. domestic market and foreign markets. These subsidiaries compete in both the primary insurance market and in the reinsurance market. Each of its insurance subsidiaries is rated highly for its capital strength, its financial condition, and its operating performance. The insurance operations and their subsidiaries are grouped into one of four units: GEICO, General Re, Berkshire Hathaway Reinsurance Group (BHRG), and Berkshire Hathaway Primary Group.

GEICO, headquartered in Chevy Chase, Maryland, primarily offers private passenger automobile insurance (but also insures other types of vehicles). General Re is a major international reinsurer operating in 56 cities providing insurance and reinsurance services worldwide. General Re's property and casualty operations are headquartered in Stamford, Connecticut, with 16 branch offices serving the United States and Canada. Its large international subsidiary Cologne Re provides property/casualty reinsurance primarily through Faraday, which controls the managing agent of Syndicate 435 at Lloyds of London. The BHRG group, also headquartered in Stamford, Connecticut, primarily provides catastrophe excess of loss reinsurance policies covering property losses that result from terrorism, natural disasters, and aviation risks. The Berkshire Hathaway Primary Group, headquartered in Omaha, Nebraska, and its affiliates primarily underwrite motor vehicle and general liability insurance to commercial enterprises principally in the United States.

Energy, Utilities, and Manufacturing

Berkshire holds a majority interest in MidAmerican Energy Holdings Company, an international energy company. MidAmerican operates two regulated utility companies and two pipelines in the United States, an electricity distribution subsidiary in the United Kingdom, and a hydroelectric facility in the Philippines.

Berkshire owns Shaw Industries, the world's largest carpet manufacturer (revenue and production).

Shaw is headquartered in Dalton, Georgia, and sells its wholesale products throughout the United States, Canada, and Mexico. Shaw also sells hardwood flooring through its Anderson Family of Companies business. Berkshire owns Acme Building Products, a manufacturer and distributor of clay bricks, concrete block, and cut limestone, based in Fort Worth, Texas, that primarily serves the southwestern United States. Berkshire also owns Benjamin Moore & Company, a leading manufacturer and retailer of architectural coatings. Benjamin Moore is headquartered in Montvale, New Jersey, and primarily serves the United States and Canadian markets.

Another major building products business owned by Berkshire is Johns Manville, a manufacturer of a complete line of fiberglass building insulation products and roofing systems and components, headquartered in Denver, Colorado. Johns Manville operates manufacturing facilities in North America, Europe, and China. Berkshire owns Albecca, Inc., headquartered in Norcross, Georgia, that designs, manufactures, and distributes framing products and supplies, serving the United States, Canada, and 15 countries outside North America.

Berkshire is also the owner of Clayton Homes, headquartered near Knoxville, Tennessee, a vertically integrated manufactured housing company operating 41 manufacturing plants in 14 states. Its products are marketed in 48 states through a network of dealers and company-owned sales centers. Clayton also offers various financing and insurance programs for its products.

In addition, Berkshire holds a 90 percent interest in MiTek Inc., headquartered in Chesterfield, Missouri, which is a provider of engineered connector parts, engineering software, and computer-driven manufacturing machinery primarily serving the building components industry. It also produces light-gauge steel framing and specialized assembly line machinery. MiTek has 24 manufacturing facilities in 10 countries, 29 sales/engineering offices in 14 countries, and sales in approximately 90 countries. Berkshire owns an 80 percent interest in ISCAR Metalworking Companies, a manufacturer of consumable industrial precision cutting tools, headquartered in Tefen, Israel, with manufacturing facilities in Israel, the United States, Germany, Italy, France, Switzerland, South Korea, China, India, Japan, and Brazil.

Berkshire is involved in other types of manufacturing not directly related to building, such as the CTB International Corp., headquartered in Milford, Indiana, which designs, manufactures, and markets systems used in the production of poultry, hogs, and eggs. It also owns Forest River, Inc., headquartered in Elkhart, Indiana, a manufacturer of recreational vehicles, utility cargo and office trailers, buses, and pontoon boats for the U.S. and Canadian markets. Berkshire's Scott Fetzer Companies are a diversified collection of businesses that manufacture and distribute a variety of products for residential, industrial, and institutional use.

Service Businesses

Berkshire owns FlightSafety International (FSI) which provides training to operators of aircraft and ships. FSI is headquartered at LaGuardia Airport in Flushing, New York, operates training facilities in 20 states and in Australia, Brazil, Canada, France, and the United Kingdom. FSI also manufactures simulators, visual displays, and other training equipment at facilities in Oklahoma and Missouri. Berkshire owns NetJets, a leading provider of fractional ownership programs for general aviation worldwide with a fleet of some 622 aircraft. NetJets is headquartered in Woodbridge, New Jersey, with its flight operations based in Columbus, Ohio, and its European flight operations based in Lisbon, Portugal. Berkshire owns XTRA Corporation, headquartered in St. Louis, Missouri, a transportation equipment lessor with a diverse fleet of 120,000 units (over-the-road and storage trailers, chassis, temperature-controlled vans, and flatbed trailers) located at 75 facilities in the United States and five facilities in Canada.

Berkshire owns McLane Company, a provider of wholesale distribution and logistics services to discount retailers, convenience stores, quick-service restaurants, drug stores, and movie theaters throughout the United States and in Brazil. Its grocery distribution division is headquartered in Temple, Texas, and operates 22 facilities in 18 states. Its food-service operations are headquartered in Carrollton, Texas, and operate 18 facilities in 16 states.

Other service businesses owned by Berkshire include the following: Business Wire, a San Francisco–based electronic disseminator of full-text news serving 150 countries in 45 languages; Pampered

Chef, the largest direct seller of kitchen tools in the United States; *Buffalo News*, the daily newspaper in Buffalo, New York; International Dairy Queen, a system of about 6,000 stores offering various dairy desserts, foods, and beverages; TTI, an electronic component distributor headquartered in Fort Worth, Texas, operating in more than 50 locations throughout North America, Europe, and Asia. Berkshire also has an 80.1 percent interest in CORT Business Services Corporation, a nationwide provider of rental furniture and accessories.

Apparel, Footwear, and Jewelry

Berkshire owns a variety of apparel and footwear manufacturing companies. Its clothing businesses include Fruit of the Loom (FOL) and Vanity Fair Brands (VFB), a combined business that is a vertically integrated manufacturer and distributor of basic apparel, underwear, and bras, headquartered in Bowling Green, Kentucky. FOL and VFB have labor-intensive manufacturing operations in Central America, the Caribbean, and Morocco, and also contract some third-party manufacturing in Europe and Asia.

Berkshire owns Garan, headquartered in New York, which designs, manufactures, and sells children's apparel in the United States through national chain stores (Wal-Mart represents 90 percent of its business), department stores, and specialty stores. Garan's production facilities are primarily in Central America. Berkshire also owns Fechheimer Brothers headquartered in Cincinnati, Ohio, a firm that manufactures, distributes, and sells uniforms targeted toward the police, fire, postal, and military markets.

Berkshire's footwear businesses, Justin Brands and H. H. Brown Shoe Group, purchase, manufacture, and distribute work shoes, outdoor and casual shoes, and western-style footwear sold principally in the United States but primarily sourced overseas. Berkshire merged two of its acquisitions to create the Richline Group, Inc., a jewelry manufacturing (gold, silver, and gem set) and distribution company selling to mass market merchandisers.

Retailing

Berkshire's retailing businesses primarily consist of several independent home furnishings operations, three jewelry retailers, and a confectionery operation. Berkshire's home furnishings businesses are an 80 percent ownership of the Nebraska Furniture Mart (NFM) in Omaha, Nebraska, and Kansas City, Missouri, and NFM's Homemakers Furniture in Des Moines, Iowa. Berkshire also owns R. C. Wiley, headquartered in Salt Lake City, Utah, operating 11 retail stores in four states. Berkshire owns Star Furniture Company, with 11 locations in Texas, and Jordan's Furniture, Inc., with four locations in Massachusetts and New Hampshire.

Berkshire owns a 93 percent interest in the single store Borsheim Jewelry Company, Inc., located in Omaha, Nebraska. It also owns Helzberg's Diamond Shops, headquartered in North Kansas City, Missouri, with a chain of 269 stores in 38 states. Its third jewelry operation is Ben Bridge Jeweler, headquartered in Seattle, Washington, with 77 stores in 12 states. Berkshire's confectionery operation, See's Candies, consists of two large kitchens, one in Los Angeles and the other in San Francisco, that produce boxed chocolates and other candies.

For its fiscal year ending December 31, 2007, Berkshire Hathaway reported total revenues of \$118.3 billion and valued its total assets at \$273.2 billion. Its 2007 net earnings per share was reported at \$8,548. As of February 15, 2008, Berkshire Hathaway had approximately 4,600 record holders of its Class A Common Stock that traded in a range from a low \$103,800 per share to a high of \$151,650 in 2007. Also as of February 15, 2008, Berkshire Hathaway had approximately 13,900 record holders of its Class B Common Stock which traded in a range from a low \$3,460 per share to a high of \$5,059 in 2007. Since the present management took over Berkshire Hathaway, the company's book value (Class A shares) has grown at a rate of 21.1 percent compounded annually. Berkshire Hathaway has not declared a cash dividend since 1967.

See Also: Acquisitions, Takeovers, and Mergers; Company Profiles: North America; United States.

Bibliography. Berkshire Hathaway, Inc., www.berkshirehathaway.com (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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Best Buy

Best Buy was founded in 1966 by Richard M. Schulze and James Wheeler in St. Paul, Minnesota, under the original name "Sound of Music Store." This retailing company, offering mainly consumer electronics, and has more than 150,000 employees. The headquarters are in Richfield, Minnesota, and the Best Buy Co. shares are listed on the New York Stock Exchange. Chairman Schulze is still leading the business, which is focused on consumer electronics, home office products, entertainment software, domestic appliances, and related services. Consumer electronics contribute about 41 percent to current sales, home office products about 28 percent, and entertainment software about 19 percent. Domestic appliances and services are less important, accounting for 6 percent of sales each.

Best Buy manages five private label brands: Insignia (personal computers and accessories), Dynex (low-price computers and home entertainment), Init (storage and portability for technical devices), Geek Squad (best known for its 24-hour on-site technical support services, high-end computer accessories, and cables), and Rocketfish (high-end cables primarily used for home theater installations). Products with these private labels are sold exclusively in Best Buy's own retail outlets. The outlets are identified by the light-brown façade and a "blue box" entrance. The logo is a yellow price label with the name Best Buy printed on it in black letters.

Best Buy, whose 1,150 retail outlets are usually the epitome of the "big box" style, has been ranked 12th among U.S. retailers.

Best Buy has successfully acquired other retail chains, such as Audio Visions, Five Star, Future Shop, Magnolia, Pacific Sales, and Speakeasy. The trust currently ranks 23rd in the Fortune Top 100 and is the leading consumer electronics vendor in the United States and Canada. The company ranks 12th in the list of U.S. retailers and accounts for 17 percent of the North American electronics market. The company has generated an impressive performance: Since the 1990s, their revenue has increased faster than that of Microsoft and the dividend per share was higher than that of Intel, Inc. This is remarkable, considering that Best Buy lost almost all of its profits just 10 years ago. In 1997 an expansion strategy resulted in hypergrowth, overextending technical and financial resources as well as management capacity.

To cope with stagnation of turnover in the U.S. retail industry, Best Buy expanded its business to overseas sites. In a total of 1,150 outlets, Best Buy offers goods and services in the United States, Canada, Puerto Rico, Mexico, and Turkey. By the end of 2008, Best Buy hoped to have eight stores operating in China. The first two were opened in Shanghai.

Best Buy is about to expand to the major European markets. The first step is a joint venture with a British mobile phone provider, Carphone Warehouse. In addition to mobile telephony, this joint venture intends to sell various consumer electronics in the 2,400 outlets in the United Kingdom. Carphone Warehouse also provides this joint venture with stores in other European countries, including 240 Phone House outlets in Germany. Thus, Best Buy could become a credible competitor to the German Metro Group, operating two successful consumer electronics chains, Media Markt and Saturn, in various European countries.

Best Buy's business model differs from those of competitors by emphasizing care for customers' needs. On the one hand, customers can ask for technically skilled employees to install the products in their homes, thus receiving a sophisticated technical solution including planning, financing, all installations, inspections, and repairs. On the other hand, the private label, low-price offerings match the quality of national brands.

Best Buy is currently facing negative publicity because of the computer repair services it provides. Critics focus on lost data stored on notebooks that were left for repair. However, Best Buy is well known for its elaborate corporate responsibility strategy, fitting social and environmental protection aspects into the stakeholders' interest portfolio. Striking elements of Best Buy's corporate relations are the sponsoring of the NASCAR Haas CNC Racing team, the Best Buy Scholarship, and the Best Buy Teach Awards.

See Also: METRO; Retail Sector; Service Level; Wholesale Sector; Wal-Mart Stores.

Bibliography. Best Buy, *Annual Report Fiscal Year 2008*; B. Chakravarthy and P. Lorange, "Continuous Renewal, and How Best Buy Did It," *Strategy & Leadership* (2007); Elizabeth Gibson and Andrew Billings, "Best Practices at Best Buy: A Turnaround Strategy," *Journal of Business Strategy* (2003); Elizabeth Gibson and Andrew Billings, *Big Change at Best Buy: Working through Hypergrowth to Sustained Excellence* (Davies-Black, 2003); G. McWilliams, "Analyzing Customers, Best Buy Decides Not All Are Welcome," *Wall Street Journal Online*, online.wsj.com (2004); H. Salomann, L. Kolbe, and W. Brenner, "Self-Services in Customer Relationships: Balancing High-Tech and High-Touch Today and Tomorrow," *e-Service Journal* (2006).

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Bhopal Disaster

In 1977 Union Carbide India Limited (UCIL) set up a manufacturing facility in Bhopal, a city of some 900,000 inhabitants in Madhya Pradesh, India. It was licensed by the Madhya Pradesh Government to manufacture phosgene, monomethylamine (MMA), methylisocyanate (MIC), and the pesticide carbaryl, also known as Sevin. The plant was located in an urban area in the center of the city, despite the existence of an industrial area that had been set aside for such hazardous undertakings. The site was near a lake that provided an essential water source.

On the night of December 2, 1984, one of the world's worst industrial disasters occurred at the plant. Water inadvertently entered the MIC storage tank. Safety systems could not contain the gases that formed as a result of the heat generated by the chemical reaction. The leak was first detected at 11:30 P.M. by workers whose eyes had begun to burn. The supervisor was informed, but action was not taken immediately. About 40 tons of MIC escaped into the densely populated surrounding area over a period of two hours.

There was no warning because the emergency alarm designed to warn of the rising temperature in the MIC tank had been switched off. Indeed, the temperature and pressure gauges were so unreliable that workers often ignored potential warning signs. The impact on people living in the shanty settlements adjacent to the plant was devastating. Many died in their beds, others choked and vomited in the streets, and many more died later in hospitals. The main cause of death was respiratory failure. The immediate aftermath saw 8,000 people killed.

Following the disaster it was discovered that the plant had been suffering from a number of other technical problems. The freon gas refrigeration unit designed to store MIC had been disconnected and the gas was being used elsewhere on site. The vent gas scrubber designed to neutralize escaping gas had been shut down for maintenance, though it would have been unable to cope with the gas in any event. The flare tower, designed to burn off the gas that escaped the vent gas scrubber, was also turned off, because a piece of corroded pipe needed replacing. The pressure on the water spray system, designed to reach points from which any gas was escaping, was too low and therefore ineffective. Union Carbide's operational procedures also required the MIC tanks to be filled only to 50 percent of capacity. The Bhopal tank was filled to between 75 percent and 87 percent capacity. Another storage tank used to hold excess MIC was already full.

Ironically, a study conducted by a team from Union Carbide in 1982 noted that there was a serious potential for the release of toxic chemicals. Workers may also have been ill equipped to deal with the scale of the problem. Between 1980 and 1984, the crew for the MIC unit had been cut by 50 percent (from 12 to six) and the maintenance crew was cut 66 percent (from six to two). Many workers in key safety positions were not properly trained and the operating manuals were all in English.

Aftermath

Since 1984 more than 20,000 deaths have been attributed to the disaster and the effects are now extending into the next generation—150,000 of the survivors are reported to be chronically ill with long-term health effects ranging from cancer and tuberculosis to birth defects and chronic fevers. Local communities are continuing to drink groundwater contaminated with heavy metals and persistent organic contaminants because the dangerous chemicals left behind still have not been cleaned up.

The Indian government registered more than 600,000 claims against Union Carbide, which did not accept liability for the disaster. Union Carbide used tactics of delay of payment to victims and denial of any responsibility. They spent US$35–40 million on legal fees in connection with Bhopal. They argued that U.S. courts were not the appropriate place to deal with the issues but rather that the Indian courts were better placed to do so. This tied up the litigation for a year. Once back in India, they argued that the Indian courts were unsuitable to try such a complex issue. Union Carbide appealed every decision that went against it. This was essentially a neutralization technique that Union Carbide had previously used in a case brought against them in Long Island (New York) for polluting the local water supply.

Finally, in 1989, the government of India negotiated a $470 million compensation payment for the victims in an out-of-court settlement with Union Carbide. However, owing to bureaucratic inertia and the slowness of India's legal system, in 2004 $325 million was still being held by India's central bank in Mumbai. In July 2004 the Indian Supreme Court accepted the arguments from the victims and ordered the government to release this money. Amnesty International, in its 2004 Clouds of Injustice report, estimates the out-of-court settlement was a fraction of Union Carbide's true liability by international norms.

In February 2001 Union Carbide became a full subsidiary of Dow Chemical, becoming the world's biggest chemical company. In buying Union Carbide, Dow not only bought the company's assets but also its liabilities. However, Dow Chemical continues to deny any liability. India continues to press for the extradition of Warren Anderson, Union Carbide's chief executive at the time of the disaster.

See Also: Corporate Social Responsibility; Dow Chemical; India.

Bibliography. Jackson B. Browning, "Union Carbide: Disaster at Bhopal" in *Crisis Response: Inside Stories on Managing Image Under Siege*, Jack A. Gottschalk, ed. (Visible Ink, 1993); D. Dembo, W. Morehouse, and L. Wykle, *Abuse of Power: Social Performance of Multinational Corporations: The Case of Union Carbide* (New Horizons Press, 1990); Greenpeace, www.greenpeace.org.uk (cited March 2009); Ashok S. Kalelkar, "Investigation of Large-Magnitude Incidents: Bhopal as a Case Study" (Arthur D. Little, Inc., 1988); The Trade & Environment Database, "TED Case Studies: Bhopal Disaster," www.american.edu/ted (cited March 2009); Union Carbide's Bhopal Information Center, www.bhopal.com (cited March 2009).

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Bid/Ask Spread

The bid/ask spread is also known as the bid/offer spread. In the financial markets the bid price is the price at which a dealer (market-maker) will buy a particular security from an investor. The ask price is the price at which the dealer will sell that security to an investor. The difference between these prices is the spread. This bid/ask spread represents the profit margin for the dealer who trades in a security after allowing for any carrying cost that may be involved if the market is not liquid.

In liquid markets (continual buying and selling) where there are always buyers for the security and trades are quickly concluded, carrying costs will be negligible. However, for some securities it may take a dealer some time to find a buyer and the carrying cost will be the interest earnings foregone by the dealer by tying up money in holding the security. As a general rule, the bid/ask spread for a liquid security, such as shares in a blue-chip company, will be narrower than the spread for a share in a start-up company. In the latter case the spread between bid and ask prices will be wider to compensate for the additional time the dealer will be tying up money in holding the security.

Bid/ask spreads are customary in all financial markets, including shares, bonds, mutual funds, and currencies. The narrowest spreads are found in the currency markets, which are the most liquid. The spreads here will be measured in basis points (hundredths of a percent), whereas the spread for an illiquid company share may be measured in full percentage points of the asset's value.

In addition to volume of trade (liquidity), the spread for a security will be determined by the volatility of the asset's price and also the volatility of the market in general. At times of market volatility all bid/ask spreads will widen. Individual securities with a history of sharp price changes will also have a wider spread than securities with more stable price characteristics. In the stock market the bid/ask spreads for low-priced shares may be wider than for higher-priced shares. The low price may be an indicator of illiquidity in the market for that share. The share prices quoted in newspapers are usually the midpoint of the spread at the previous close of business. For the investor wishing to calculate the return on a security, it is important to ensure that performance is based on an ask-to-bid basis.

A perfectly reversible security would allow the investor to move from cash into the security and back again without loss of value. Any security with a bid/ask spread is, therefore, imperfectly reversible. The market makers are responsible for maintaining an orderly market by providing continuous buying and selling prices. This can only be done by holding inventories of the securities, which requires the market makers to tie up capital. The bid/ask spread is their means of compensation for this essential activity. In open and competitive markets there may be variations in the bid/ask spreads from dealer to dealer for particular securities, but arbitrage will ensure they converge. With an exchange-traded security the client may get a better price than the indicated bid/ask spread as the dealers may improve the transaction price within the spread. With over-the-counter (OTC) deals the client will only deal at the quoted spread.

Bid/ask spreads are not only found in spot markets (immediate trade) but also in forward markets. Thus a bank may quote a bid/ask spread on forward exchange rates. Once again this spread will be wider for currencies that are more difficult to trade. Tourists are familiar with an everyday example of the bid/ask spread when they buy currency for foreign travel. Banks and bureaux de change quote two prices depending on whether the tourist is buying or selling the foreign currency. The difference represents the profit to the dealer. As a general rule in any transaction the dealer gets the more attractive price and the investor/purchaser the less attractive price. The bid/ask spread is a valuable source of information for investment planning, providing insight into the liquidity and potential volatility of a security.

See Also: Arbitrage; Carrying Costs; Credit Ratings; Financial Markets; Foreign Exchange Market; Market Maker.

Bibliography. C. Alexander and E. Sheedy, *The Professional Risk Manager's Guide to Financial Markets* (McGraw-Hill, 2006); D. Connolly, *The UK Trader's Bible* (Harriman House, 2007); R. Vaitilingam, *The Financial Times Guide to Using the Financial Pages* (Prentice Hall, 2006).

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Big Mac Index

The Big Mac Index compares the prices of McDonald's Big Mac burgers, a fast food item produced and sold in 120 countries worldwide, as an indicator of possible overvaluation or undervaluation of the local currency relative to the U.S. dollar. The tongue-in-cheek analyses give an easily digestible example of the economic theory on purchasing power parity (PPP) and its applicability in the practical sense.

The Big Mac Index is based on the PPP theory, which holds that the price of a certain commodity should be the same in different countries and, if they are not so, that the exchange rate between the currencies of two countries will gradually adjust toward parity, or equality. This notion also extends toward an identical basket of goods and services. If the prices of all components of this basket are the same, then the PPP theory implies that the price for the basket should also be the same among countries.

If the price is not the same, the price difference (called arbitrage) between countries will encourage traders to buy the commodity in the lower-priced country and sell it for a profit in the other country with higher prices. The trade creates demand and induces commodity prices to rise in the lower-priced country; it also increases supply and influences prices

McDonald's standard items and outlets in cities like Bangkok made the Big Mac a lighthearted tool for comparing currencies.

to go down in the high-priced country, until the point is reached when no more price difference exists and there is no more profit to be made.

The Big Mac Index uses the Big Mac burger as the reference commodity, or basket, consisting of its beef patties, cheese, lettuce, spices, and secret sauce on a bun studded with sesame seeds. The index takes the prices of the Big Mac burger in all 120 countries where it is available. The Big Mac PPP refers to the exchange rate that would make the prices of hamburgers in any of the 120 countries identical to prices in the United States (dollars). A currency would be considered undervalued or overvalued when its actual market exchange rate is compared with the Big Mac PPP.

For example, in the last annual publication (every July) of the index in 2007, the burger price in the United States was \$3.41 (the average of prices in four cities: New York, Chicago, Atlanta, and San Francisco). In comparison, the same burger in the United Kingdom (UK) cost £1.99, which was equivalent to \$4.00 at the prevailing market exchange rate of \$2.01/£1. However, the implied Big Mac PPP is only \$1.71 (actual U.S. price in dollars divided into actual UK price in pounds, i.e., \$3.41/£1.99). Comparing the Big Mac PPP of \$1.71 and the official exchange rate of \$2.01, the UK pound has a 17.5 percent advantage and is thus overvalued against the dollar. It can be expected to depreciate in order to reach the PPP rate of £1=\$1.71 from the existing £1=\$2.01. Put another way, the burger is 17.5 percent more expensive in the UK than in the United States at the existing exchange rate, and is said to be 17.5 percent overvalued versus the dollar.

On the other hand, the same burger in China costs 11.0 yuan, which converts to \$1.45 at the prevailing market exchange rate of \$1= 7.60 yuan. The implied PPP is 11 yuan/\$3.41 or 3.23 yuan per dollar. But the market exchange rate is 7.60 yuan per dollar, and the yuan is therefore undervalued by about 57.5 percent. The yuan can thus be expected to appreciate.

Use of the Big Mac Index

The Big Mac Index was developed by *The Economist* magazine in the UK in 1986. It was not designed to be a precision tool for economic forecasting but simply as a lighthearted test of the PPP. Even *The Economist* acknowledges there are wide divergences in prices across the McDonald's world. Unlike regular commodities, there is no cross-border trade in burgers (as required by PPP). The index, however, has been used as a measure of the costs of living in different countries. Average prices tend to be lower in less-developed countries, making their currencies seem cheaper in comparison to more developed countries.

Goods that are traded across countries will probably be similarly priced, whether in developed or less-developed countries. But products that by their nature are traded only in the domestic market, e.g., labor-intensive services and rents, are usually priced lower in poorer countries. London will have more expensive barbers than Beijing, for example. Price disparities also arise from differences in transportation costs, taxation systems, barriers to trade, and other factors. The level of local wages is also a significant influence on the cost of serving the burgers.

An important implication of the PPP is that the real size of a poor country's economy and the associated standards of living will tend to be understated if the economic figures are converted into dollars using the prevailing exchange rates. The PPP, however, tends to yield higher economic figures for an economy than market exchange rates. China's economy, for instance, will appear more than twice as much when converted at Big Mac PPP than at market exchange rates. The International Monetary Fund also uses more sophisticated models of PPP.

Economic rankings change dramatically when the PPP is used for converting and comparing economic performance. Emerging economies turn out to be greater contributors to global economic output than market exchange rates would indicate. Conversion of economic output using PPP shows that emerging economies contributed nearly half of world output in 2004. But conversion using market exchange rates shows these countries contributing less than one-quarter.

Economists generally acknowledge PPP as descriptive of how international prices are determined in the long run. Over time, similar countries do tend to have smaller price differentials. There is also general recognition that it provides a better idea of relative economic rankings than market exchange rates.

Although it was originally meant to provide a simple, lighthearted means to illustrate the fundamentals of purchasing power parity, the Big Mac index has become an essential feature of the consumer's menu for understanding more complex concepts of currency valuations and exchange rates.

See Also: Arbitrage; Exchange Rate; Purchasing Power Parity.

Bibliography. Gavyn Davies, "Gavyn Davies Does the Maths: The Big Mac Index Says Sterling Should Fall," *The Guardian* (June 8, 2006), www.guardian.co.uk (cited March 2009); Economist Staff, "Food for Thought: The Big Mac Index," *The Economist* (May 28, 2004), www.cfo.com (cited March 2009); Campbell R. McConnell, *Microeconomics: Principles, Problems, and Policies* (McGraw-Hill Professional, 2005); Michael R. Pakko and Patricia S. Polland, "Burger Survey Provides Taste of International Economics," *Federal Reserve Bank of St. Louis–Regional Economist* (January 2004); "The Big Mac Index: Sizzling," *The Economist* (July 5, 2007), www.economist.co.uk (cited March 2009).

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Bilateral Free Trade Agreements

Bilateral free trade agreements (BFTAs) are agreements generally made between two countries or two regions, or one country and one region; it is widely accepted that they lead to economic growth by reducing poverty and increasing standards of living and generating employment opportunity. While some BFTAs can be narrow-range in their dealing of traded goods for a certain time period, some BFTAs can be much more comprehensive and cover other issues including services and investment, and can generally take existing World Trade Organization (WTO) agreements as their benchmark. The free trade agreements are like stepping stones toward international integration into a global free market economy, and they are seen as the manifestation of globalization, which requires governments to implement the liberalization, privatization, and deregulation measures.

The first important general factor for the popularity of BFTAs is the apparent disenchantment with the pace of liberalization at the multilateral level. Another general factor driving the growth of BFTAs can be the snowballing or domino effect. The number of BFTAs thus continued to grow, almost doubling to 109 between 2002 and 2004. By 2007, this number has more than doubled again as countries did not want to be left behind. Finally, it is often claimed that some, if not most, BFTAs are politically motivated. There is no doubt that political economic considerations, political parties, or even individual politicians have played a major role in driving the formation of BFTAs.

Negotiating a BFTA is a serious exercise as the outcome can have major implications for development policy and for social, economic, and development outcomes for many countries. While it can result in some export gains, it can also result in increases in imports, affect the local industries and farms, reduce tariff revenue, and restrict the options and instruments available to a country to institute certain social, economic, and development policies.

Therefore, before negotiating or even contemplating any BFTA, countries should concentrate on three important issues. First, when a proposal is put forward by the BFTA partner or potential partner, it should be evaluated in the context of national development policy framework (plans on local and sectoral levels and issue-based plans like intellectual property). In the absence of such a framework, it would be difficult to determine the objectives of entering any negotiation, or of the advantages/disadvantages of the proposed BFTA.

Second, this framework should also assess the benefits and costs of the BFTAs for the whole nation. By doing that, the gains and losses in terms of trade and jobs, effects of the agreement on the policy space and the degree of flexibility on national plans, effects on social issues such as health, and finally key effects on technology transfers would be examined in detail before the negotiations. The costs and benefits can be applied to the various aspects of the BFTAs, including market access (to the other country, and the partner country's access to one's own market) in goods; services; intellectual property; investment, competition and government procurement; and labor and environment standards.

Third, the country should establish or organize the resources and institutional base for assessing whether or not to enter negotiations for the BFTA. As part of the process, different agencies of the government should be consulted and should be part of the process of the formulation of policy and positions. It is equally important to involve stakeholders, such as local firms, trade unions, farmers, consumers, and groups representing patients and involved in health provision and environmental protection.

Then, the decisions have to be taken nationally whether it is a good idea to enter negotiations in the BFTAs; if the decision is on the side of entering, how to conduct the negotiations; how to manage the process; how to assess the costs and benefits of proposals; and how to conclude the negotiations.

In the context of developing country–developed country negotiations on BFTAs, the costs and benefits might significantly differ in nature whether two developed countries negotiate on BFTAs or one developed and one developing country negotiate on BFTAs. If any developing country contemplates a negotiation with a developed country, then the developing country's production and export capacity should be satisfactory enough for the partner, and the partner should be able to offer significant concessions to the developing country. Otherwise the net cost of having this negotiation will be higher than the benefit. Furthermore, the additional costs of these negotiations can be higher for the developing country, as that country will end up paying more license payments, higher prices of the protected products, less access to medicines, loss in farmer's rights, etc.

Bilateral Versus Multilateral Agreements

It is generally recognized that bilateral agreements, especially between a developing and a developed country, are not the best option, and that multilateral negotiations and agreements are much more preferable. Few reasons can account for that. One of them is that bilateral agreements generally lead to trade diversion that also results in inefficiency in trade. The other reason is that developing countries are usually in a weaker bargaining position due to their undeveloped economies and political instabilities. As a result, they might put themselves in a disadvantaged position. The third reason is that even within the WTO there are flexibilities open to developing countries in interpreting and implementing obligations in trade between countries. Nevertheless, developed countries tend to remove these flexibilities for developing countries in the BFTAs. This attempt would significantly reduce the policy space for developing countries. The proliferation of so many agreements also puts pressure on personnel and financial resources in developing countries and requires technical expertise for the use of limited resources.

There are also some views that BFTAs can even be handicaps in front of multilateral trade negotiations. Philip Levy discussed the position of BFTAs and claimed that BFTAs can undermine political support for further liberalization in the field of multilateral trade, and he suggested that if the BFTAs offer larger gains to some countries than to others, then the multilateral agreements would be blocked and liberalization activities in trade would be prevented. BFTAs can never provide the political support for multilateral free trade for political economic reasons. Similarly, Gene Grossman and Elhanan Helpman also examined BFTAs from the political-agreements point of view and they ask if these negotiations are politically viable due to interaction between special interest groups and an incumbent government. They concluded that if BFTAs are to be followed, then these negotiations should generate substantive welfare gains for voters, and the agreement would create profit gains for actual or potential exporters.

See Also: Free Trade; Regional Trade Agreements; Trade Pact; World Trade Organization.

Bibliography. Richard Baldwin, "Multilateralising Regionalism: Spaghetti Bowls as Building Blocs on the Path to Global Free Trade," CEPR discussion paper (2006); Gene Grossman and Elhanan Helpman, "The Politics of Free-Trade Agreements," *The American Economic Review* (v.85/4, 1995); Mohar Khor, "Bilateral/Regional Free Trade Agreements: An Outline of Elements, Nature and Development Implications," Third World Network, www.twnside.org.sg (cited March 2009); Philip Levy, "A Political-Economic Analysis of Free-Trade Agreements," *The American Economic Review* (v.87/4, 1997).

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Bill of Lading

Routine business activities often involve contracts known as bills of lading. A bill of lading is a document or receipt issued by a carrier when it receives goods for shipment. Usually, the receipt indicates (1) the particular vessel on which the goods have been placed; (2) destination; (3) cargo weight; and (4) terms of transportation. International sales transactions usually involve sales and transportation contracts; therefore, a seller not only sells goods, but also arranges the transportation of the goods to the purchaser. Under such circumstances, a bill of lading serves as a link between the sales part of the transaction and the transportation portion of it.

Typically, contracts governing carriage of goods by water are evidenced by charter parties or bills of lading. The term *charter party* is employed to describe three widely differing types of contracts relating to the use of vessels owned or controlled by others. Bills of lading, by contrast, usually fall into one of four categories—inland, ocean, through, and air waybill—and are independent of the vessel used.

An inland bill of lading establishes an agreement between a shipper and a transportation company. It is used to lay out the terms for transportation overland to the exporter's international transportation company. In short, inland bills of lading are necessary for the domestic transportation of goods.

An ocean bill of lading provides terms between an international carrier and an exporter. It deals with the shipment of goods to a foreign location overseas. Ocean bills of lading are usually in order form—that is, they call for delivery to the order of the shipper. These bills of lading can be negotiated similarly to a draft or check. Essentially, this means that a bona fide purchaser of the bill of lading takes it free and clear of any defects that, otherwise, do not appear on its face.

A thorough bill of lading covers specific terms agreed to by a shipper and carrier. It covers domestic and international transportation of export merchandise; further, it provides the details agreed upon for transportation.

Finally, an air waybill is a bill of lading that establishes terms of flights for the transportation of goods, both domestically and internationally. An air waybill can be thought of as a type of through bill of lading because it may cover both international and domestic transportation of goods. Ocean shipments, by contrast, require both inland and ocean bills of lading.

Some bills of lading are negotiable; others are not. But inland and ocean bills of lading may be negotiable or nonnegotiable. If it is nonnegotiable, the carrier must provide delivery to the consignee—the person receiving the goods—named in the document. If, however, it is negotiable, the owner of the bill of lading has the right to ownership of the goods and, thus, has the right to reroute shipment. Depending on the parties' intention, the bill of lading may solely represent ownership of the goods. But the parties may agree that a mere security interest is to be transferred only. Upon receiving the goods, a receipt is issued and later turned in for the bill of lading proper. Apart from proving receipt of the goods to be shipped, the bill of lading incorporates the terms of the contract between the carrier and shipper.

As international trade expands, the quantity of goods transported by water will also continue to grow. Bills of lading will become increasingly important and provide the necessary safeguards to facilitate the expansion of the world economy.

See Also: Export Trading Company; Import; International Commercial Terms (Incoterms); Transportation.

Bibliography. Robert Force, A. N. Yiannopoulos, and Martin Davis, *Admiralty and Maritime Law* (Beard Books, 2008); William McNair, Alan A. Mocata, and Michael J. Mustill, *Scrutton on Charter-Parties and Bills of Lading*, 17th ed. (Sweet and Maxwell, 1964).

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Biodiversity Convention

The Convention on Biological Diversity ("Biodiversity Convention" for short) is a treaty signed in 1992 by 150 government leaders who met at the so-called Earth Summit in Rio de Janeiro, Brazil. They pledged to promote sustainable development and to act to protect the natural resources of their respective countries. Business is referred to in the Convention (Articles 10 and 16), both because of the proactive role that the private sector may play, and because of its corporate responsibility toward the environment and global biological diversity.

The Convention is not a long text (42 articles on 20 pages in the English version), yet it represents one of the founding documents of the current agenda for sustainable development, on a par with the "Rio Declaration on Environment and Development" and the "Agenda 21" program. Now a piece of international public law featured in the United Nations (UN) Treaty Collection, it was the first agreement on such a global scale to focus on biological diversity, proclaiming in its preamble that "the conservation of biological diversity is a common concern of humankind" and that "it is vital to anticipate, prevent and attack the causes of significant reduction of loss of biological diversity at source." Since its launch in 1992, over 40 other countries have joined the Convention; only a very few countries worldwide are not signatory parties yet: Some micro-states such as Andorra and the Vatican, also Iraq as well as the United States (which signed the treaty in 1993 but the U.S. Senate has yet to ratify it).

The Convention provides a global policy framework; national governments remain sovereign to decide and implement the most suitable strategies to achieve, in their own contexts, the three goals of the Convention: "conservation of biological diversity; sustainable use of natural resources; fair and equitable sharing of the benefits" (Article 1). National governments set their own targets, priorities, and action plans. Depending on the country, some industry sectors are more directly concerned, typically forestry, agriculture, fisheries, energy, transportation, and urban planning—but the broad agenda also reaches into other policy areas such as education, health, science, and technology. For the business community, this may translate into a range of opportunities (such as financial measures and incentives for the conservation and sustainable use of biological diversity) but also constraints (such as regulated access to genetic resources or statutory impact assessment).

The Convention is supported by a secretariat operating under the UN Environment Programme and based in Montreal, Canada. The secretariat increasingly regards business as a key stakeholder, on a par with local authorities and nongovernmental organizations. Since 2006 the secretariat has published a regular newsletter on business and biodiversity. The diverse topics in the April 2008 newsletter illustrate the range of challenges that lie at the interface of business and biodiversity: "assessing the economic cost of biodiversity loss," "mainstreaming sustainable agriculture," "catalyzing global corporate ocean responsibility," but also "a mining company perspective." Professional organizations such as the World Business Council on Sustainable Development and the International Chamber of Commerce are also contributing to this agenda.

Although the emphasis has recently shifted from mere environmental issues (reducing waste and avoiding pollution) to commercial objectives (managing biodiversity opportunities in order to provide better products and services and to improve corporate performance), there is also an increasing emphasis on corporate social responsibility and ultimately ethics.

Moreover, the need to engage the business community in biodiversity protection and sustainable development is increasingly recognized by political organizations, as illustrated by the High Level Conference on Business and Biodiversity organized in 2007 by the Portuguese presidency of the European Union Council. One of the outcomes of that conference was the "Message from Lisbon on Business and Biodiversity," which noted that "there is a strong business case for biodiversity, including the competitive advantage gained from conserving biodiversity and using biological resources in a sustainable way."

In 2003 the Biodiversity Convention was supplemented by another international agreement called the Cartagena Protocol on Biosafety. The Convention and the Protocol are now often presented together; most of the countries that signed the Convention have also signed the Protocol, with a few exceptions such as Israel and Russia. The Protocol builds upon the Convention, yet adds a special focus on protecting biodiversity from the potential risks posed by the living modified organisms (LMOs) created by modern biotechnology. Common examples of LMOs include agricultural crops (such as tomatoes, corn, cotton, and soybeans) that have been genetically modified for greater productivity or for resistance to pests or diseases.

Based on the principle of precautionary approach, the Protocol is wary about the impact that such genetically modified organisms may have on other organisms; as a consequence, it promotes biosafety by establishing rules and procedures for the safe transfer, handling, and use of LMOs. Although the Protocol is primarily relevant for businesses involved in agriculture, logistics, the food industry, and biological sciences, the international political will that underpins it further illustrates the global concerns for environmental changes that now frame all business decisions.

See Also: Corporate Social Responsibility; Environmental Standards; Sustainable Development.

Bibliography. Convention on Biological Diversity, *Convention on Biological Diversity* (1992); Earthwatch Institute, IUCN & WBCSN, *Business & Biodiversity: The Handbook for Corporate Action* (WBCSD, 2002); M. J. Epstein, *Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts* (Berrett-Koehler, 2008); A. Kontoleon, U. Pascual, and T. Swanson, *Biodiversity Economics: Principles, Methods and Applications* (Cambridge University Press, 2008).

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Black Market

Black markets are markets that traffic in illegal goods or services. They may exist with the connivance of local authorities. They may be hidden or underground markets found down dark alleyways or they may be openly tolerated. In the shadow economies of the world, commerce is seeking to avoid government regulations or taxes on a vast array of goods and services. The lack of economic freedom in some countries is often a stimulus to the development of black markets. In some cases shadow markets employ people who feel marginalized in a system that favors legal monopolies or has excessive taxes or regulations. Their victimization is seen as a justification for their economic behavior.

Gray markets handle goods that are produced by legitimate firms; however, they are sold through unauthorized dealers. The genuine goods are sold by dealers who are not a part of the producer's distribution system.

Black markets have existed in earlier times as well. For example, in the early 19th century London was a center of medical training. However, there was a shortage of cadavers because many people believed that to enter heaven the body had to be intact. The supply of executed criminals was not sufficient for medical schools. Grave robbers, at times working with church wardens, dug up fresh corpses and sold them to the medical schools. These "body snatchers" were filling the demand illegally. Other types of older black markets included the smuggling of slaves, operating illegal houses of prostitution, and trafficking in drugs or other illegal goods. In general whenever anything is prohibited or priced too high an illegal market can be expected to arise to supply the demand.

Trafficking in human beings is still happening today. Babies can be adopted through back channels for a price. Sometimes the babies are the victims of kidnappings. Smuggling illegal workers into labor markets is a thriving business in the world and one that makes the news in the United States, Canada, or Europe on a frequent basis. Along the border with Mexico authorities have to contend with "coyotes" who are traffickers in humans, as well as with drug smugglers.

After the fall of communism at the end of the Cold War in 1989, criminal gangs arose, in many cases forming the Russian Mafia. They lured women into prostitution, often through deception, as thousands of young, educated women in search of work accepted jobs in western European countries. However, the jobs often were falsehoods told by gangsters to lure their victims into prostitution by force when they arrived at their destination in places such as the Czech Republic. It would have been hard for such activities to operate without the active complicity of the local police.

The demand for goods in contemporary markets evokes all manner of black markets. Pirated goods, knockoff goods, and adulterated goods have been sold in markets around the world. The sale of all of these pirated goods amounts to billions in the black markets even though they are cheap imitations. The cost to the original inventors, designers, manufacturers, wholesalers, and retailers runs into the hundreds of billions of dollars.

Hollywood's sales of DVDs of first-run movies has been especially hard hit by copyright pirates in the Third World. Shanghai before 1937 and the beginning of the Japanese-Chinese War was a city with a reputation for numerous black market operations. Other Chinese cities shared in that reputation. Some of the sales were sales of information in the espionage trade. Other sales were in drugs, or other illegal commodities. Since 1989 and the enormous development of trade in China anyone, and especially foreigners, walking the streets of Shanghai can find black market sales of pirated DVDs selling for less than $1. The DVDs are good quality and are often of first-run movies. In fact they are often on sale in Shanghai and other Chinese cities before the DVDs are released in the United States. Other countries in the Third World also participate in these and many other copyright violations of printed as well as digital materials.

Shanghai is also typical of many other Chinese cities visited by foreigners by the number of street venders selling imitation Rolex watches or knockoffs of famous writing pens. The buyer who asks about the price may well be asked in return how many dozens they want to buy. The traffic in black market goods in many countries has harmed the business of many companies. In some cases the imitation goods show up in the United States or in other countries where they are sold cheaply at a variety of gray market locations. Black market goods are often sold knowingly or unknowingly at flea markets or by street vendors.

Black market pirates may sell goods or services. The goods may be imitations or they may be stolen. The burglar, hijacker, or thief operates in a different type of black market where stolen goods are sold to a middle man who in criminal slang has been called a *fence*. The fence takes possession of the goods and then sells them in some kind of market that may be legitimate or underground. Besides consumer goods art works are continually being stolen and sold to someone who can find a buyer.

Art and Artifacts

Many countries have had to surround their museums or traditional sites with armed security guards in order to protect ancient artifacts. The traffic in stolen artifacts is huge and does serious damage to the integrity of archeological sites around the world. The pieces of ancient art that lose their provenance (record of discovery and ownership) may have commercial value as art, but they lose value as historic pieces.

Museums, libraries, and art institutes have at times willingly purchased items that were excellent pieces but were from the underground market in artifacts. The trade has promoted grave robbing in a great many ancient sites around the world from China to Peru and from India to Arizona. The looted pieces lose archeological value, and then as they move in the underground trade their provenance is also lost. Buyers of artifacts in black markets may be indifferent to the archeological information lost when artifacts are traded in the hidden market.

The illegal trade in ancient art is matched by the traffic in stolen art. From time to time there are news accounts of dramatic robberies of famous works of art that are stolen by thieves. The buyers of such works of art participate in a criminal conspiracy to gain personal pleasure from privately viewing art that was once on public display. To this art should be added the traffic in art that was stolen during World War II by the Nazis and by others. Many of the original owners of these works of art died during the war and left little that could be used to identify the lost property to their possible heirs.

Illegal Drugs

The black market in intoxicating drugs is likely the greatest in the sums of money the trade generates. It also leads to the largest response from law enforcement agencies, many of which have been assigned or created just to deal with it. It is also the most common reason for the imprisonment of people in the United States and in many other foreign countries. However, some countries such as the Philippines and Singapore apply the death penalty to convicted traffickers.

The illegal drugs with the greatest volume are cocaine, marijuana, and opium. Other drugs that are derivatives from these are also widely distributed by the heavily armed criminal organizations that engage in supplying the demand for illicit drugs. The sums of money involved run into the billions of dollars.

Cocaine comes from South America where the Columbian drug cartels have established bases for growing and processing coca leaf into cocaine. The war on drugs has not defeated the trade. Thousands have been killed and perhaps millions imprisoned because of the trafficking in illegal drugs.

Marijuana can be grown around the world and is often grown in the United States in secret locations. These may be in patches of ground in national forests. Or clever growers have bought houses in an area and then staffed them with growers who live on site to tend the plants that are grown under artificial lights in the rooms of the house. Outwardly the house looks normal, but inside it is a pot farm that can produce tens of thousands of dollars in marijuana per year unless detected and suppressed by law enforcement.

Opium and its derivatives have been mostly grown in south Asia. The "Golden Triangle" located in northern Thailand and Burma produces huge quantities of the drug. Afghanistan has also and continues to be a center for growing opium poppies. These and other places are centers for a vast network of drug dealers who sell these toxic chemicals.

At times violence has exploded between rival drug gangs. Jamaican gangs have fought with Columbian and Mexican rivals. The violence in Columbia and Mexico between rival gangs or against the government's efforts to control these gangs has threatened to destabilize these and other countries. Historically Italian gangs known as the Mafia handled the opium trafficking in the United States and elsewhere.

Medicine and Body Parts

The black market trade in recreational drugs is only one type of trafficking in drugs. Many legitimate pharmaceutical products have been copied and sold by illegal manufactures. In addition many cases have been exposed in recent years of companies and consumers who were victims of substitutions. As insulin or some other drug is made and distributed, opportunities for adulteration or substitution occur in the distribution system. The impact for consumers who believe that their medical supplies are secure when they are not has been to adversely affect the health of some and even resulted in deaths. This type of fraud is on a par with the adulteration of products from China or other developing countries. There have been cases where chemicals have been added to such things as baby formula or milk. The adulterant makes it appear that the protein level is higher than it actually is; however, the adulterant in some case could be dangerous for children or even adults to consume. Cases involving the deaths of animals including pets have renewed calls to stopping the trafficking these activities.

The medical field is the scene of a great many black market operations. Not only drugs and medical supplies, whether copied or stolen, enter into the illicit trade—so do body parts. The great development of organ and body part transplant technology has generated a cruel and at times deadly trafficking in body parts. Cases of people who are financially desperate selling a kidney or an eye have received media attention. But for those that make the news, there are others that do not. This is an area were the organs of the poor can be purchased by those with money. It is a trade that is likely to grow unless suppressed with severe penalties.

Plants and Animals

The medical field of modern medicine is not the only area of medicine affected by illegal drug trafficking.

Traditional medical systems in China and India have long used a variety of natural products including teas, herbs, and ointment to treat a variety of ailments. Most of these ancient remedies are supplied with legitimately produced materials. However, there are many products that continue to stimulate a trade in illegally obtained animal organs, or plants that are a threat to the survival of some species. For example, bears are often poached for their bile, which contains ursodeoxycholic acid (UDCA). The chemical has been used in Chinese medicine to reduce fever, act as an anti-inflammatory, and to break down gallstones. It is also believed to protect the liver and to improve eyesight. The active drug is now manufactured from other sources, but tradition and superstition have continued the demand.

Rhinoceros horn is also in wide demand and has been supplied by poaching. In traditional medicine it is believed to be an aphrodisiac. The horn is also used to make traditional handles for knives used by men in Yemen and neighboring countries. The impact upon the rhinoceros populations of the trade has led to a significant reduction in the populations of these famous animals.

Elephant ivory has been sought for centuries for purposes of decoration, as has the ivory of narwhales and other sea mammals. The trafficking in elephant ivory has been successfully suppressed, as has the trafficking in sea mammal ivory. However, there are many other plants and animals that continue to be the victims of black marketers who seek such parts as tiger bones for aphrodisiacs.

The trafficking in animal parts is similar to the illegal trade in rare plants. Illegal logging of rare woods in a common activity in many Third World countries; however, it has been known to occur in the United States, where old Black Walnut trees on abandoned farms in places like Wisconsin are hijacked and sold in legitimate markets to unsuspecting buyers. Other types of commercially valuable trees are stolen from forests around the world in order to sell them for a hidden profit to a buyer who can move them into the legitimate stream of commerce.

Diamonds

Another dangerous and violent type of black market is the trade in diamonds. Most diamonds are sold through legitimate channels. A few diamonds have always been smuggled out of the mines and a few others are taken from people through robbery or by other means. These diamonds are usually smuggled into the legitimate trade. However, far more important is the trade in "blood diamonds" or "conflict diamonds."

Conflict diamonds have developed from the collapse of governments in war-torn Africa. In Angola, Liberia, Sierra Leone, and the Congo, as well as a few other places, the virtual lack of law and order has allowed criminal gangs to pose as guerrilla fighters as a cover for gross criminal conduct. The diamond gangs proceed to capture a mining area and then enslave the local people and force them to do the mining. The diamonds that are found are used to pay for guns and to prosecute more violence. The trade in blood diamonds has also at times involved known terrorist groups such as Al Qaeda seeking a source of funding.

The discovery of new diamond mines in Russia and Canada has not increased the supply enough to make

A diamond miner in Sierra Leone, where in 1999 only $1.5 million out of $300 million in diamond exports was legal.

the conflict diamond operations unprofitable. However, the legitimate wholesalers and retailers have adopted policies that promote selling diamonds with a detailed history of each stone.

Nuclear Technology

Nuclear technology has advanced rapidly since the Manhattan Project produced the first atomic bombs in 1945. There is now a growing fear of nuclear proliferation by many governments around the world. Their concerns about terrorist groups gaining nuclear materials for making a radiological bomb ("dirty bomb") have grown with the piles of nuclear waste and stocks of nuclear materials available for theft or illegal sale.

The fall of the Soviet Union in 1949 left it open to having its military-grade nuclear materials stolen and sold in the Asian region or beyond. Some arrests of this type have been made; however, the sale of "yellow cake," which is uranium ready to process into fissionable material, has been conducted legally or illegally by some Third World countries.

Alcohol

Black markets can be so hidden that wars occur between government agents and the black market operative. However, black markets can also be so widely tolerated that a government openly collects a black market tax on illegal sales. The State of Mississippi until the mid-1960s collected a black market tax on the sale of alcoholic beverages. A large majority of its citizens were Baptist and Fundamentalist members of churches that supported temperance policies prohibiting the sale of alcohol. While it was the case that their preachers supported prohibitions on the sale of alcoholic beverages, significant minorities of these churches did not. In fact many members consumed alcoholic beverages.

In what was a blatant compromise between drinkers of alcohol and opponents, the State of Mississippi began to allow the open sale of beer and wine, for which it collected a black market tax. Citizens could purchase beer stamped with "Mississippi black market tax paid" standing in a cooler beside milk containers. Technically it was illegal to sell the beer, but it was also tolerated. However, in one case the state seized a stock of alcoholic beverages from a bootlegger near Hattiesburg, Mississippi, who then sued to get back his property because he had paid the black market tax. He lost in court on the grounds that the state had the right to seize the contraband even if he had paid the tax. The case demonstrated the hazards of dealing in black markets even when the affected trade is almost legal.

The manufacture, transportation and sale of alcoholic beverages in black markets has a long history. The Whiskey Rebellion of the 1790s began a long American tradition of trafficking in illicit distilling and distributing of untaxed whiskey. During the Prohibition era of the 1920s numerous illegal stills operated, some people made "bathtub gin," while others made home-brewed beer. In the Great Depression there were farmers who were unable to get good returns for their fruit harvests. In some places they fermented the fruit into alcoholic beverages that were sold by local bootleggers in an underground economy. Many of these farmers engaged in a black market trade but were otherwise upstanding citizens. Law enforcement in many places also accepted payments to ignore this black market trade.

Weapons

In contemporary times the illegal sale of alcohol has been supplanted by drug trafficking. Those engaged in illegal drug trafficking often use weapons purchased in the black market in guns. The guns used are often more powerful than those available to the police forces because the police have to operate on a much smaller budget for weapons purchases than do the criminals.

The illegal sale of guns is widespread globally. Following the Cold War many former communist countries had large arsenals of small arms and sometimes larger weapons that were sold to nations-states in Third World countries or to guerrilla groups operating there. In many cases these weapons were stolen from poorly guarded armories, or they were sold to arms dealers who then saw that they were delivered to buyers. The market in guns has continued to be brisk because of the numerous terrorist organizations and conflicts around the world. The numerous small wars that continue to flare up make the demand for weapons virtually constant. Weapons purchased by the various criminal organizations around the world are used to attack the police, rival gangs, or to intimidate civilian populations.

Currency

In the case of the South American drug cartels, huge sums of money flow into their coffers, often making it difficult for them to launder their profits. This leads to illegal currency exchanges, quite often through hidden bank transfers drawing banks into supplying services to black market operations.

Currency transfers in currency black markets are a common feature of many developing countries. Many do not permit free markets in foreign currency exchanges. They often impose a variety of regulations to protect their balance of payments or for other reasons. The various restrictions have different forms from country to country. Among the restrictions are limits on the foreign currency that can be purchased by citizens of their country or restrictions on currency brought into the country. The restrictions often interfere with trade, causing traders to devise ways to gain the currency that is needed for business. In some countries illegal markets in currency are places that attract foreigners seeking a much better exchange rate than the official rate. Such transactions may be openly tolerated, occasionally punished or sometimes severely punished depending upon political needs.

Transportation

Transportation services are another area of underground or shadow market operations. In many places unlicensed cab drivers operate outside of the government regulated system. The unlicensed cabs may be cheaper than the licensed cabs, but riders, especially foreign visitors, may be victimized by thieves or kidnappers if they take one of these cabs. Illegal cab drivers or unlicensed guides are common in Third World countries and they may try to overcharge or to take the fare to places where they are pressured into buying goods from a "cousin."

In many jurisdictions participation in black markets is a criminal offense whether the participant is a seller or a buyer. The illegal nature of these markets puts buyers at greater risk from criminals as well as from government sanctions.

See Also: Copyright Infringement; Gray Market; Money Laundering; Sea Piracy; Smuggling.

Bibliography. Peter Andreas, *Blue Helmets and Black Markets* (Cornell University Press, 2008); Tihomir Bezlov, *Transportation, Smuggling and Organized Crime* (Center for the Study of Democracy, 2004); Gargi Bhattacharyya, *Traffick: The Illicit Movement of People and Things* (Pluto Press, 2005); Ben Davies and Jane Goodall, *Black Market: Inside the Endangered Species Trade in Asia* (Mandala Publishing, 2005); Gianluca Fiorentini and Stefana Zamagni, eds., *Economics of Corruption and Illegal Markets* (Edward Elgar Publishing, 2000); Alan Green, *Animal Underworld: Inside America's Black Market for Rare and Exotic Species* (Public Affairs, 2006); James S. Henry, *The Blood Bankers: Tales from the Global Underground Economy* (Four Walls Eight Windows, 2003); Lora Lumpe, ed., *Running Guns: The Global Black Market in Small Arms* (Zed Books, 2000); Moises Naim, *Illicit: How Smugglers, Traffickers, and Copycats Are Hijacking the Global Economy* (Random House, 2006); Mangai Natarajan and Mike Hough, *Illegal Drug Markets: From Research to Prevention Policy* (Willow Tree Press, 2000); R. T. Naylor, *Wages of Crime: Black Markets, Illegal Finance and the Underworld Economy* (Cornell University Press, 2002); Ramsay M. Ravenel, *Illegal Logging in the Tropics: Strategies for Cutting Crime* (Taylor & Francis, 2005); Peter Reuter, *Organization of Illegal Markets: An Economic Analysis* (University Press of the Pacific, 2004); Friedrich Schneider and Dominik H. Enste, *The Shadow Economy* (Cambridge University Press, 2007); Paul Steege, *Black Market, Cold War* (Cambridge University Press, 2007); Kimberly L. Thachuk, *Transnational Threats: Smuggling and Trafficking in Arms, Drugs, and Human Life* (Praeger Security International, 2007); Sudhir Alladi Venkatesh, *Off the Books: The Underground Economy of the Urban Poor* (Harvard University Press, 2006); Sheldon Zhang, *Chinese Human Smuggling Organizations: Families, Social Networks, and Cultural Imperatives* (Stanford University Press, 2008).

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Blame Culture

Blame culture can be defined as the attitude of a person or a group of people of not accepting the responsibility for making a mistake in order to avoid the risk of being criticized or prosecuted. This phenomenon has infiltrated every part of modern society, especially in the Western world in the last 50 years. Cancer patients suing the tobacco companies, obese people blaming the fast food companies for their condition, malpractice cases in the medical practices, etc., are a few of the many examples of blame culture. This is sometimes also referred to as compensation culture. An extreme example of this culture was a burglar suing the household for getting hurt while he was in the act.

The blame culture has become a major nuisance in the healthcare industry. Many millions of dollars are being paid out to patients each year in personal damage cases. It is hard for anyone to report or admit a medical error, especially if it has caused any harm to the patient. The individual involved is afraid of being blamed and punished for the error committed. Often, reporting errors damages professional image, self-confidence, and eventually one's practice in the competitive environment of medical and health services. It is challenging to maintain professional and institutional accountability along with increased public safety and quality of service.

To find a way to reduce the rate of medication error, the government of Great Britain established the National Patient Safety Agency (NPSA) in July 2001. NPSA has launched a nationwide reporting scheme for recording actual medication errors and near misses across the National Health Service to analyze the root causes. The goal of this program is to discourage the blame culture by viewing those who report the errors as heroes. It is, however, important to clarify where and how the professional responsibility fits into the "no blame" culture.

It is not unexpected that when something goes wrong people try to find an explanation and hold someone accountable. But blaming others instead of taking personal responsibility for any misfortune or wrongdoing and trying to obtain compensation has become part of modern culture in the United States and Europe. As a result, the corporations, the institutions, and the general public are all spending an excessive amount of time, energy, and money in innumerous frivolous lawsuits in mostly Western societies. In New Zealand, for example, within the first few years of the introduction in 1974 of the "no fault" principle for accidents, the accident rate increased by 40 percent from people taking advantage of the ACC benefits. Quickly tougher policies were introduced to avoid bankruptcy from the escalating costs.

It is not merely a coincidence that the blame culture is more prominent in the countries with the highest numbers of legal professionals. The United States is at the top of the list of countries with the most lawyers per person (1 lawyer per 265 Americans), followed by Brazil, Spain, Italy, the United Kingdom, Germany, and France in 2007. The increasing numbers of legal personnel have improved accessibility and communications with the public directly, or through media like television ads. They have been very persuasive in encouraging the cultural shift from personal accountability to blaming others.

The financial well-being of the advanced countries is more than ever tied to the rest of the world. Developing countries like China and India are experiencing economic prosperity that was unimaginable in the near past. However, their legal systems and personnel are not yet as established as in the United States and Europe. Hence their societies still focus on personal accountability. It is the obligation of the advanced countries to direct their societies toward "no blame culture," which not only will help to stop the financial bleeding of institutions, government, and corporations in their own countries, but also will prevent the nationals from emerging countries from taking the same path toward "blame culture."

See Also: Cross-Cultural Research; Cultural Norms and Scripts; Culture-Specific Values; Enculturation; Ethnocentrism; Gannon's Cultural Metaphors; Loyalty; Negotiation and Negotiating Styles; Opportunistic Behavior; Silent Language of Hall (Nonverbal Communication).

Bibliography. Michael Bassett, *The Blame Culture* (DOM/PRESS, 2004); Jane Galt, "Lawsuit Culture," www.janegalt.net (cited March 2009); D. McArdle, N. Burns, and A. Ireland "Attitudes and Beliefs of Doctors Towards Medication Error Reporting," *International Journal of Health Care Quality Assurance* (v.16, 2003); Alan Nathan, "Reporting Errors: Can a 'Fair Blame Culture' Really Work for Pharmacists?" *The Pharmaceutical Journal* (v. 272); Jeffrey O'Connell and Joseph R. Baldwin, "(In)juries, (In)justice, and (Il)legal Blame: Tort Law as Melodrama—or is Farce?" *UCLA Law Review* (v.50/2, 2002); Michael Pearn, Chris Mulrooney, and Tim Payne, *Ending the Blame Culture* (Gower Publishing Ltd., 1998); David Pollitt, "Track-Supervisor Training Transforms Attitudes and Culture at Tube Lines," *Training and Management Development Methods* (v.21/3, 2007); Tim van Zwanenberg, "Clinical Governance in Primary Care: From Blind-eye to No-blame Culture in One Short Leap?" *British Journal of Clinical Governance* (v.6/2, 2001).

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Blocked Funds

Blocked funds are capital assets or cash flows generated by a foreign project that cannot be transferred to another country because of restrictions imposed by the host government. Reasons for funds being blocked include political motives, criminal activity, trading violations, or exchange controls on foreign currencies. Some firms specialize in the trading of these securities, but at a sharp discount. Blocked funds are also used in popular media to illustrate any act by a financial institution restricting access to or transfer of funds; this has led to a broader (if somewhat incorrect) use of the term. The use of blocked funds has also led to the emergence of "blocked funds loan scams" on unsuspecting consumers around the world.

Funds are usually blocked for one of four reasons: political motives, criminal activity, trading violations, or exchange controls on foreign currencies. Funds can be blocked for political motives, such as a country being at war or in connection to a national emergency. For example, in 1992, following the Iraqi invasion of Kuwait, Iraqi funds abroad were frozen by the United States to pressure Iraq to stop the invasion as well as for leverage to extract war reparations.

Furthermore, funds can be blocked when the host government suspects the funds are either produced by, or used to generate criminal activities. In those cases, the host government will force the institution to hold the funds until it is satisfied that no illegal activities occurred. If illegal activities are found to have occurred, the host government will demand the funds be turned over to it. One recent example occurred when the U.S. Justice Department requested payment services like Visa and PayPal to block fund transfers to offshore gambling Web sites until which time it could determine the legality of these sites.

Trading violations are a rather uncommon reason for blocking funds; this is usually at the behest of a trading authority, which will ask the financial institution to hold funds because of questionable transactions. Finally, in rare occurrences, currency transfers can be restricted by the host government, forcing financial institutions to block funds until such restrictions are lifted.

Once a host government determines some capital has to be blocked, it will contact the financial institution handling the transaction and will request the institution freeze the funds. The financial institution then places the funds in an interest-bearing account until which time the host government will decide if the funds can be released. During the period when the funds are frozen, the institution makes a reasonable attempt to place the capital in a financial product that generates a commercially acceptable interest rate; interest is returned to the capital holder once funds are unblocked.

It is also possible for funds to be blocked even if they are only transiting in the country hosting the funds. For example, a company in Europe transiting funds through the United States to a country with fund restrictions might have their funds frozen, even if the funds were only in financial transit in the United States. Countries usually reserve the right to verify that funds are not transiting to blocked countries or individuals through its national financial system.

R. D. Ellis has suggested different techniques to prevent having funds blocked by host governments. These techniques include receiving contract payments in dollars, purchasing host country dollar bonds, increasing local purchases, making capital investments with the blocked funds in the host country, and establishing counter trades of equivalent value.

Market Impact

There are a number of brokers and banks that specialize in trading blocked funds. By demanding a deep discount on the blocked funds, these firms take on the risk that the funds may never be released in exchange for potential profits. Some firms specialize in blocked funds due to currency transfer issues; they facilitate the exchange from one currency to the next, making profits on the currency conversion rate they request.

Blocked funds transactions are used in less ethical transactions as well. Some organizations use them for money laundering, exchanging illegally obtained capital for "clean" money. Other scams include individuals purchasing blocked funds for deep discount, only to find that the funds did not exist, or that the transaction has been cancelled by the offering party.

See Also: International Law; Risk Management.

Bibliography. R. D. Ellis, "Recognizing and Avoiding Currency Exchange Problems in International Project Management," *Proceedings of the Project Management Institute Seminar/Symposium* (1988); Young Hoon Kwark, "Risk Management in International Development Projects," *Proceedings of the Project Management Institute Annual Seminars & Symposium* (2001); Zia Ullah, "The Blocking of Funds by OFAC," Pannone LLP, www.pannone.com (cited March 2009).

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The photo shows one of Bloomberg's 2,000 reporters and editors at work in a television studio in London, England.

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Bloomberg's headquarters are in a seven-story building designed by Cesar Pelli on Lexington Avenue in Manhattan. The open-plan glass building is designed to be a physical manifestation of the 24/7 global marketplace and of information transparency. The building has some 22 fish tanks filled with exotic rare specimens (every office contains a fish tank) and edgy works of art, from a massive aromatic cedar artwork in the first-floor lobby to a large titanium thundercloud over an escalator. The work layout is nonhierarchical with employees stationed every six linear feet in a long row of desks.

Revenues for 2006 were approximately $4.7 billion with operating profits before taxes of about $1.5 billion. In addition to the firm founders, Merrill Lynch holds a 20 percent stake in Bloomberg.

See Also: Market Research; Media; Merrill Lynch.

Bibliography. Bloomberg.com, about.bloomberg.com (cited March 2009); Carol J. Loomis, "The Bloomberg," *Fortune* (April 16, 2007); Aline van Duyn, "News Chief Stays Hungry for Expansion," *Financial Times* (USA) (June 21, 2007).

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BMW

The Bayerische Motoren Werke (BMW Group), a German manufacturer of motorcycles, aircraft engines, and automobiles, producing the three premium products BMW, MINI, and Rolls-Royce, has 23 production plants in 12 countries and representation in more than 140. The BMW Group offers customized luxury cars to an international audience.

BMW is among the world's leading premium manufacturers. In 2007 the net profit of the company for the first time exceeded the €3 billion figure, with more than 1,276,000 BMW brand cars, 222,875 MINI units, and 1,010 Rolls-Royce cars sold. BMW AG, which has more than 107,000 employees (2007), is one of the pillars of the well-known German automobile industry.

Despite its planned downsizing by 8,000 jobs in 2008, BMW remains among the top five companies on the Corporate Trust Index (CTI) of DAX-listed German companies. Despite losing the number one position it had held for several years, BMW remains on this index ahead of fellow German car makers Daimler and Volkswagen.

In a study undertaken of the Sustainable Value of 16 automobile manufacturers, conducted by the Berlin Institute for Futures Studies and Technology Assessment and the Queen's University Management School in Belfast and funded by BMW, BMW ranked second. The study examined the fact that enterprises use not only capital but also ecological and social resources such as water and labor in their production processes. If these resources are employed more efficiently than the market, it is a positive sustainable value. With the provision for ecological and social resources, the study links the value of sustainability with investment decision-making processes.

Following a strategy of local production, this German global player is committing itself to a long-term market penetration strategy while at the same time evading high import duties on importing foreign-produced cars. Another sales and production strategy used by BMW is the completely knocked down (CKD) process in which car parts and components are imported from overseas and locally assembled also using locally produced parts.

Historical Milestones

The aircraft-engine producing company Rapp-Motorenwerke was renamed Bayerische Motoren Werke GmbH on July 21, 1917. Shortly before the end of World War I, on August 13, 1918, the Bayerische Motoren Werke GmbH became a stock corporation. As the Treaty of Versailles forbade German companies to manufacture aircraft engines, in the postwar years the new company specialized in the production of rail vehicle brakes and built-in engines. In 1922 Bayerische Flugzeug-Werke (BFW) purchased the engine production operations and the name BMW. Up to this day, the BFW founding date of March 7, 1916, is considered by BMW as the formation date of the Bayerische Motoren Werke.

In the 1930s, boosted by increasing state subsidies, BMW increased its production of aircraft engines. In 1934 the Aircraft Engines Division was merged with BMW Flugmotorenbau GmbH and later with a joint company of BMW AG and BMW Flugmotorenbau GmbH. This was followed by a period of cooperation with the Brandenburgische Motorenwerke GmbH (Bramo) and the later takeover of Bramo by BMW. The production of aircraft engines rose significantly during the war years.

While BMW's Munich plant was heavily battered by air raids during the last years of World War II, the plant in Allach got off relatively lightly. Production slowly resumed in mid-1945 when BMW was allowed to repair U.S. Army vehicles and to manufacture spare parts, agricultural equipment, and bicycles. However, as the U.S. military government transitionally expropriated BMW from its plants, and in the course of Germany's reparation payments, the company lost control over both assets and machinery.

The slow recovery of the company in the post-war years rendered it vulnerable to takeover bids. In 1959 Daimler-Benz made an offer to BMW, expressing its interest in restructuring the company. BMW rejected the offer and soon afterward restructured itself. Over the next two decades the company, under Board of Management chairman Eberhard von Kuenheim, expanded from a domestic and European brand to an international brand featuring one of the world's most recognized commercial logos.

The expansion strategy included the acquisition of the British Rover Group in 1994 with its brands Rover, Land Rover, MINI, and MG. In 1998 BMW purchased the name Rolls-Royce for cars (with usage not before 2003) that were still being built by the German Volkswagen Group at the time. In 2000 BMW decided to sell Rover, MG, and Land Rover for a very low price as it could no longer cope with high restructuring costs and low profits. Since 2000, BMW has positioned its cars in the premium segment of the international automobile market.

See Also: DaimlerChrysler; DAX Index (Germany); Germany; Volkswagen.

Bibliography. BMW Group, *Corporate News. BMW Group Heading Yowards a Successful Year in 2008* (Bayerische Motoren Werke AG, 2008); BMW Group, *The Fascination* *of Production* (Bayerische Motoren Werke AG, 2007); "BMW Roundel Celebrates 90 Years," www.Motorcycle.com (cited March 2009); Lars Mende, "Vertrauensranking. Stellenabbau—na und?" [Ranking of Confidence. Reduction of Jobs—So What?], www.manager-magazin.de (cited March 2009); Mark C. Schneider, "Nachhaltigkeit. Toyota macht das Rennen" [Sustainability. Toyota Comes Out First], *Wirtschaftswoche*, www.wiwo.de (cited March 2009).

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BNP Paribas

One of the most prominent European banks, BNP Paribas was formed in 2000 with the merger of the Banque Nationale de Paris and Paribas, two Parisian banks which, with Crédit Lyonnais (est. 1863) and Société Générale (est. 1864) constitute the "old banks" of France, established in the 19th century and foremost in prestige throughout the 20th. In 2007–08, the bank made headlines as one of several major foreign banks left vulnerable by the American subprime mortgage crisis.

Banque Nationale de Paris had been formed in 1966 by the merger of two 19th-century retail banks, Banque Nationale pour le Commerce et l'Industrie (BNCI) and Comptoir National d'Escompte de Paris (CNEP). Both banks had been nationalized at the end of World War II, along with Crédit Lyonnais and Société Générale, as part of France's postwar reorganization of banking regulations. When the government decided to experiment with re-privatizing these banks decades later, BNP was the second to be privatized, in 1993, after the privatization of Société Générale proved successful. (Crédit Lyonnais followed in 1999.)

Paribas's origins lie with the Banque de Crédit et Depot des Pays-Bas, which was founded in Amsterdam in 1863 and immediately opened a Parisian branch, helping to connect Parisian investors (still recovering from the havoc wrought on the French banking and finance industry by the regime changes of the first half of the century) with private banking throughout Europe. Only nine years after its founding, BCDPB merged with the Banque de Paris (est. 1869) to form the Banque de Paris et des Pays-Bas (BPPB) in January 1872.

BPPB was a public limited company, and began a relationship with Crédit Lyonnais early on, pairing with it to back part of a loan for the French government to repay war debts; a large portion of the funds for the loan was raised from across Europe, through the Pays-Bas connections. This kind of financial intermediation remained a primary pursuit of BPPB through the early 20th century, and it was instrumental in financing the French defense industry during World War I. Because it was not nationalized in the wake of World War II, it was able to become a more prominent commercial bank, and assisted and profited from the reconstruction of French industry.

The bank was eventually renamed Paribas, compressing the "Pari" of Paris and the "bas" of Pays-Bas. It became a focal part of the competition between BNP and Société Générale after both were privatized, as Société Générale attempted to buy out Paribas stock while BNP made attempts to acquire both Paribas and Société Générale. The bid for Paribas eventually succeeded, and BNP Paribas, formed in May of 2000, enjoyed a stronger position in the market. In 2007, when the American subprime mortgage crisis threatened three of BNP Paribas's funds—Parvest Dynamic ABS, BNP Paribas ABS EURIBOR, and BNP Paribas ABS EONIA—the bank suspended their operation, precipitating the intervention of the European Central Bank for the first time since the financial panic following 9/11. A $130 billion loan at 4 percent interest was extended by the ECB in order to keep BNP Paribas's announcement from causing further panic.

BNP Paribas has become the largest bank in the Eurozone by assets, and the second-largest by market cap. Just under half of its 162,000 employees work in Europe, and the bank's branches are spread throughout 87 countries. In its home country, it is most active as a retail bank, having inherited Paribas's extensive coverage—nearly 200 locations in Paris alone, another 2000 throughout the rest of the country, serving 6 million consumers. Its subsidiaries include Bank of the West in the United States, and the Italian bank BNL. The idiosyncratic scholar Nassim Taleb, best known for his writings on finance and the mathematics of rare occurrences—and for his prediction of the failure of Fannie Mae—once worked for BNP Paribas as a proprietary trader.

See Also: CAC 40; France; Mortgage Credit Crisis of 2008; Subprime Loans.

Bibliography. Niall Ferguson, *The Ascent of Money: A Financial History of the World* (Penguin, 2008); James Kanter and Julia Werdigier, "Big French Bank Suspends Funds," *New York Times* (August 10, 2007); Rehan Ul-Haq and Jorg Itschert, *International Banking Strategic Alliances: Reflections on BNP/Dresdner* (Palgrave Macmillan, 2004).

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Board of Directors

A board of directors is a group of people elected by the shareholders of a corporation to oversee the management of the corporation. Directors are elected at annual general meetings. At this meeting shareholders have the ultimate power to control both their investment and their board of directors. The board of directors delegates authority for day-to-day operations to a group of managers called officers. The primary duty of directors is to act in the best interest of the company and its shareholders.

There are three types of director: executive director, nonexecutive director, and independent nonexecutive director. An executive director is also an employee of the company, whereas a nonexecutive director is not an employee. The standard practice is for the executive director to have an appointment letter, rather than a contract of employment, and to be paid an agreed fee for services rendered. A nonexecutive director usually provides his or her services part-time and is not expected to be involved in the day-to-day running of the company. There is no legal distinction between executive and nonexecutive directors. Independent nonexecutive directors are nonexecutive directors who are free from any connection with the company that might affect their opinions and behavior. An example of a connection is an executive director who manages the same business in which they serve on the board of directors.

A board of directors normally has three committees: nominating, compensation, and audit. The nominating committee selects new candidates to be reviewed for positions on the board. The compensation committee reviews the executives' remuneration. The audit committee examines internal audits and reports from independent audit firms.

The United Kingdom's Financial Reporting Council set up its Combined Code on Corporate Governance in 2003. The code sets out its own view of the role of the board of directors: provide entrepreneurial leadership; set strategy; ensure human and financial resources are available to achieve objectives; review management performance; set the company's values and standards; and satisfy themselves as to the integrity of financial information and robustness of financial controls and risk management. The code also describes the role of chairman of the board of directors: the chairman leads the board, ensures there is a good relationship between the executive and nonexecutive directors, and bears primary responsibility for communications and liaison with shareholders. The code adds that the roles of chairman and chief executive should not be held by the same person. The chief executive is responsible for the day-to-day management of the company and carries out the decisions of the board. The code also requires there to be a balance between the number of executive and nonexecutive directors so that no individual or small group can dominate the board's decision making.

The Sarbanes-Oxley Act is a wide-ranging U.S. corporate reform legislation, coauthored by the Democrat in charge of the Senate Banking Committee, Paul Sarbanes, and Republican Congressman Michael Oxley. The act, which became law in July 2002, lays down stringent procedures regarding the accuracy and reliability of corporate disclosures, places restrictions on auditors providing nonaudit services, and obliges top executives to verify their accounts personally. Under the act, companies should establish an audit committee comprised solely of independent board members.

A good board structure will take into account the board's independence, size, committees and functions, and director development. The combined code states that, in order to qualify as an independent nonexecutive director, an individual must be free of any connections that might lead to conflicts of interest.

The board of an American company may be made up of a large number of nonexecutive directors and only one or two executive directors, whereas a British board has more executive directors. The size of a board can also affect its efficiency. The larger the board, the harder it is to become active and engaged. On the other hand, the board must be large enough to have a range of skills and experience to operate successfully. But directors' free-riding intentions may be higher when the board becomes larger. It has been pointed out that the law of diminishing returns may be applicable here, as companies with small boards have better financial ratios. The loss of value occurs as boards grow from small to medium size.

How a board works and how well it speaks for its shareholders is a key component of a company's performance and financial success. The director may be a senior executive of another company. Many directors also serve on more than one board, in addition to other full-time commitments. A common criticism of this arrangement is the claim that these directors are unable to carry out their directors' duties. The role of directors is largely advisory and does not involve important commercial decision making. When the chairman of the board is also the chief executive officer, the power of directors diminishes.

See Also: Corporate Governance; Decision Making; Management; Sarbanes-Oxley.

Bibliography. William G. Bowen, *The Board Book: An Insider's Guide for Directors and Trustees* (W. W. Norton and Company, 2008); Financial Reporting Council, "The Combined Code on Corporate Governance, June 2008," www.frc.org.uk/corporate (cited March 2009); Scott Green, *Sarbanes-Oxley and the Board of Directors* (John Wiley & Son, 2005); David Yermack, "Higher Market Valuation of Companies with a Small Board of Directors," *Journal of Financial Economics* (v.40, 1996).

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Boeing

The Boeing Airplane Company (originally Pacific Aero Products) was founded in 1916 in Seattle, Washington, by Yale engineer William Boeing and Navy engineer George Westervelt. It was only 13 years since the Wright brothers' successful flight, and

Boeing displayed this extra long-range 777 Worldliner aircraft at the Paris Air Show in 2005.

the aviation industry would go through a number of changes, Boeing changing with it. When the company was folded in with Boeing's airline (est. 1927) and Pacific Air Transport, it became the United Aircraft and Transport Corporation, and went on an acquisition spree of smaller aviation companies. 1933 saw the introduction of the Boeing 247, the first aircraft significantly similar to modern passenger planes, with an autopilot, retractable landing gear, cantilevered wings with wing flaps, deicing boots, and a metal semi-monocoque construction. The modern airplane had arrived. It was also the first model of aircraft to be sabotaged; when a nitroglycerin device was detonated on a 247 over Indiana, the *New York Times* headline put the then-unfamiliar word *bomber* in quotation marks.

United both manufactured airplanes and flew them, and knew the 247 was first in its class—first of a new class—so it kept the first 60, gaining a competitive advantage on other airlines. This was one of the things that led to the 1934 Air Mail Act, in the spirit of trustbusting and the New Deal: Corporations were no longer allowed to both manufacture and fly planes. United was thus split into three companies: United Airlines, the United Aircraft Corporation, and the Boeing Airplane Company. Boeing continued to be at the forefront of aircraft design, building the "flying boat" (the Boeing 314) for the Pan Am airline in 1939. The largest passenger plane of its time, it carried 90 passengers on transoceanic flights.

Boeing also developed the pressurized cabin, allowing planes to travel above the weather, an innovation taken for granted now, but which revolutionized air travel and paved the way for the widespread commercial flights of today. In the early days of the Cold War, Boeing carved out a position in the defense industry, alongside competitors Lockheed Martin and McDonnell Douglas. It remained and remains the leading aircraft manufacturer, especially in passenger planes—introducing the first jet airliner in the early 1950s, the first commercial jet (the 707) in 1958, and the 747 in 1970. The 747 remains Boeing's most successful aircraft, and indeed one of the most famous aircraft by any manufacturer. Development cost over $1 billion, and the final product seated 450 passengers on two decks, on a craft with an intercontinental range. Almost 40 years later, the 747 remains in production, something that can be said of few vehicles of any mode.

Boeing acquired McDonnell Douglas in 1997 when its competitor fell on hard times, giving the company a near-monopoly on intercontinental aircraft. Its main competitor since the 1980s has been Airbus, a European consortium formed in 1970. While Airbus's early successes were in the then-untapped short-to-medium-range aircraft market, it now competes directly with Boeing in the long-range market, and has enjoyed a steadily increasing share of new orders worldwide. Boeing and the American government have disputed Airbus's use of research and development subsidies from the European Union, claiming they violate the World Trade Organization (and when the complaint was first lodged, the General Agreement on Tariffs and Trade); a 1992 agreement limited those subsidies.

In the 21st century, Boeing has lost the coveted Jet Strike Fighter project for the U.S. Defense Department to Lockheed Martin, and continues to battle with Airbus. But it is the principal contractor for the International Space Station and a prominent contributor to NASA's manned Mars mission.

See Also: EADS; Lockheed Martin; Manufacturing; Transportation.

Bibliography. Kenny Kemp, *Flight of the Titans: Boeing, Airbus, and the Battle for the Future of Air Travel* (Virgin Books, 2007); John Newhouse, *Boeing versus Airbus: The Inside Story of the Greatest International Competition in Business* (Vintage, 2008); Joe Sutter and Jay Spenser, *747: Creating the World's First Jumbo Jet and Other Adventures in a Life in Aviation* (Collins, 2007).

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Bolivia

A landlocked country in South America, the Republic of Bolivia (population 9,118,000 in 2007, gross domestic product [GDP] $40 billion) is named for Simon Bolivar, the revolutionary and former president of Venezuela, who was instrumental not only in Bolivia's successful war for independence in 1825, but the wars of independence across the Spanish-American colonies. Its history since independence has been tumultuous, marked by long periods of widespread poverty. While many revolutions of the 18th and 19th centuries used independence as an excuse to create democracies, in practice Bolivia remained pseudo-feudal until the 20th century, and the terrible living conditions of all but the upper classes provoked the revolution of 1952, which finally resulted in universal suffrage and public education for the rural populace. That government lasted 12 years, and was succeeded by a series of military juntas.

In the 21st century, Bolivian politics are beset by crises. The government's plan, in conjunction with the United States, to eliminate Bolivian cocaine production completely is resisted by much of the population, who have grown coca leaves for centuries, and in some cases enjoyed the profits of the cocaine trade in the last few decades. President Evo Morales has promoted legal coca leaf goods, such as teas and liqueurs, in an attempt to make peace with coca growers. Morales also renationalized Bolivia's oil and natural gas, in 2006.

Bolivia is a democratic republic with a bicameral parliament. The 130 members of the Chamber of Deputies and 27 members of the Chamber of Senators are elected to five-year terms by their constituencies. In practice, the role of the legislature is much weaker than that of the executive branch, and principally discusses legislation introduced by the president. The president also serves a five-year term. The current president is Morales, from the Socialist party, whose term began at the start of 2006.

Despite its natural resources, Bolivia has the lowest per capita GDP in South America, in part because of its lack of a coastline: Transporting natural gas, for instance, most of which is exported to Brazil, requires the use of expensive pipelines that eat into the profits. Inflation and unemployment are high, and the situation is worsened by a long history of corruption at multiple levels of government, with few serious efforts to stamp it out.

The fossil fuels industry is almost solely responsible for Bolivia's trade surplus. The country is energy self-sufficient, with fossil fuels accounting for some 42 percent of energy use and hydroelectric power responsible for most of the rest. Outside of fossil fuels, exports include soy, zinc, and tin; Bolivia's main trading partners are other South American countries (especially Brazil, Argentina, and Chile), the United States, China, and Japan. Foreign investment has been encouraged by various privatization acts since the 1990s, but declines whenever there is political unrest, and Bolivia has yet to demonstrate long-term economic stability.

See Also: Company Profiles: South America; Microfinance; South America.

Bibliography. Benjamin Dangl, *The Price of Fire: Resource Wars and Social Movements in Bolivia* (AK Press, 2007); Rex A. Hudson and Dennis M. Hanratty, eds., *Bolivia: A Country Study*, 3rd ed. (Library of Congress, 1991); Benjamin Kohl and Linda Farthing, *Impasse in Bolivia: Neoliberal Hegemony and Popular Resistance* (Zed Books, 2006); Jeffrey D. Sachs, ed., *Developing Country Debt and Economic Performance, Volume 2: Country Studies: Argentina, Bolivia, Brazil, Mexico* (University of Chicago Press, 1990).

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Bonded Warehouse

A bonded warehouse is a public or private warehouse authorized by customs officials to hold goods for which payment of duties and VAT (value added tax) has been deferred until removal. Goods stored in a bonded warehouse can be taken out only after applicable taxes and duties have been paid on them, or when they are moved by a bonded carrier to another bonded warehouse or a customs area. If the goods are destroyed under customs supervision, no duty is payable.

Bonded warehouses are also used to store certain types of finished products on which there are heavy domestic excise taxes, since the producer is not required to pay taxes until the product is taken for distribution. Since a producer may carry substantial inventories of some of these products, a bonded warehouse arrangement helps conserve capital. For example, consider a United Kingdom company trading in spirits that pays £18,000 excise duty and £4,000 VAT per order. Fifteen monthly orders result in £330,000 of duties per month. Two-month average stock turnaround would save the company £660,000 that would otherwise be tied up in prepayment of taxes.

Bonded warehouses sometimes may be used to store goods imported temporarily into a country for transshipment or for consolidation in a shipment going elsewhere. For example, a U.S.-based distributor may be importing products from Europe with the intention of part-exporting to South America. The imported product from Europe would be held at a bonded warehouse until a decision is made about what to import into the United States and what to export. The imported product may be combined with a domestic product and then shipped to South America with the cost benefits of a consolidated shipment. The goods that are imported have the benefit of tax deferral until the time they are withdrawn for consumption, and the exported goods never entered the U.S. economy, so no taxes/duties would be obligated. For the export, the goods would transit from the bonded warehouse to the outbound port by a bonded carrier. Bonded warehouses may also be used to avoid return or destruction of merchandise for which a quota has closed (when the quota opens, stored merchandise may then be withdrawn).

Traditionally, companies have had the choice of delivering the goods through one central point of entry, possibly using a bonded warehouse, where they deconsolidate the cargo, then physically distribute the goods from there, or through a multiple-entry approach, physically transporting products to as many ports of entry as necessary to support their distribution model. Today, through the use of a "virtual bonded warehouse" it is possible for a European Union (EU) importer to separate the physical entry of products from their related financial transactions (for example, physical in Madrid and financial in Amsterdam), thereby improving the ease of transportation throughout the continent.

Cross-border customs warehouses can also be set. If a company has several warehousing facilities in more than one EU country, they can be linked together into a single bonded warehouse system under one license. This offers the advantage that all the customs declarations can be filed in the location where the centralized administration is kept. It is the company's own inventory control system, and not its physical facilities, that is bonded. Transporting goods from one bonded warehouse to another under the same license can be done without customs documents.

In a bonded warehouse simple activities such as cleaning, labeling, and repackaging may be carried out. More substantial activities, such as the completion of manufacturing operations before the finished product is shipped out to another customs jurisdiction, may also be carried out, but require an additional authorization for inward processing relief (IPR) or processing under customs control (PCC).

See Also: Common Market; Customs Broker; Freight Forwarder; North American Free Trade Agreement; Value Added Tax.

Bibliography. Thomas Cook, Rennie Alston, and Kelly Raia, *Mastering Import & Export Management* (AMACON, 2004); Robert Feinschreiber and Charles Crowley, *Import Handbook: A Compliance and Planning Guide* (Wiley, 1997).

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Bonds

A form of debt issued by corporations, federal agencies, and local, state, and national governments, a bond is a financial security designed to pay back the bondholder on particular dates. Payments received by the bondholder typically consist of the repayment at the time of maturity of the principal amount borrowed as well as coupon payments (interest payments) made during the life of the bond (most commonly semi-annually, but often quarterly, monthly, or even once at the time the bond matures and the debt is retired). Because most bonds have a fixed interest payment that the bondholder receives, this form of debt security is also referred to as a fixed-income security.

Interest rates paid by the issuers of bonds can be fixed, can be paid at maturity, or can be variable as is the case with a step-up bond or a floating coupon level bond. The step-up coupon bond is the least complex of the variable rate bonds whereas a derivative bond (derivatives can be tied to an index such as an equity index or a consumer price index or determined by a mathematical equation that links the level of interest payments to an economic variable including market indices, single equities, or even commodity prices) can range from a simple structure to a very complex structure. An example of a fixed-coupon bond would be a bond with a $1,000 denomination (par value) that had a seven percent coupon paying semi-annually with a final stated maturity date of January 15, 2020. In this example, every January 15th and every July 15th until and including January 15, 2020, the investor holding the bond would receive $35 such that his or her annual income from the bond would be $70 (7 percent of $1,000 par value or face value of the bond). In addition, upon maturity of the bond on January 15, 2020, the investor would receive not only the last interest payment of $35, but also the principal par value of the bond, which is typically $1,000.

Some bonds are issued without regular interest payments such that all of the interest is paid at the time the bond matures. These bonds are called zero-coupon bonds; they are issued (or sold) at a deep discount to their face value and they mature at par. The difference between the discounted price and the par value of the bond at maturity is considered accreted interest and represents the return to the investor over a specific time period. Consider the example of a zero-coupon bond that matures January 15, 2020. If the investor bought the bond when it was first issued on January 15, 2010, at a price of $300, then the investor would stand to gain $700 in accreted interest over 10 years time, or $70 a year. Comparing the zero-coupon bond to the previous 7 percent fixed-coupon bond shows that both bondholders would earn $70 per year. The advantage of the 7 percent coupon bond is that the bondholder actually receives current income of $70 each year throughout the life of the bond, whereas the zero-coupon bondholder has to wait to receive his or her income until the bond matures or until he or she sells the zero-coupon bond in the marketplace. The advantage of the zero-coupon bond is that it requires a much smaller initial investment, in this case $300 for the zero-coupon bond versus $1,000 for the 7 percent coupon bond.

Variable Interest Bonds

Examples of variable interest bonds include a simple step-up coupon that will pay a certain coupon or interest rate for a specified period and then increase the coupon payments at a specific point in time. The simplest form of a step-up bond is called a one-time step-up in which the interest rate is fixed for a period of time and then steps-up once to a higher level. The number of times a bond may step-up typically varies from once to five or six times. As an example, the coupon of a one-time step-up bond might have the following characteristics: 4 percent from July 15, 2008, to January 15, 2010, 8 percent thereafter until maturity in January 15, 2020. Typically the step-up bond will be callable at par on the dates on which it is scheduled to have its coupon increased (step-up). When a bond is called by the issuer, the interest due to that point of time along with the principal of the bond at par value is paid to the bondholder in return for the debt being retired.

A step-up bond with several step-ups in coupons might have a coupon schedule that looks like the following: 3 percent from July 15, 2008, to January 15, 2009; 4 percent January 15, 2009, to January 15, 2010; 5 percent January 15, 2010, to January 15, 2012; 7 percent January 15, 2012, to January 15 2014; 9 percent thereafter. As is typically the case with a single step-up bond, the multiple step-up will be callable by the issuer at par on the dates at which the coupon is scheduled to increase. Because the step-up bond is callable, the yield to maturity for the bondholder is typically higher for a step-up then a fixed coupon bond. However, this higher yield will only be realized by the investor if the prevailing interest rate and the borrowing opportunities of the issuing entity are such that the step-up bond is not called.

Another common form of variable (floating) interest rate bonds are bonds issued with coupons tied to a specific interest rate or index including but not limited to examples such as the U.S. Treasury Bill, the 3- or 6-month London Inter-bank Overnight Rate (LIBOR), or the Consumer Price Index (CPI). Many of these types of floating interest rate bonds have coupons that adjust and pay as frequently as monthly such that, for example, the coupon paid for a given month will be 200 basis points (200 bps = 2 percent, pronounced "bips") above the current 3-month LIBOR. So if the 3-month LIBOR is at 3 percent then the coupon for the bond in that month will be 3 percent + 2 percent = 5 percent. The advantage of owning floating interest rate notes is that in the event that interest rates or inflation increases dramatically, then the investors holding these floating rate notes will enjoy increasing coupon payments.

Many more complex forms of floating coupon bonds exist and are typically referred to as structured products or derivatives. A structured product's coupon can be linked to just about any economic variable including but not limited to interest rates, commodity prices, equity indices, single equities, yield curves, inflation indices, or even to other derivatives. In addition, structures may include caps on coupons, be based on averages or weighted averages, and range from a fairly simple one-to-one relationship to a more complex mathematical computation. One example of a derivative would be a bond that paid a fixed 11 percent coupon for one year and then converted to a floating coupon that paid 10 times the difference between the 30-year interest rate and the 10-year interest rate for the duration of the bond until maturity. A derivative like this would likely have a cap on its interest rate (20 percent, for example) and be callable by the issuer in case the difference (spread) between the 30-year and 10-year rates were significant.

Bond Ratings

Bonds are rated by several credit rating agencies including Standard & Poor's (S&P), Moody's, and Fitch. These rating agencies focus on evaluating the credit worthiness of the bond issuers and publish their ratings. Criteria such as the issuer's asset protection, management capabilities, quantity and type of existing debt and its ability to pay the associated interest and principal due, as well as the overall stability of the issuer's cash flow are all assessed to determine the creditworthiness and financial strength of the bond issuer. The best known of the credit rating agencies are S&P and Moody's, each having similar rating scales that range from high-quality investment-grade bonds with little risk through the mid-range investment grade and speculative bonds all the way down to the defaulted bonds that have been issued by organizations that have failed to stay current in the payment of interest and/or principal of their debt.

Typically the defaulted bonds are associated with an organization that is in bankruptcy and going through a process of restructuring. In the process of restructuring, bondholders are treated as general creditors, although bonds have a hierarchy in which secured bonds provide the bondholder with a higher level of claim on the assets of the organization, followed by debentures, subordinated debentures, and finally income bonds.

Ranging from the highest quality ratings to the lowest by S&P/Moody's, the ratings are (1) AAA/Aaa indicates the highest investment-grade rating in which capacity to repay principal and interest is assessed as being very high; (2) AA/Aa indicates a very high quality bond only slightly less secure than the AAA/Aaa ratings; (3) A/A indicates a bond that is slightly more susceptible to adverse economic conditions; (4) BBB/Baa indicates the issuers of these bonds are judged to have reasonable capacity to repay principal and interest, yet they are slightly speculative; (5) BB/Ba indicates that the investment in these bonds is speculative and that there is a significant chance the issuer could miss an interest payment; (6) B/B indicates the issuer has or is likely to miss one or more interest and or principal payments; (7) C/Caa indicates that there is a very high likelihood that the issuer will miss interest and principal payments and go into default, some even consider this rating to mean a technical default; (8) D/D indicates the issuer is in default and that the payment of interest and principal is in arrears.

Each of the above ratings by S&P can be qualified further by a plus sign (+) or a minus sign (–) to indicate relative strength within each rating category. Likewise, Moody's qualifies its rating categories with the numbers 1, 2, and 3. The most positive ratings being "+" and "1," moderate ratings within category being a lack of qualifier for S&P and "2" for Moody's, and the lowest quality rating being a minus sign "–" for S&P and the number "3" for Moody's.

One additional important consideration when judging the creditworthiness of a particular bond issuer is the credit rating trend. The credit rating agencies will issue positive or negative outlooks that indicate potential direction of future credit watches or credit rating changes. Credit watches issued by the rating agencies are a stronger statement of trend and can be either negative or positive. Although a negative credit watch issued by S&P or Moody's indicates a potential future downgrade in the credit rating of a particular issuer, a credit rating downgrade does not always follow the negative credit watch as economic conditions and the financial strength of an issuer is subject to positive changes over time.

The last important aspect of assessing credit rating trend is to analyze the empirical credit ratings over time. It is more common for a troubled firm to undergo a series of downgrades spanning years than for a highly rated investment-grade bond to suddenly become speculative and default, although there are exceptions such as Enron, for example, in which its investment-grade senior secured debt rated Baa3 with a negative credit watch on November 27, 2001, defaulted rapidly and within six days became a Ca rated "junk" bond on December 3, 2001, as evidence of accounting fraud became known.

Bond Yields

The return to an investor in bonds is referred to as yield. There are three important yield calculations for bonds: current yield, yield to maturity, and yield to call. Current yield (CY) is equal to the annual income received from the bond divided by the current market price. For example, a $1,000 face-value bond with a 7 percent coupon trading at a discount of $800 would equal a current yield of 8.75 percent, whereas if the same 7 percent coupon bond was trading at a premium of $1,120 the current yield would be 6.25 percent.

Yield to maturity (YTM) is the annualized rate of return the investor receives if the bond is held to maturity. To calculate YTM, divide either the premium amount paid or the discount by the number of years until the bond's final stated maturity, then subtract this amount from the annual interest paid, and divide the remainder by the price of the bond. Considering the example above, the YTM of a $1,000 face value, 7 percent coupon bond, maturing in 10 years, offered at the discounted price of $800 would be 11.25 percent. Likewise considering the premium-priced bond above, the YTM of a $1,000 face value, 7 percent coupon bond, maturing in 10 years, offered at the premium price of $1,120 would be approximately 5.18 percent. In both of these examples, it is important to understand that an inverse relationship between bond price and bond yield exists such that the higher the price of a bond goes, the lower its yield will be and vice versa.

Calculating yield to call (YTC) is similar to calculating YTM in that the only alteration in the formula is that the "number of years to call" is substituted for "the number of years until the bond's final stated maturity." When comparing YTC and YTM, notice that discount and premium prices for bonds will have a greater impact on the YTC because the number of years to a potential call is always less than the number of years to maturity, thus the amount of discount has fewer years to accrete or in the case of a premium, the amount has fewer years for amortization in the event of the bond being called by the issuer. In the bond market, it is important to make distinctions among the various kinds of yields and to be aware of what the yield in the worst-case scenario will be, which is commonly referred to as yield to worst (YTW). This is of particular importance when callable bonds are being sold at a premium.

The yield curve can be represented by a graph that displays time until a bond's maturity on the x-axis and bond's yield on the y-axis. A "normal" yield curve is upward sloping such that the bonds with longer maturities will tend to yield more than the bonds of the same quality with shorter maturities. A "normal" spread between short-term bonds and long-term bonds is approximately 3 percent or 300 basis points, although spreads between the short end and long end of the yield curve may vary dramatically. An ascending yield curve typically occurs when the economy is growing and tends to predict future increases in interest rates. An inverted, or downward sloping yield curve in which the shorter-term yields are higher than the longer-term yields can occur when the Federal Reserve Board raises short-term interest rates in order to tighten credit and prevent inflation. The inverted curve tends to foretell future decreases in interest rates.

Although a single yield curve depicts bonds of the same quality and type (for instance AAA corporate bonds) it can be informative to view the differences among yield curves representing different types of bonds. For example, as the spread in yields between corporate AAA and U.S. government bonds (AAA) widens, it indicates that there is a "flight to safety" and that investors in the marketplace believe the economy is worsening and that corporate profits will be decreasing, thus in order to be induced to buy corporate bonds investors require a greater differential yield over the lower yield of U.S. Treasuries that are considered to be close to achieving the status of a "riskless" investment.

Bond Pricing

Bond pricing is based on the perceived risk of the bond relative to the risk and return of alternative investments. The majority of investment-grade corporate bonds and agency bonds are priced among bond trade desks based on a negotiated yield spread to the U.S. Treasuries. The lower the investment-grade credit rating for the corporate bond, the greater the negotiated spread will be. For example, a high-quality corporate bond may offer 50 basis points (one-half percent) more yield to the investor when compared to a similar duration U.S. Treasury. As the quality of the corporate bond decreases through the investment-grade spectrum from AAA to the BBB category, the spread of the offered yield to the Treasuries will increase in order to entice investors to take on the additional risk of lending money to a corporation that may be slightly susceptible to variance in economic conditions. So instead of offering a spread of 50 basis points or less, the trade desk may offer a spread of 200 to 300 basis points.

It is important to note that corporate spreads are not only dependent on the bonds' credit ratings, but also on the sector to which the corporation belongs. For instance during the financial sector's troubles of 2008, the spreads were much higher for the bonds issued by financial institutions as compared to corporate bonds of the same quality rating issued by firms within the industrial sector. Corporate bonds that are speculative (rated below BBB) are traded among bond desks based on a dollar price. For instance, a 7 percent coupon bond rated B would be offered for sale at a dollar price such as 95 ($950 per $1,000 face bond) that is expressed in terms of percentage of par value. In general the price will be lower (and the yield higher) the lower the rating of the bond and the longer the period until the bond matures. This lower price and higher yield is meant to compensate the investor for taking on the risk associated with lower creditworthiness and the uncertainty associated with the passage of time.

Similar to investment-grade corporate bonds, agency bonds issued by the Farm Credit System, Federal Home Loan Bank, Federal Home Loan Corporation (Freddie Mac), and Federal National Mortgage Association (Fannie Mae) are offered based on a spread to U.S. Treasuries. In contrast, municipal bonds are offered among trade desks based on yields, although some consideration may be given to the municipal bonds yield as a percentage of similarly maturing U.S. Treasuries.

See Also: Basis Points; Credit Ratings; Debt; Debt Rescheduling; Debt (Securities); Government Bonds; Mortgage Credit Crisis of 2008; Sovereign Borrowing; Spread.

Bibliography. F. J. Fabozzi, *The Handbook of Fixed Income Securities*, 7th ed. (McGraw-Hill, 2005); *Passtrak Series 7: General Securities Representative License Exam Manual*, 15th ed. (Dearborn Financial Publishing, Inc., 2004); Florian Schmidt and Adam Harper, *A Guide to Asian High Yield Bonds: Financing Growth Enterprises* (Wiley, 2008); Securities Industry and Financial Markets Association, www.investinginbonds.com (cited March 2009); Shop4Bonds, www.shop4bonds.com (cited March 2009); Timothy Sinclair, *The New Masters of Capital: American Bond Rating Agencies and the Politics of Creditworthiness* (Cornell University Press, 2008); B. Tuckman, *Fixed Income Securities: Tools for Today's Markets*, 2nd ed. (John Wiley & Sons, 2002).

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Botswana

Sub-Saharan Africa is comprised of 48 countries. Forty-two of these countries are mainland countries and six are island countries that spread across four geographical regions: west Africa (21 mainland and two island countries), central Africa (five mainland countries), east Africa (eight mainland and one island countries), and south Africa (10 mainland and three island countries).

Botswana is a landlocked mainland country in the southern part of sub-Saharan Africa, and was formerly the British protectorate of Bechuanaland. It gained independence from Britain on September 30, 1966. Since independence, the Botswana Democratic Party has dominated the political system of presidential representative democracy; political governance and leaderships have included Seretse Khama (1966–80), Quett Masire (1984–98), and Festus Mogae (1999–present).

The size of Botswana is slightly smaller than Texas in the United States with more than half of the land surface covered by the Kalahari Desert. It borders Angola and Zambia to the north, Zimbabwe to the northeast, South Africa to the south, and Namibia to the west. The climate is semi-arid, with mild winters and hot summers. The population of Botswana is about 1.8 million, ranking 35th in sub-Saharan Africa, with an annual growth rate of about 1.4 percent. The population by age totals about 61 percent between the ages of 15 and 60 years, 35 percent under 14 years, and 4 percent 65 years and over. The life expectancy of the total population is low, about 50 years. Males live slightly longer than females. Infant mortality rates are slightly higher in males than females. The literacy level of the population is somewhat high, with the literacy level of females higher than males.

Diversity in Botswana is less pronounced. Whereas Nigeria and Kenya have 250 and nine ethnic groups, respectively, there are only five ethnic groups in Botswana. The largest ethnic group is Tswana with 70 percent of the population; Kalanga, 11 percent; Basarwa, 3 percent; Kgalagadi, whites, and others, 7 percent. In recent times, there is no evidence that ethnic diversity has promoted instability and corruption. Botswana is one of the most stable countries in sub-Saharan Africa, enjoying an uninterrupted civilian regime and minimal ethnic violence. The level of corruption in Botswana is insignificant. Transparency International ranks Botswana as the least corrupt country in Africa.

The economy of Botswana revolves mainly around the natural resources, tourism, and agriculture (subsistence farming and cattle raising) sectors. The natural resources sector, particularly diamond mining, dominates the economy. Diamond mining contributes between 70 and 80 percent of export earnings and one-third of GDP. Economic performance in

Botswana is remarkable. The GDP grew significantly—at an annual rate of 9 percent—between 1966 and 1999. The economy slowed in 2002 and 2003 due to budget deficits, high military expenditures (4 percent of GDP), and exorbitant healthcare costs resulting from the HIV/AIDS epidemic. However, the GDP per capita income rose from $11,000 in 2006 to $16,450 in 2007.

Though the natural resources policies stimulated growth, sound economic governance was a critical factor that transformed the economy from poor to middle-income. Such economic governance includes responsible fiscal policy devoid of political instability and corruption; investing in education and training; growth and spread of real income throughout the economy; promoting private sector development; and encouraging flow of foreign direct investment through sound microeconomic, macroeconomic, and institutional policy reforms. Botswana ranks as the best credit risk country in Africa.

Nevertheless, the high HIV/AIDS rate and poverty among the rural population remain significant threats to the economy. Botswana has the second-highest HIV/AIDS infection rate in Africa and the world. About 30 percent of the rural population is below the poverty line, a characteristic fact of countries of sub-Saharan Africa.

See Also: Africa; Angola; South Africa; Zimbabwe.

Bibliography. CIA, "Botswana," *World Factbook,* www.cia.gov (cited March 2009); P. Collier, *The Bottom Billion* (Oxford University Press, 2007); M. Umeadi, *A Dark Century for Sub Sahara Africa* (AuthorHouse, 2008); World Bank, *Botswana: Financial Policies for Diversified Growth* (1989); World Bank, *World Development Indicators* (1998); World Bank Group, *Botswana: A Case Study of Economic Policy Prudence and Growth* (August 31, 1999).

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Bottleneck

Bottleneck is the "narrow part of a bottle near the top." The literal meaning aside, the term refers to "a place or stage in a process at which progress is impeded" and was first used sometime between 1895 and 1900. It is used in varied contexts at present: software/internet, road traffic, logistics (of office work), supply chain, even music (to portray the sliding effects on guitar strings). This term is becoming increasingly significant in global business as large businesses and multinational companies (MNCs) are operating around the world, more so now that ever before. Any sort of bottleneck in the global supply chain (of whatever product) hinders the productivity and efficiency of the whole chain.

To conduct business globally, firms work to facilitate coordination to maintain liaisons all over the world. Technology has also made transportation cheaper, allowing the best rates for various steps of production to converge to make the final product. With large MNCs, firm boundaries that once seemed lucid now appear blurry because of the MNCs' multi-layered networks and relationships with many business partners and stakeholders. For instance, different geographic or product divisions in an MNC frequently need to be handled differently to address their varying environmental milieus and strategic frameworks. The interdependence of these very different divisions in the overall production and/or supply chain makes the chain vulnerable to the ever-increased possibilities of bottlenecks. For MNCs pursuing either a global or transnational strategy, hindrances can come in the form of ecological hazard, power failure, political unrest and violence, shipping disaster, etc. This situation in the production or supply chain is akin to shutting down a lane on a highway. It inevitably slows down all other working lanes, just as an obstacle in any major division of an MNC slows the entire chain—creating a global business bottleneck.

One major example of a global business bottleneck can be traced back to the August 2006 closing of London's Heathrow airport. As a precaution to potential terrorist attack, all incoming flights had to be either cancelled or diverted to other airports; all the carry-on baggage had to be checked one by one with the support of a limited number of machines; all passengers on flights leaving the United Kingdom (UK) were searched by hand and their footwear was X-rayed for safety. This led to substantial delay at all UK airports, and subsequently further delays for international travelers who only had transit at Heathrow. Thus, with the shutting down of Heathrow, bottlenecking happened in all other airports.

Yet another global bottlenecking situation can be dated back to September 1999, when Taiwan experienced a 7.6-magnitude earthquake, followed by five strong aftershocks. Serious damage was evident throughout the country, thousands were killed, and infrastructure was damaged. In the days following the earthquake, the computer industry faced troubles internationally, because Taiwan was one of the largest sources of computer chips. The computer chip industry of Taiwan was shut off for weeks, causing a steep rise in silicon chips' prices; and that had adverse consequences on the whole industry. It was estimated right after the quake that while Taiwan's losses could amount to \$1–2 billion, another \$1 billion of losses would be incurred by the United States. The Taiwan earthquake impacted the Indian computer industry as well. In 1999, 55 percent of computers in India were either purchased from the "gray" market or assembled in India after various parts had been imported from Taiwan and Korea. The trend of lowering prices of personal computers in India (in the pre-quake time) stopped right after the quake; in fact, the prices temporarily moved upward during the post-quake period.

While bottlenecks caused by natural disasters cannot be maneuvered around, troubles such as power failure or communication gaps (due to cultural and even linguistic differences in various locations in an MNC) can be better managed. Obstacles to production caused by power failure simply require having enough backup resources to continue the work. For example, Bangladesh is a developing country with severe nationwide shortages in electricity supply. Despite that, the Square Group of companies decided not to fall prey to the sporadic electricity supply and created a small plant where it generates enough electricity to continue work uninterrupted. It did not take Square Group long to reach the break-even point, and the benefit of a reliable electricity supply remains. With the increasingly diversified locations and production units of large MNCs, communication gaps and disparities in the understanding and evaluating of company strategy cannot be escaped. These gaps, however, may be better bridged as new techniques are incorporated into the workplace.

See Also: Channels; Multinational Corporation; Supply Chain Management; Supply Chain Risks.

Bibliography. *American Heritage Dictionary of the English Language*, 4th ed. (Houghton Mifflin, 2006); Christopher A. Bartlett and Sumanta Ghoshal, "Global Strategic Management: Impact on the New Frontiers of Strategy Research," *Strategic Management Journal* (v.12, 1991); "Heathrow Shut to Incoming Flights Amid Terrorism Fears," Australian Broadcasting Corporation, August 10, 2006, www.abc.net.au (cited March 2009); Navika Kumar, "Taiwan Quake Rattles Indian Computer Industry," *The Indian Express*, November 14, 1999, www.indianexpress.com (cited March 2009); "With U.S. Chip Industry Facing Aftershocks from Taiwan Earthquake, Deloitte & Touche Advises Hi-Tech Companies to Check Insurance Policies for Contingent Business Interruption Coverage—Industry Trend or Event," *Edge: Work-Group Computing Report* (October 11, 1999).

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Bottom of the Pyramid

"Bottom of the pyramid" (BOP) refers to the persistent dilemma of the world's poorest four billion people subsisting on less than \$2 per day in developing countries. According to C. K. Prahalad, this socioeconomic demographic is a relatively untapped commercial market for multinational corporations (MNCs). He calls on MNC chief executive officers to change their long-held beliefs regarding these people as victims to be pitied and instead see them as resilient individuals, skilled entrepreneurs, and consumers demanding value from their products and services.

Prahalad argues that there are business opportunities for MNCs that create innovative products and services for BOP consumers, as he calculates they possess purchasing power parity (PPP) of \$13 trillion. Furthermore, these BOP consumers are not necessarily difficult to reach, very brand conscious, and increasingly open to state-of-the-art telecommunications technology. Prahalad and Stuart Hart recommend that these MNCs: (1) build a host country base of political support; (2) reorient research and development efforts to the needs of the poorest consumers; (3) form new alliances with host country organizations; (4) increase host country employment opportunities; and (5) reinvent cost structures.

Aneel Karnani, however, challenges Prahalad's BOP claim of a potential PPP of $13 trillion, since profits are repatriated by MNCs at the financial exchange rate, not the PPP, resulting in a global BOP market of less than $0.3 trillion. With the poor spending nearly 80 percent of their income on food, clothing, and fuel, it leaves little room for the purchasing power needed to acquire brand name luxury goods. Nevertheless, Anand Jaiswal argues that the poor need to be viewed as consumers so that MNCs can offer them increased value products at a lower cost (saving them money), as well as welfare-oriented goods and services, e.g., agricultural inputs enhancing productivity and insurance and microfinance.

Karnani recommends that the best way for MNCs to help eradicate poverty is for them to invest in upgrading the skill sets and productivity of the poor and help create more local employment opportunities. Reflecting Karnani's economic development approach, Erik Simanis, Stuart Hart, and Duncan Duke offer a BOP protocol presenting a new innovative business process model that includes both collective entrepreneurship development and business enterprise co-creation between local communities and MNCs.

See Also: Corporate Social Responsibility; Economic Development; Less Industrialized Countries; Multinational Corporation.

Bibliography. A. K. Jaiswal, "The Fortune at the Bottom or the Middle of the Pyramid?" *Innovations: Technology/ Governance/ Globalization* (v.3/1, 2008); A. Karnani, "The Mirage of Marketing to the Bottom of the Pyramid: How the Private Sector Can Help Alleviate Poverty," *California Management Review* (v.49/4, 2007); C. K. Prahalad, *The Fortune at the Bottom of the Pyramid*: *Eradicating Poverty Through Profits* (Wharton School Publishing, 2004); C. K. Prahalad and S. L. Hart, "The Fortune at the Bottom of the Pyramid," *strategy + business* (v.26, 2002); E. Simanis, S. Hart, and D. Duke, "The Base of the Pyramid Protocol: Towards Next Generation BOP Strategy" (Center for Sustainable Global Enterprise, Cornell University, 2008).

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Bouygues

Founded in 1952 by Francis Bouygues (pronounced "bweeg") and run by his son Martin since 1989, Bouygues is a Parisian industrial holding company with two main focuses: construction and telecommunications. One of the largest construction contractors in the world, its over 113,000 employees are employed in 80 countries.

Though Martin oversaw much of the company's diversification, Francis set the ball in motion. "I have no colleagues," he was often quoted as saying, "only competitors." Those competitors called him Monsieur Breton: Mr. Concrete. Mr. Concrete pursued government contracts to build France's roads and motorways, its postwar suburbs, all the while eschewing interactions with the press and his own public relations department.

After his retirement as CEO, Francis stayed involved with the company's motion picture interests, which developed in accordance with his plan to make French cinema more international. Among the movies produced by Bouygues' CiBy subsidiary are *Twin Peaks: Fire Walk With Me*, *Little Buddha*, and *The Piano*, an Oscar-winning commercial success that helped restimulate American interest in the Cannes Film Festival where it first attracted buzz. Francis was also responsible for the acquisition of TF1, the French television network, when it was privatized in 1987; under Bouygues ownership, the network became prosperous, and its nightly news program the most important television program in France.

Martin took control of the company in 1989, having dropped out of the University of Paris in 1974 to work on one of his father's construction sites. Within a few years he was overseeing the construction of the Parisian Les Halles shopping complex, and in 1978 oversaw Maison Bouygues, a Bouygues residential construction subsidiary. Just before Martin became CEO, Bouygues acquired the Screg Group, a holding company that included the highway contracting giant Colas, and began building the Channel Tunnel beneath the English Channel. This was the last major project begun under Francis, who remained on the board until his death in 1993; the Tunnel was completed the following year.

Under Martin, in 1993, the company moved into telecommunications. While acquisitions and ventures in the past had involved what was nominally a construction company in movie financing, flour milling, and frozen foods, the creation of the Bouygues Telecom subsidiary was the first major venture outside the company's wheelhouse. But the company's infrastructure experience and the timing of the move resulted in success; mobile telephony was offered through a joint venture with Telecom Italia, gaining over one million customers in less than two years.

In 2001 Bouygues Telecom was the only cellular service provider in Europe not offering 3G (third-generation) wireless service, because of the licensing fees imposed by the French government; revenues and subscriptions were seemingly unaffected by the decision. Further, Martin Bouygues' comments that such fees would be detrimental to the industry, and that the companies in other countries electing to pay them would face financial consequences for implementing such artificially expensive technology, may have proven prescient, as other companies found themselves struggling with debt. 3G service was eventually added in 2002, when the French government cut their fee from a total of $4.4 billion to $557 million—about an eighth of the original asking price.

Today, Bouygues is run very much according to Martin's philosophies. Employees rotate through different departments, regardless of relevant experience—or more to the point, specifically because of their lack of experience. Martin Bouygues' business approach calls for employees who are smart and quick-witted but do not have significant experience in the industry before coming to Bouygues—ensuring that they do not have preconceptions, or habits to unlearn. The approach has paid off well. Currently the company is organized into five divisions: Bouygues Construction, Bouygues Immobilier (real estate and property development), Colas, TF1, and Bouygues Telecom.

See Also: Euronext; France; Telecom Italia.

Bibliography. "Bouygues Considers Takeover Bids For Its Saur Water Subsidiary," *Europe Agri* (September 16, 2004); John H. Christy, "Clean Slate," *Forbes* (June 12, 2000); Matthew Curtin, "European Trader: Cash Cow: Bouygues Investors Say 'Oui,'" *Barron's* (October 25, 2004); "Special Report: Bouygues," *The Economist* (December 2, 2006); "Tale of a Bubble: How the 3G Fiasco Came Close to Wrecking Europe," *BusinessWeek* (June 3, 2002).

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BP

The third largest of the six supermajors, British Petroleum (BP) originated when the last Shah of Persia (before that country became known as Iran) granted an oil concession to British land speculator William Knox D'Arcy in 1901. Fittingly, the company that has been so intertwined with modern Middle Eastern history was founded to drill for oil in the first major oil discovery in the Middle East. In the century since, it has expanded to open productions in 22 countries.

The supermajors are the six oil companies that rose to the top of the industry in the 1990s, in the flurry of mergers following the decline in the price of oil. The older term *Big Oil*, used in reference to the cooperative behavior and lobbying of oil companies, is often used now to refer specifically to the supermajors. Each supermajor has revenues in the hundreds of billions of dollars, benefiting from vast stores of petroleum products and natural gas and oil resources. BP currently employs 115,000 workers, with revenues of $274 billion.

D'Arcy found oil in 1908, making the first major oil discovery in the Middle East, and founded the Anglo-Persian Oil Company in order to pursue his claim. The refinery built in Abadan was, until the 1960s, the largest in the world. Nearly as soon as it began operations, the British government "partially nationalized" the company in order to guarantee an oil supply for its ships, which proved even more critical when World War I broke out.

When the D'Arcy concession was first granted, there was no way of knowing if oil would ever be found—indeed, the engineer who eventually found it had been instructed to give up hope, and told that the operation was going to be canceled, but by delaying his response for a matter of weeks he managed to pull the company's fat out of the fire. When the company thus became such an extraordinary success, and the nature of oil wealth became clear to the Persian government, pressure mounted to renegotiate terms. This was a critical time in the nation's history—not long after World War I, in 1925, Reza Khan overthrew the Qatar Dynasty and became Shah, instituting a significant effort at modernization that included railroad construction and nationwide public education.

It was the new Shah's request that the rest of the world refer to once-Persia as Iran, and the Anglo-Persian Oil Company became the Anglo-Iranian Oil Company (AIOC). New terms were negotiated slowly, complicated by the global economic destabilization of the Great Depression. Though the rate of royalty paid to the Iranian government increased, the AIOC's accounting practices saw that the amount paid remained largely the same. Nationalization helped the company survive, with the British government making decisions the private sector could not have—such as refusing to acknowledge the Iranian government's decision to rescind the D'Arcy concession.

Though the Shah was the guiding force behind Iran's demands for better treatment under the agreement, he was still broadly pro-British, and sought to preserve a good relationship with his various European and western allies. Unfortunately, since those connections included both the British and the Germans, as the world approached the precipice of World War II he was forced to make a decision. He abdicated rulership of Iran in favor of his son, Reza Pahlavi, rather than lose British support. However, as far as appeasing British interests, this backfired. Dr. Mohammed Mossadegh was elected prime minister in 1951, and nationalized Iranian oil, a move with widespread approval in the country because of AIOC's refusal to split profits 50-50 with Iran, as was done in Saudi Arabia. Both the communist party and the Islamic fundamentalists supported nationalization as well.

This, then, put Iranian interests at odds with British interests, AIOC's interests, and in the early days of the Cold War, it was perceived that it then put them at odds with American interests as well. Nationalized Iranian oil could become communist oil. In 1953 the United States and newly elected President Eisenhower were persuaded to join the British effort to depose Mossadegh, and the CIA's Operation Ajax was the lever used to dislodge him. Mossadegh was arrested on August 19, 1953, and the Shah's rule was strengthened in order to prevent future prime ministers from being able to do anything so drastic.

Still, public opinion was so strongly turned against AIOC that a new consortium of companies was formed, bearing the name used during the brief period of nationalized oil—the National Iranian Oil Company—of which AIOC, renamed British Petroleum, was given a 40 percent share. The consortium split profits 50-50 with Iran, on an honor basis—in other words, Iran had no authority to conduct an audit, nor access to the consortium's records, no choice but to accept that the amount it was given was correct. The other shareholders in the consortium were European and Western oil companies, including those that became the other supermajors; BP's share, though not a controlling one, was the largest.

The Iranian Revolution

The Shah was now in an untenable position, despite his increased power. Though he was beholden to Western powers for increasing his authority, and for Iran's more or less friendly relationship with the world outside the Middle East, he was at the same time considered too traditional and conservative by those Westerners. As time wore on and the young Shah became the old Shah, his Western allies were embarrassed by the association. When he faced another coup by fundamentalists, he found himself without aid. The Islamic Revolution of 1979 removed him from power, ended BP's 70 year association with Iran, put the Ayatollah Khomeini in power, and—when the United States allowed the Shah entrance to the country in order to have access to medical facilities—resulted in the seizure of American hostages, a crisis that lasted throughout the 1980 presidential campaign and helped to bring conservative Ronald Reagan into power, over conciliatory incumbent Jimmy Carter.

At this point, BP was already operating outside of Iran, and while the loss of Iranian oil hurt it—and the Western world in general—it had been developing oil production in Alaska since 1959, and in the North Sea since 1965. It had also acquired one of the pieces of Standard Oil created by trustbusting: Standard Oil of Ohio. Ironically, while oil was being nationalized again

Oil workers on a BP company drill ship in Angola, one of many locations BP developed to make up for the loss of Iranian oil.

in Iran, that same year the British government—under the conservative economic reforms of new Prime Minister Margaret Thatcher—began privatizing BP, selling off its interest in the company in large pieces through 1987. In 1998 the company merged with Amoco, another former Standard Oil company, and was briefly known as BPAmoco until it renamed itself simply BP in 2000, retrofit for a new slogan: Beyond Petroleum.

Both BP and Amoco brands remained in use for a time, as both service stations and branded gasoline, Amoco-branded gasoline having consistently ranked highest in customer satisfaction for years. As of 2008, the Amoco brand is being phased out in much of the United States. BP also owns and operates a number of other store brands: BP Connect is used throughout the world, BP Travel Centres are known for their enormous food courts in Australia, ARCO operates along the west coast of the United States, while Air BP provides aviation fuel and Marine BP provides marine fuels.

See Also: Chevron; ConocoPhilips; ExxonMobil; Iran; Royal Dutch Shell; Total; United Kingdom.

Bibliography. R.W. Ferrier and James H. Bamberg, *The History of the British Petroleum Company*, vol. I–III (Cambridge University Press, 2000); Karl E. Meyer and Shareen Brysac, *Kingmakers: The Invention of the Modern Middle East* (W.W. Norton, 2008).

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Brain Drain

Brain drain is a popular term describing the international migration of highly skilled professionals. Transnational relocation of the highly skilled adheres to general migration patterns, but with some differences. Highly trained migrants are attracted to fast-growing economies from slow-growing economies, from low-wage to high-wage regions, and from political instability, risk, and restriction toward more stability, security, and freedom. Skilled migrants are also drawn toward flexible markets for professional jobs and toward fertile intellectual environments. Brain drains have increased in recent years thanks to the increasing importance of the "knowledge economy," a slowdown or reversal of population growth and concomitant aging of populations around the world, and more mobile and less loyal workforces.

Originally a reference to the movement from post–World War II Europe to the United States in the 1950s and 1960s, "brain drain" has since been applied more widely to describe the phenomenon of trained professionals migrating internationally, but particularly from poorer to wealthier countries. Net recipients of a brain drain, such as the United States, are sometimes said to be experiencing a "brain gain." Some countries having both sizable inflows and outflows, such as New Zealand (losing professionals to Australia but pulling them in from elsewhere in Asia), are regarded as experiencing a "brain exchange." The "draining away" of scientists, computer programmers, nurses, and other such trained professionals is compensated by the knowledge transfers and monetary remittances those professionals send back to their places of origin. The value of such offsets varies across time and place, however. They have also been difficult to measure and difficult for policy makers to agree upon.

The global extent of the brain drain is unclear. Systems for tracking the movement of skilled professionals are incomplete and inconsistent. There are also uncertainties in defining the line between professional and nonprofessional workers, and in assessing the importance of factors, other than the demand for and supply of skilled workers, that also encourage their migration. There is, however, a general consensus on two points. First, the migration of professionals is disproportionately large relative to both the flows of international migrants generally and to the numbers of stay-at-home professionals. Second, this brain drain is likely to remain significant and grow larger in the future.

Information technology and healthcare are two industries most prominently reliant on international imports of trained professionals. India and the Philippines, among many others, are important suppliers of such workers. Leading destination countries include the United States, Canada, and Australia.

Demand for skilled professionals is rooted in growing global needs for "human capital." In 2006 *The Economist* reported that 70 percent of the value of companies making up the United States' "Standard & Poor's 500" was comprised of "intangible assets," much of which derived from technology and the talents of employees. A general ongoing shortage of scientists and engineers further increases their international movement toward places and companies where they are most wanted and best rewarded. The supply of highly skilled migrants also has powerful underpinnings. Compared to other migrants, professional workers are better able to recognize and pursue opportunities abroad, and public policies of recipient countries—and sometimes sending countries as well—have tended to favor skilled over unskilled immigrants.

The increasing globalization of higher education is connected to the brain drain in several ways. Many universities in developed nations now rely heavily on foreign students and teaching assistants who, in turn, often use that education abroad as a stepping stone to a job abroad. The brain drain also fosters the growth of education in developing countries whose citizens seek more advanced training at home as a ticket to a skilled job in a more-developed country. The total number of those obtaining higher education in the less-developed countries has been increasing, however, and some of them do not emigrate, thereby partially compensating developing countries for the skilled workers "drained" away.

Programs

The world's largest official program of international importation of professional migrants is the system of H-1B visas in the United States, created by the Immigration Act of 1990. The number of such visas has been capped at 65,000 annually, although businesses calling for an increased quota succeeded in raising the ceiling to above 100,000 between 1999 and 2003. Foreign university students, often recruited by businesses, do not come under and are thus not limited by the cap of 65,000, however.

A "means test" is required before H-1B visas are approved for workers. Would-be employers have to "attest" that there are not a sufficient number of qualified American citizens to fill the job openings. This test has not proven to be a significant encumbrance, although there have been several controversial cases where the hiring of H-1B workers has been associated with an eventual layoff of local workers. Overall though, the program has been viewed favorably, has remained in effect with minor revisions over the years, and has been emulated by other developed countries. Regularized channels for migrating professionals limit, but do not eliminate, their extra-legal movement internationally.

Multinational corporations have also been active users of skilled migrants, despite a greater capability (than at smaller local firms) for shifting jobs between countries as well. Foreign direct investment is thus a substitute for brain drain but also opens up new channels for it, as workers generally can be moved across borders more easily if they are transferring between units of the same employer, rather than seeking a new job with a new employer abroad on their own. An increasing international diversity in the upper-management ranks of large companies reflects this globalization of talent.

See Also: Cross-Border Migration; Expatriate; Visa.

Bibliography. Showkat Ali et al., "Elite Scientists and the Global Brain Drain," University of Warwick Economic Research Paper (n.825, 2007); H-1B Work Visa Online Information Center, www.h1bvisa.org (cited March 2009); "How to Plug Europe's Brain Drain," *Time Europe* (January 2004); Phillip Martin, Manolo Abella, and Christiane Kuptsch, *Managing Labor Migration in the Twenty-first Century* (Yale University Press, 2006); Babs Ryan, *America's Corporate Brain Drain: Why We Leave, Where We Go, How We Can Reverse the Flow* (Sparks Worldwide, 2008); "The Search for Talent," *The Economist* (October 5, 2006).

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Branch

A branch is a part of an organization that is located in a different geographic region than the parent organization. It is also called a branch office and is very similar to a subsidiary. Although it functions autonomously, it is an extension of the corporate headquarters. Authority is granted to the branch or subsidiary to perform the necessary duties to conduct the same business transactions that would normally be conducted at the corporate headquarters.

A typical branch is smaller than the corporate headquarters, but it performs all or many of the same functions. Companies that have branch offices are able to extend the organization's reach into different geographic regions. Establishing a branch office allows the organization to extend its products and services into markets and customer segments far beyond the reach of the corporate headquarters. The additional geographic reach can extend the company's business into different local, regional, or global markets. This allows the organization to conduct business, interact with customers, and perform many of its daily business activities in more than one market. Companies with flatter organizational structures and decentralized decision making will tend to use branch offices more than other types of organizations.

Although many organizations will establish a branch office, some industries tend to use them more than others. This can include companies that are in the mail and/or packaging and shipping industry. Organizations in this industry tend to have a lot of branches so customers can access their services locally. For example, some countries have a national postal service with numerous post office branches, or a shipping company will have numerous branch offices where customers can come to ship packages. Banks will also have branch offices in numerous locations so they can gain access to customer segments in different geographic regions.

In general, the branch office will have: (1) the authority to act on behalf of the organization and (2) the infrastructure that allows it to conduct normal business activities. Similarly, when a company wants to extend its operations into a foreign market, it will sometimes establish a branch office in that country. The branch will have a building, employees, and an infrastructure that allows it to conduct business on behalf of the parent company. It functions autonomously and typically has the authority to spend money, hire employees, and provide service on behalf of the parent organization.

Although a branch office is convenient for the customer and extends the company's business activities into different geographic markets, it generally requires a lot of resources and can be quite costly. The parent organization has to set up a second location that requires many of the same resources as the corporate office, but on a smaller scale. This includes the cost of buying or leasing a building, hiring qualified personnel, and developing an infrastructure that is self-sufficient so that it can function autonomously.

The recent trend has been to reduce or limit the number of branch locations. Many organizations have long desired to limit the number of branch offices because of the costs associated with building and maintaining these offices, but the investment was necessary to extend the company's business activities, and because some business activities required direct or face-to-face contact. However, recent technological improvements allow some organizations to have direct contact and conduct many of these same business activities without face-to-face interaction.

For example, many financial institutions conduct business with customers without face-to-face interaction. With online access and ATMs, these companies can open accounts, check credit, grant credit, transfer funds, and complete numerous other banking activities without having the customer come into a branch or corporate office. It is no longer necessary for a customer to go into a local branch office to complete a business transaction with their bank. In today's environment, there are companies that conduct a lot of business without face-to-face interaction. These organizations do not have customers that access their services at a main office or branch—all or part of the interaction takes place online.

Although a branch is a part of the parent company, it is an autonomous entity that functions separately from the corporate or main headquarters. Branches can be in different local, regional, or global locations than the corporate office. They can perform all or many of the same duties as the main office, as they extend the company's business operations. Because of the cost of maintaining a branch and recent technological improvements, most companies try to limit the number of branches that they have.

See Also: Retail Sector; Service Level; Subsidiary.

Bibliography. B. B. Buchholz, "City To City: When Firms Branch Out," *ABA Journal* (1991); R. Frierson, "Development Order Approving Establishment of a Representative Office," *Federal Reserve Bulletin* (2006); Hazel J. Johnson, *Bank Valuation Handbook: A Market-Based Approach to Valuating Banks & Bank Branches* (Irwin Professional Publishing, 2005); J. Kolari, A. Zardkoohi, T. Santalainen, and A. Suvanto, "Branch Bank Operating Costs: Evidence From Savings Banks in Finland," *Applied Economics* (1992); K. Potvin, "Opening a Regional Office—Not a Choice, A Necessity," *Public Relations Tactics* (1999); Shirley Donald Southworth, *Branch Banking in the United States* (Southworth Press, 2007).

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Branding

Branding entails much more than simply affixing a clever logo to a product. In fact, the act of branding encompasses a wide range of marketing activities such as product design, name, packaging, advertising, and image projection—all of which are designed with one core purpose in mind: To differentiate a seller's own product from competitors' offerings. When effectively orchestrated, branding enables a product to stand out from a sea of products that otherwise might appear similar to consumers.

If brand managers focus on developing and conveying the points of distinction that matter most to consumers, the brand is likely to thrive and consumers are inclined to pay a premium price to acquire that product. A powerful brand, therefore, is one that commands a large brand premium and engenders a deep level of loyalty among its dedicated users. The best brands, according to marketing guru Philip Kotler, are ones that appeal to consumers on some higher emotional level, not just on the basis of a specific product attribute or benefit sought. While a product feature often can be easily imitated, it is more difficult for competitors to replicate a feeling generated by a compelling brand. Consumers may buy Coke, for instance, not for the taste alone, but also for the positive images and feelings that the product conjures through the company's successful marketing and advertising campaigns.

Indeed, branding is all about good "story-telling," as former English professor James Twitchell emphasizes. He means this not in a derogatory sense—not in the sense of brand managers creating malicious fictions. Rather, by "story-telling," Twitchell means that the best marketers develop convincing and engaging narratives that suffuse their products with such vitality that consumers want to believe in them, use them, and endorse them to others. Consumers enjoy and trust their favorite brands, and the most passionate of them also will act as brand apostles, spreading the word about their brand's perceived strengths.

It is easy to perceive why branding holds such appeal to sellers: Done right, branding offers them significant financial benefits. By eliciting consumers' attention and generating positive interest as well as repeat sales, branding facilitates the selling of a greater number of products. Moreover, sellers generally can command higher prices for stronger brands than weaker ones.

But what about the advantages to branding for buyers? Critics maintain that branding is disadvantageous to consumers. As they argue, the process of creating and maintaining a brand is quite expensive, and those costs are invariably passed on to consumers. Critics also point out that branding, by making an emotional connection with consumers, can encourage irrational purchases, tricking consumers into buying what they do not need or what they cannot truly afford.

A defense of branding, however, also can be made: Branding can be good for consumers. Advocates emphasize that branding, by calling attention to the differences among products, plays a valuable role in helping overwhelmed consumers make decisions in a crowded marketplace. If consumers are pleased with a product's performance, branding also can help consumers identify that product again, facilitating a repeat purchase and a very similar experience as their first time using it. Branding encourages product consistency and uniformity. Viewed in this light, brands therefore may be worth what consumers are willing to pay for them.

Although branding is most frequently associated with the world of consumer products (think, for example, of Coke, Tide, and Apple), it is important to remember that branding also extends to a plethora of other areas, such as nonprofit institutions, services, and ideas. As Twitchell notes, among the many diverse "products" that are branded are museums, churches, and colleges.

Even people can be branded. In fact, in the United States today, some parents are starting to enlist consultants to help them master the art of "branding" their newborn babies with the most effective names—names that allegedly will enable their babies to stand out from the crowd and hence increase their chances of success later in life. Celebrities also are routinely described as being the subjects of brand management. The proper development, cultivation, and maintenance of stars' images can be critical to ensuring their sustained success. Celebrities also frequently engage in brand and line extensions, as they try to leverage their well-known names by attaching them to other product offerings such as perfume, jewelry, and dolls.

The Coca-Cola Conundrum

While it is often tempting for sellers to try to capitalize on a successful brand by expanding it in new directions, brand extension efforts, however, carry the risk of brand dilution. If an extension fails, it may harm the value of the underlying brand. In general, the higher the brand equity, the more risky it is to tamper in any way with the core brand. On a consumer product level, an often cited example of a bungled brand strategy decision was the launch of New Coke in 1984. The taste was supposed to be an improvement and in fact, some consumers did prefer it, yet the alteration in the formula alienated many loyal Coke consumers. Ultimately, in an effort to placate both sides, the company decided to revert to the original formula (renamed "Coca-Cola Classic") but also to retain the updated version ("New Coke").

While the Coca-Cola conundrum seems to illustrate the importance of marketers managing their brands carefully and prudently, a counter school of thought advises marketers to relinquish some of their control and instead empower consumers to help shape the brand. Marketing author and practitioner Alex Wipperfurth maintains that consumers should be encouraged to commit "brand hijack"—an essential takeover of the brand in which end users more than marketers drive the evolution of the product. Wipperfurth perceives this to be a win-win situation: consumers get exactly what they want, and marketers in turn sell more product.

Allowing consumers a relatively free hand in branding, however, can have negative consequences, such as an inconsistent brand image. Moreover, if a brand already possesses high stature, it may be riskier to adopt a more relaxed brand management policy than if the product is new or not yet widely known.

The process of creating a powerful and enduring brand therefore remains a challenging and complex task for marketers. While periodic efforts have been made to reduce branding to a set of rigid rules, branding remains more of an art than a science.

See Also: Advertising; Brand Loyalty; Consumer Behavior; Consumer Needs and Wants; Marketing; Positioning.

Bibliography. Alexander Alter, "The Baby-Name Business," *Wall Street Journal* (June 22, 2007); Del Breckenfeld, *The Cool Factor: Building Your Brand's Image Through Partnership Marketing* (Wiley, 2008); John Gerzema and Edward Lebar, *The Brand Bubble: The Looming Crisis in Brand Value and How to Avoid It* (Jossey-Bass, 2008); Nigel Hollis, *The Global Brand: How to Create and Develop Lasting Brand Value in the World Market* (Palgrave Macmillan, 2008); Philip Kotler and Gary Armstrong, *Principles of Marketing*, 12th ed. (Pearson/Prentice-Hall, 2008); Tengku Chik Melewar bin Tengku Nasir and Elif Karaosmanoglu, *Contemporary Thoughts on Corporate Branding and Corporate Identity Management* (Palgrave Macmillan, 2008); Irving Rein, Philip Kotler, and Marty Stoller, *High Visibility: The Making and Marketing of Professionals into Celebrities* (Dodd, Mead, & Co., 1987); Al Ries and Laura Ries, *The Origin of Brands* (HarperBusiness, 2004); Brian D. Till and Donna Heckler, *The Truth About Creating Brands People Love* (FT Press, 2008); James B. Twitchell, *Branded Nation: The Marketing of Megachurch, College Inc., and Museumworld* (Simon & Schuster, 2004); William D. Tyler, "The Image, the Brand, and the Consumer," *Journal of Marketing* (October 1957); Alex Wipperfurth, *Brand Hijack: Marketing Without Marketing* (Penguin Group, 2005).

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Brand Loyalty

Brand loyalty is defined as a consumer behavior whereby the consumer prefers to continually purchase the same product over time rather than purchase competing products. This behavior usually occurs when the customer believes the brand he or she is purchasing offers a better product or experience than those offered by competitors. This belief then becomes the basis for future purchases. Brand loyalty is usually attributed to a single product, rather than to the organization; hence, a customer's loyalty to a brand does not automatically imply loyalty to the company's other products.

There are three main reasons why brand loyalty is important: Brand loyalty usually decreases the cost of goods sold (through higher volumes), it allows companies to employ premium pricing, and it increases chances that consumers will recommend the product other consumers. In recent years, retail stores have introduced private labels with great success, but these products are counter-intuitive to the theory of brand loyalty. Whereas brands tend to cultivate image over price, private labels often cultivate the image of homogeneous products that offer lower prices with the same level of comfort.

Development

Most customers make their purchases through a trial-and-error process. If, after a few repeated purchases of the same product, they are convinced that the experience, quality, and features were overwhelmingly better than the products offered by competitors, they will tend to form a purchasing habit where they will favor the product. This happens because to the consumer, the purchase has become safe and familiar and few consumers want to constantly reexamine recurring purchasing decisions (especially for low-value goods). Instead, they choose to stick with the brands that have delivered good results if the product stays within what are perceived as acceptable norms.

Generally, some products are more likely to elicit brand loyalty than others. For example, quickly consumed goods (which imply repeated purchases) are more likely to generate brand loyalty, while other products (such as durable goods) are less likely to do so. Also, brand loyalty is not restricted to physical products, and can occur with online products and other services.

For some researchers, brand loyalty is akin to consumer inertia because the consumer is quite content with his or her current purchasing habit and does not want to explore other product offerings. Others believe that brand loyalty occurs because there is limited competition in the current market structure, existing competing products are sufficiently different that they will not answer current needs, and because customers feel "trapped" with their current purchases.

Nonetheless, building brand loyalty usually requires more effort than just relying on consumer inertia or restrictive market conditions. Companies that want to build brand loyalty must be able to convince customers that there is an advantage in continuing to purchase the product by deploying adequate marketing and sales efforts. Furthermore, a company will try to leverage that customer loyalty onto other company products, or use customer loyalty to spread the advantages of its products by word of mouth.

Importance

There are three main reasons why brand loyalty is important. First, brand loyalty usually decreases the cost of goods sold. Companies that have brand-loyal customers find that they can dedicate less resources and effort to marketing to brand-loyal customers, as they are more likely to look for their brand by them-

Popular sneaker brands are a good example of the way brand loyalty can convince consumers to accept premium pricing.

selves when making a purchase (rather than purchasing the first product they find). Brand-loyal consumers are also less likely to be convinced to change brands by a competitor's marketing effort. Finally, brand loyalty generates a higher sales volume due to higher retention of existing customers. The combination of these three factors usually translates into lower costs on a "per unit" basis.

Second, brand loyalty allows companies to employ premium pricing when selling their wares. Studies have shown that brand-loyal customers are more likely to accept a higher price in light of the higher quality they believe they will get, and are less likely to discriminate because of different costs. They are also less likely to purchase products that are on sale due to the perception of a "unique" premium attribute that competing products do not possess, and are less affected by the phenomenon of private labels as a viable purchasing alternative.

Finally, companies that have a loyal consumer base find that there is an increased chance that current consumers will recommend their favorite brand to other customers. They are far more likely to spread the word to other customers and convince them of the advantages of the product. Because a personal recommendation generates important volumes of sales, it is a desirable effect of brand loyalty.

Decline

The rapid rise of private labels has been pointed to as a prime example of the decline of brand loyalty, because consumers are most likely to purchase cheaper products rather than purchasing their favorite product. In many countries, private labels now account for 20–25 percent of retail sales. Also, studies demonstrate that customers who are satisfied with their brand are less likely to convert into repeat customers than they were just a few years ago.

Some companies have tried to attenuate this decline by increasing line extension, whereas different products (or improvements of an existing product) are sold to customers under the same brand. This strategy has met with mixed results, as customers do not always transfer their loyalty from one product to the next, even if there is an obvious relationship between the old and the new product. In many cases, line extensions disrupt existing purchasing habits and reopen the purchasing decision process.

See Also: Branding; Consumer Behavior; Consumer Needs and Wants; Marketing.

Bibliography. Hsiu-Yuan Tsao and Li-Wei Chen, "Exploring Brand Loyalty from the Perspective of Brand Switching Costs," *International Journal of Management* (September 2005); Miguel Villas-Boas, "Consumer Learning, Brand Loyalty, and Competition," *Marketing Science* (Winter 2004); Mary Werner and Richard Murphy, "On-line Business: Is There Loyalty?" *The Business Review* (December 2007).

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Brazil

The territory of the Federative Republic of Brazil is subdivided into five regions (south, southeast, central west, northeast, and north) and 26 federal states as well as the federal district with its capital Brasília. Counting a population of 189.3 million people and a gross domestic product (GDP) of US$1,295 billion (or US$6,841 per capita), Brazil is the world's fifth most populous country, the largest economy in Latin America, and the 10th largest worldwide in 2007.

After several years of double-digit growth rates in the early 1970s, Brazil's economic development strategy based on import substitution came to an end in the early 1980s. It was followed by the "lost decade" and the default on foreign-currency denominated debt in 1987. Years of hyperinflation reached their peak in 1993. Starting in 1994 a successful stabilization program (*Plano Real*) introduced a new currency, the *real* (R$), which was initially pegged to the dollar and freely floated from 1999 onward. A milestone was achieved when Brazilian foreign-currency denominated debt became investment grade in 2008.

The Brazilian government has conceded operational autonomy to the Central Bank, which has been able to continue its orthodox and highly transparent macroeconomic policy even over the change of government in 2003 from a center right to a center left coalition. Having adopted an inflation target policy, the inflation rate dropped to less than 5 percent in 2006 and 2007. Decreasing foreign debt and rising foreign currency reserves reestablished credibility and permitted the country to become a net creditor in 2008.

Although GDP growth is modest (2003–07 the average was 3.8 percent), it is considerably higher than the long-term (1986–2007) average of 2.7 percent. Increasing domestic demand, one of the key drivers of GDP growth, can be traced back to several factors: (1) nominal interest rates, although the world's highest, fell to 11.5 percent in 2008 after topping 26.5 percent in 2003; together with micro-finance programs, this decrease has fostered lending; (2) higher wages (minimum wage rose to R$415 [US$250] in March 2008), combined with low inflation and currency appreciation have increased purchasing power; (3) a large antipoverty program, *bolsa família* ("family fund"), which conditions payments to children's school attendance and vaccination records, reaches one-fourth of the Brazilian population; (4) formal employment has risen by 15 percent between 2003 and 2007; (5) though a highly unequal country, income distribution has improved over the last decade (the Gini coefficient fell from 0.66 in 1996 to 0.56 in 2006).

Traditionally leading in primary products (iron ore, soy beans, meat, coffee), the economy has increasingly diversified. Brazil is today the world's fourth largest commercial aircraft manufacturer (Embraer) and the sixth largest car producer, with an expected output in 2008 of over 3 million cars. General industrial production has increased since President Luiz Inácio Lula da Silva took office in 2003. Energy supply has been increasing and is mainly provided by hydro-, thermal, nuclear, and wind power with 76.4 percent, 21.4 percent, 2.0 percent, and 0.2 percent of total energy production, respectively, in 2008. In 2006 Brazil became self-sufficient in oil and in 2007–08, the oil company Petrobras discovered large offshore reserves raising prospects of becoming a future net oil exporter. Oil production was 1.9 million barrels per day in 2007.

Brazil's overall investment rate is low compared to the other countries of BRIC (Brazil, Russia, India, and China) at 17.6 percent of GDP in 2007. However, a fresh investment cycle in new plants with emphasis on the petrochemical, mining, metal and steel, automobile, and agro-industries has been initiated. Investment in manufacturing by the National Social and Economic Development Bank (BNDES) more than doubled since 2003, reaching US$13 billion in 2007. FDI inflows topped US$34.5 billion in 2007 or 2.1 percent of GDP (2003–07 average). Moreover, a public-private partnership scheme has started operating. Portfolio inflows of US$48 billion in 2007 have also fueled the stock exchange BOVESPA. Mentioned factors have contributed to strengthening the economy despite a high corporate tax burden, educational deficits, crime, and inefficiencies in public administration.

Exports

After the *real* was floated in 1999, the trade balance produced surpluses from 2001 onward and exports increased from US$73 billion in 2003 to US$160.6 billion in 2007, while imports increased from US$48 billion in 2003 to US$120.6 billion in 2007. Hence, the Brazilian trade volume equals 21.5 percent of GDP in 2007. Exports are composed of 32 percent basic, 14 percent semi-manufactured, and 52 percent manufactured products. Brazil's export markets are diversified, with the United States, China, and Argentina being the main foreign trade partners (accounting together for roughly one-third of Brazilian trade).

Compared to the 1990s, Brazil has reduced its foreign trade dependence from the Mercosur/Mercosul countries. An increase of commodity prices, attributed to rising demand in Asia, explains part of Brazil's export growth. Brazilian outward investment stock reached US$108 billion in 2006 and is championed by multinationals such as CVRD, Petrobras, Gerdau, Embrae, and Votorantim. Being a medium-income country, Brazil is increasingly becoming an off-shoring destination, due to competencies in the banking, telecommunications, and transportation industries, proximity to the United States, and economic and political stability. Thus, there are signs that Brazil has passed an inflection point in its recent economic and business performance.

See Also: BRICs; Latin America; Mercosur/Mercosul; Petrobras.

Bibliography. P. Arestis and A. Saad-Filho, eds., *Political Economy of Brazil: Recent Economic Performance* (Palgrave Macmillan, 2008); W. Baer, *Brazilian Economy: Growth and Development* (Praeger, 2001); Central Bank, www.bacen.gov.br (cited March 2009); F. V. Luna and H. S. Klein, *Brazil since 1980* (Cambridge University Press, 2006); A. Rodriguez, C. Dahlman, and J. Salmi, *Knowledge and Innovation for Competitiveness in Brazil* (World Bank Publications, 2008).

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Bretton Woods Accord

Toward the end of World War II, there appeared to be a necessity for an international monetary system so as to accomplish meaningful economic coordination between countries, if they were to rejuvenate their economies and live in peace. To attain these goals, delegates from 44 countries led by the United States, Great Britain, and France met at the United Nations Monetary and Financial Conference in Bretton Woods, a small town north of Mt. Washington, New Hampshire, in July 1944.

The location was chosen because most of the European countries were still in the turmoil of war, while the United States was the only major country to remain unscathed and keen to rebuild an international economic system. The dollar was chosen as the index currency over the British pound because the latter had lost considerable luster during the war (because the Nazis undertook a major counterfeiting effort against it). The dollar, on the other hand, had recovered from being a failed currency in 1929 after the stock market crash to being a benchmark currency by which most international currencies were compared, since the United States had emerged as a world power and its economy was thriving.

The major currencies were pegged to the U.S. dollar and allowed to fluctuate by 1 percent of the set standard, and subsequently, the International Monetary Fund (IMF) was founded. The respective central bank intervened to bring the exchange rate back into the accepted range when it fluctuated 1 percent on either side of the set standard. Furthermore, the U.S. dollar was pegged to gold at a price of $35 per ounce. For example, the Deutsche Mark (Germany's currency) was set to one-fortieth of an ounce of gold, implying that it was worth $0.25 ($35/DM140). This was intended to be permanent, and policed by the IMF, and for almost three decades it also brought stability to the world foreign exchange situation.

Another aspect of the Bretton Woods Accord was a commitment not to use devaluation as a competitive trade policy. Nevertheless, a devaluation of up to 10 percent was allowed without the formal approval of the IMF, if a currency became too weak to defend—larger devaluations required IMF approval.

The Bretton Woods system began to gradually collapse in the mid-1960s as national economies moved in different directions. Several realignments kept the system alive until the early 1970s, when President Richard Nixon suspended gold's convertibility in August 1971. Increasing U.S. budgets and trade deficits resulted in the dollar no longer being considered as the sole international currency. By then, however, it had accomplished the important task of reestablishing worldwide economic stability, particularly in Europe and in Japan.

The Smithsonian Agreement was signed in December 1971—it was similar to the Bretton Woods Accord, but allowed greater flexibility and fluctuation bands for the currencies. In 1972 the European Joint Float was formed by West Germany, France, Italy, the Netherlands, Belgium, and Luxembourg, as the European community tried to move away from their dependence on the dollar.

Both agreements collapsed in 1973, signaling the official switch to the free-floating system by default, as no further agreements were signed. Governments were now free to peg, semi-peg, or freely float their currencies. In 1978 the free-floating system was officially mandated by the IMF. Europe, however, created the European Monetary System in 1978, in a final effort to gain independence from the dollar, but in 1993 it too failed, like all of the previous agreements.

The major currencies today move independently from each other. Central banks occasionally intervene to move or attempt to move their currencies to desired levels. The free-floating system is ideal for today's foreign exchange markets—the underlying factor is mostly supply and demand.

See Also: Bretton Woods Institutions; Currency Exposure; Devaluation; Dollar Hegemony; Dollarization; Euro; European Union; European Monetary Union; Exchange Rate; Exchange Rate Risk; Exchange Rate Volatility; Financial Market Regulation; Financial Markets; Fixed Exchange Rate; Flexible Exchange Rate Regime; Floating Exchange Rate; Foreign Exchange Market; Foreign Exchange Reserves; Gold Standard; International Monetary Fund; Managed Float Regime; Monetary Intervention; Money Supply; Pegged Exchange Rate; Terms of Trade; World Trade Organization.

Bibliography. Patricia Clavin and Jens-Wilhelm Wessel, "Trans-nationalism and the League of Nations: Understanding the Work of Its Economic and Financial Organization," *Contemporary European History* (v.14/4, 2005); Forex, "Forex History: The Bretton Woods Accord," www.forexrealm.com (cited March 2009); Laurent L. Jacque, "Management of Foreign Exchange Risk: A Review Article," *Journal of International Business Studies* (v.12/1, 1981); Cornelius Luca, "Should Forex Traders Battle the Banks?" *Futures* (v.34/1, 2005); Ronald I. McKinnon, "The Rules of the Game: International Money in Historical Perspective," *Journal of Economic Literature* (v.31/1, 1993); S. Roden and B. G. Dale, "Quality Costing in a Small Engineering Company: Issues and Difficulties," *The TQM Magazine* (v.13/6, 2001); Oded Shenkar and Yadong Luo, *International Business*, 2nd ed. (Sage, 2008).

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Bretton Woods Institutions

The World Bank and the International Monetary Fund (IMF) are together known as the Bretton Woods institutions. They were created at a meeting of 44 countries in Bretton Woods, New Hampshire, in July 1944. Their goals were to assist in rebuilding the shattered postwar economy and to promote international economic cooperation. The original Bretton Woods Accord also mandated a plan to create an international trade organization, but this was not realized until the formation of the World Trade Organization (WTO) in the early 1990s.

The formation of these two "sister institutions" came at the end of World War II, and was based on the initiatives of a trio of key experts—U.S. Treasury Secretary Henry Morgenthau, Jr., his chief economic adviser Harry Dexter White, and the noted British economist John Maynard Keynes. The goal was to establish a postwar economic order based on consensual decision making and cooperation in the realm of trade and economic relations. A multilateral framework was envisioned to overcome the destabilizing effects of the previous global economic depression and trade wars.

World Bank Group

The goal of the World Bank Group (WBG) was to improve the capacities of countries to trade by lending money to war-ravaged and impoverished countries for reconstruction and development projects. WBG currently lends over $20 billion annually to developing economies worldwide, and is made up of two main institutions—the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA)—and three subsidiary organizations: the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Center for Settlement Investments Disputes (ICSID). The WBG comprises 185 member countries and is based in Washington, D.C. Membership varies across the institutions—all members of the World Bank are members of the IMF, while IDA has 116 members, the IFC has 174; MIGA has 154, and ICSID has 133 members.

The president of WBG (Robert Zoellick as of June 2008) is the president of all five WBG institutions as well as chairman of the board of the 24 executive directors—five of whom are permanent and represent the United States, the United Kingdom, France, Germany, and Japan, while the remaining 19 are elected by groups of members every two years. The U.S. government has 20 percent of the vote and is represented by a single executive director. In contrast, the 47 sub-Saharan African countries have two executive directors and hold only 7 percent of the votes between them.

Each member state's vote is tied to its level of financial contribution. An 85 percent majority vote is required to pass any supermajority, which gives the United States veto power in all but one of the WBG institutions, the IDA, where it has approximately 13 percent of the votes.

International Monetary Fund

The IMF's original goal was threefold: To promote international monetary objectives, to facilitate the expansion of international trade, and to promote exchange rate stability. The IMF provides several types of loans to member countries. Concessional loans are granted to low-income countries at a concessional interest rate through the Poverty Reduction and Growth Facility (PRGF), while nonconcessional loans are offered with a market-based interest rate through five mechanisms: the Stand-By Arrangements (SBA); Extended Fund Facility (EFF); Supplemental Reserve Facility (SRF); Contingent Credit Lines (CCL); and the Compensatory Financing Facility (CCF).

Members facing a balance of payments problem can immediately withdraw up to 25 percent of their quota in gold or convertible currency. They are further allowed to borrow up to three times their paid-in quota, if the original amount is deemed to be insufficient.

IMF loans are of two major types: Under the Standby Arrangements, member countries are allowed to borrow for a one-to-two-year period to support macroeconomic stabilization programs, and repayments are made within three to five years. The longer-term loan is known as the Extended Fund Facility; countries are allowed to borrow for three to four years and repay the loans five to 10 years down the road.

Criticisms

The criticisms of these two institutions mostly focus on the social and economic impact of their policies on the people of the countries that avail themselves of financial assistance from them. There are questions about governance structures, which are dominated by developed, industrialized countries. Some are also apprehensive about their role in shaping the discourse—through their own research and training—on financial regulation and economic development without participation from poorer and developing economies.

Others have raised the issue of conditions placed by these institutions, which is likely to reduce the authority of the state to govern its own economic policies because these are predetermined under the structural adjustment packages set by Washington-based financial institutions in which they hold insignificant power. Many infrastructural projects financed by the World Bank, such as constructing dams for hydro-electric power, have resulted in the displacement of indigenous people of the area. Finally, there are also concerns that these institutions, in working with the private sector, may undermine the role of the state as the primary provider of essential goods and services, such as healthcare and education, resulting in the underperformance of such services in countries badly in need of them.

See Also: Bretton Woods Accord; European Monetary Union; European Union; Financial Market Regulation; Financial Markets; International Monetary Fund; Monetary Intervention; Money Supply; Pegged Exchange Rate; Trade Bloc; Trade Pact; World Trade Organization.

Bibliography. Bretton Woods Project, www.brettonwoodsproject.org (cited March 2009); Ariel Buira, ed., *Reforming the Governance of the IMF and the World Bank* (Anthem Press, 2005); International Monetary Fund, www.imf.org (cited June, 2008); Strom Thacker, "The High Politics of IMF Lending," *World Politics* (v.52/1, 1999); World Bank, www.worldbank.org (cited March 2009); Ngaire Woods, *The Globalizers: The IMF, the World Bank, and Their Borrowers* (Cornell University Press, 2006).

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Bribery

Bribery is the practice of enticing people to do something they are otherwise reluctant, unwilling, or legally forbidden to do, with money or gifts. Though that description may sound straightforward, attitudes toward bribery vary widely around the world and across different contexts. A comparison might be to the varying attitudes toward other culture-specific practices, like tipping or haggling—either of which may be taken for granted in one culture while seen as bizarre and frustrating in another, or may be considered a social responsibility in one context (tipping a waiter) and unthinkable in another (tipping a doctor). The mechanism, severity of taboo or illegality, and sometimes language of bribery varies not just from country to country but industry to industry.

Legally speaking, the term *bribery* is applicable only when the transaction is forbidden by law—either explicitly or because it requires one party to break a law or neglect their duties—and typically involves officials and other authority figures. A driver may be pulled over and try to bribe a police officer in order to avoid a ticket, even offering more than the cost of the ticket in order to avoid points on his license. Lawyers may bribe workers in a courtroom for information pertinent to their case.

Gamblers, crime syndicates, or other interested parties may bribe the referees or players in a sports event, in order to influence the outcome so as to profit off of sports betting—this has been a perennial problem in organized sports, from the Black Sox scandal of the 1919 World Series to the charges against NBA referee Tim Donaghy in 2007, and affect even ostensibly "amateur" sports, as in the ice dancing scandal at the 2002 Winter Olympics. While a referee, judge, or other official is an obvious person to target for bribery, athletes can be enticed to throw the game, and coaches may be enticed to exert their influence.

Bribery and International Business

Bribery is an inescapable aspect of doing business internationally. In some countries, bribes are so accepted that they are tax-deductible. The U.S. Foreign Corrupt Practices Act even makes allowances for a limited degree of bribery, permitting "grease payments," which are legally distinguished from the bribery of foreign officials, and which are usually made in order to speed up legal processes rather than to bypass local or international law. This makes it easier to do business, without violating American law, in countries where bribery is a way of life.

The Bribe Payers Index tabulates a rough estimate of how likely businesses from various countries are to pay bribes when doing business abroad. It is based on responses from over 10,000 executives, as part of the World Economic Forum. In 2006, the 30 leading export nations were ranked on a scale of 1 to 10, with 10 being the most likely to pay bribes:

1. Switzerland 7.81
2. Sweden 7.81
3. Australia 7.59
4. Austria 7.50
5. Canada 7.46
6. United Kingdom 7.39
7. Germany 7.34
8. Netherlands 7.28
9. Belgium 7.22
10. United States 7.22
11. Japan 7.10
12. Singapore 6.78
13. Spain 6.63
14. United Arab Emirates 6.62
15. France 6.50
16. Portugal 6.47
17. Mexico 6.45
18. Hong Kong 6.01
19. Israel 6.01
20. Italy 5.94
21. South Korea 5.83
22. Saudi Arabia 5.75
23. Brazil 5.65
24. South Africa 5.61
25. Malaysia 5.59
26. Taiwan 5.41
27. Turkey 5.23
28. Russia 5.16
29. China 4.94
30. India 4.62

One of the interesting things about the list is the low placement of countries like Russia, where the common perception is that bribery is common within the country, which would intuitively lead to the assumption that its businesses would be as willing to pay bribes outside of the country.

Payola and Pay to Play

Pay to play is a phrase used in reference to an assortment of similar activities, some legal, many of them forms of bribery, all of them having in common the transaction of money for some form of access or attention. In its most literal rendering it refers to *payola*, the long-standing and often overlooked practice in the music industry of paying radio stations to play certain songs, without any overt announcement of sponsorship. Many of the most popular, successful, and talented artists in popular music history were given a boost by payola, if only because the practice creates a system into which everyone must buy in.

The institution of independent record promoters arose specifically to try to circumnavigate FCC regulations about payola, after both Alan Freed and Dick Clark—world-famous and influential DJs in the 1950s and 1960s—were subjects of payola scandals. In the independent promoter system, record companies pay independent promoters—separate companies or individuals—who then pay record stations or DJs to play the songs on the list the record company provides. Though blatantly the same essential act as paying the station directly, it was believed that this would honor the letter of the law and at least permit the practice until the law could be rewritten. Instead, the blatancy of the violation of the spirit of the law attracted the attention of state and federal prosecutors, resulting in a federal settlement in which four broadcasting companies—ClearChannel, CBS Radio, Entercomm, and Citadel—paid $12.5 million in fines but were not found guilty of specific charges, nor made to admit to wrongdoing. It was enough to send the message, and the practice has either died off or gone underground.

In politics, *pay to play* refers to the need to pay money—usually in the form of campaign contributions—in order to get special attention from a politician. That attention may be in the form of favorable legislation (which is the essential and legal goal of lobbying), government contracts, appointments to special posts, jobs, et cetera. The potential influence of a newly elected politician is broad, and a good many politicians—especially at the state and local level—elevated their campaign supporters to all the available posts in government, as a reward for their support. Though there are regulations governing campaign contributions from individuals, institutions, and corporations, and the disclosure thereof, pay to play payments are often made with so-called soft money, money that is donated to political organizations (called 527s for the section of tax code governing them) which do not fund advertising promoting the election or defeat of a specific candidate. The abuse and scrutiny of soft money contributions is one of the most prominent issues in campaign finance reform.

Rent Seeking

The reason bribery is so discouraged, beyond the consequences of its specific instances, is because it creates a "rent-seeking" culture, in which those who cannot afford to pay cannot afford to play. The *rent* of *rent-seeking* is derived from Adam Smith's tripartite division of income into wage, profit, and rent, and does not refer specifically to property leasing. A rent-seeking culture is one in which individuals and organizations in that culture seek to increase their incomes through the manipulation of conditions, rather than through production and trade. For instance, it may be cheaper for a manufacturer to preserve or change the regulations affecting its industry and its products than it is to alter those products or practices. If the cost of preserving beneficial regulations allowing for widget production to pollute the environment—whether through lobbying, campaign contributions, illegal bribes, or other illegal activity—is significantly lower than the cost of developing and producing a nonpolluting widget, then on paper it appears that it is in the business's best interest to spend the money on those regulations. In fact, it is in a sense even in the interests of the widget consumer—until one factors in the environmental effects.

In late 2008, a global crackdown on companies using bribery to advance their business interests in foreign nations increased its momentum. In the United States, such investigations went from only three in 2002 to 84 in 2007. Also, in 2007, Baker Hughes, a Houston oil-field services firm, agreed to pay $44 million in fines and return profits associated with bribing Kazakhstan officials, as a penalty under the Foreign Corrupt Practices Act.

See Also: Corruption; Culture-Specific Values; Foreign Corrupt Practices Act; Legal Environments; Lobbying.

Bibliography. Russell Gold and David Crawford, "U.S., Other Nations Step Up Bribery Battle Prosecutions Climb on Tougher Laws Aimed at Businesses," *Wall Street Journal* (September 12, 2008); Gordon Tullock, *The Rent-Seeking Society* (Liberty Fund, 2005); Alexandra Addison Wrage, *Bribery and Extortion: Undermining Business, Governments, and Security* (Praeger Security International, 2007).

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BRICs

"The BRICs" refers to Brazil, Russia, India, and China, and specifically to their fast-growing but still developing economies (and, by implication, their similar goals and the mutual benefits to be had from an alliance). The term was coined by Jim O'Neill, head of global economic research at finance corporation Goldman Sachs, and has been rapidly adopted by other parties, to the extent that financial news sources use it with minimal or no explanation, and a 2008 summit between representatives of the four nations was called the BRIC Summit. As O'Neill pointed out, and as Goldman Sachs economists and others have expanded on since, these four economies are not simply rapidly developing. They are rapidly developing and have a great deal of demonstrable potential. One quarter of the world's land and a staggering two-fifths of its population is accounted for by the BRICs.

The BRIC thesis has been a long-term prediction from the start, and its first formal defense was in the 2003 paper "Dreaming with BRICs: The Path to 2050." O'Neill's argument is that these four economies have the capability of being among the dominant economic powers—and collectively, the dominant power—by the year 2050. Specifically, the Goldman Sachs prediction is that by that year, raw materials will be dominated by Russia (particularly petroleum products) and Brazil (particularly soy and iron), and manufactured goods by China and India. This provides a practical reason for cooperation among the BRICs, especially in trade.

The Goldman Sachs scenario postulates a 2050 in which BRIC citizens (apart from Russians) are poorer on average than those of other industrialized nations, but in which the BRIC countries account for the largest share of the global economy and wealth. Commodity prices will change as the global consumer base changes. BRIC currencies will appreciate by 300 percent. Follow-up reports from Goldman Sachs have amplified, rather than contradicted, these predictions. While the predictions are based on economic potential, they do not represent a "best case scenario." They assume the continued adoption of policies that encourage growth, but nothing miraculous or extraordinary—just steady growth as the BRIC countries, having recently adopted favorable capitalist policies, expand their economies to fill the space available to them.

In the wake of the Goldman Sachs conjectures and their popularization, the BRIC term has been adopted by many investment firms and analysts who favor investing in emerging markets. If those countries are expected to rapidly expand, after all, they would seem to offer great investment opportunities. The applications of the conjectures to investing strategies are not immediately apparent, however.

There is a tendency to use the term as shorthand for emerging markets in general, especially in investment contexts. Sometimes this is explained narratively, with the four nations taken as symbolizing developing regions of the world—Latin America, Eastern Europe, South Asia, and East Asia—sometimes the cache of the word, the brand name appeal, is simply used in order to introduce a similar theory about emerging markets. At the same time, the term is sometimes attacked for glossing over the differences among the BRIC nations. Brazil, for instance, is an established full democracy with no recent history of serious disputes with its neighbors. (*The Economist* has called it "the only BRIC without a nuclear bomb.") Russia and China are diminishing in population, while Brazil and India are growing.

Very similar to the BRIC nations are Mexico and Korea, both of which are experiencing economic growth comparable to Brazil's, and have become more devotedly capitalist in the recent past. An early Goldman Sachs BRIC paper explained the exclusion of the two countries as owing to Korea's current political situation—the division between North and South—and the fact that Mexico is already a major economy. But the countries do have BRIC-like potential in the coming decades. Mexico's middle class is growing at a significant rate, while its impoverished class declines, and infrastructure is quickly modernizing. Korea is widely considered likely to reunify before 2050, and has tremendous economic potential if it does so and retains favorable policies. Unlike Brazil, India, and China, Mexico and Korea (unified or just South Korea) are likely to have per capita incomes comparable to the United States and other leading economic powers.

See Also: Brazil; China; Geopolitics; India; Korea, South; Mexico; Russia.

Bibliography. Arindam Banerjee, ed., *Capital Markets in the BRIC Economies* (Icfai University Press, 2007); Marc

Kobayashi-Hillary, *Building a Future with BRICs: The Next Decade for Offshoring* (Springer, 2007); Stefano Pelle, *Understanding Emerging Markets: Building Business Bric by Brick* (Sage, 2007); Dominic Wilson and Roopa Purushothaman, "Dreaming With BRICs: The Path to 2050," Goldman Sachs Global Economic Paper no. 99, www2.goldmansachs.com (cited March 2009).

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British East India Company

The contribution of the British East India Company (EIC) to the British Empire was considerable. In the closing years of her reign, Queen Elizabeth I (1533-1603) granted a royal charter to the company on December 31, 1600, with rights of trading east of the Cape of Good Hope. Within a span of 150 years, the EIC was the most powerful company trading with India. Gradually Britain established political hegemony in the subcontinent and from its traders, it became colonial masters.

The EIC, a joint-stock company of 125 shareholders, began with a capital of £72,000. It was administered by a court of directors, and had a governor and 24 directors elected annually. The EIC got its start in 1601, when merchant ships went to purchase spices from Indonesia. The huge quantities of black pepper brought back resulted in an oversupply in the British domestic market and the company began to diversify its trade. Indian textiles were a prized item and a factory (meaning a trading establishment, from the word *factor*, or agent) in Surat was opened on the northwest coast of India in 1608. After three years, a factory was established in Masulipatam on the eastern coast of India. In 1615 the EIC representative Thomas Roe (1581–1644) obtained *farman* (an imperial order) from the Mughal Emperor Jehangir (1605–27) for trading and setting up posts throughout the Mughal Empire. The EIC did brisk trading from major factories such as the walled forts of Saint George in Bengal, Fort William in Madras, and Bombay Castle.

An abundance of cotton textiles in the factories resulted in fulfilling global demand for durable and washable Indian textiles. The EIC began to receive concessions from the local rulers of India and in time dabbled in politics. In Bengal, the EIC was enjoying highly profitable trading and in fact, 60 percent of commodities imported from Asia were coming from Bengal. By 1717 it had a free hand in the importing and exporting of goods from Bengal. It did not have to pay any tax and could issue *dastak* (permits) to certify the movement of goods. By adroit diplomacy, warfare, and political conspiracy, the British subjugated Bengal, and afterward the whole of the Indian subcontinent.

In 1757 the expansion of the EIC began with the Battle of Plassey after the defeat of Mirza Muhammad Sirajuddaula (1729–57), the *nawab* of Bengal, by Robert Clive (1725–44). The French were defeated in the ensuing Anglo-French conflict. The Carnatic wars eliminated the French from south India. There was further consolidation of the EIC's power in eastern India after the Battle of Buxar in 1764, which gave the company control over the financial administration of Bengal, Bihar, and Orissa.

With the loss of the American colonies, the "first British Empire" was over by 1783. In the period of the "second British Empire," imperial attention turned toward Asia and the sugar plantations of the Caribbean. The EIC defeated any power that stood in its way. Mysore and Maratha states came under the British sway. By the middle of 19th century, British authority extended up to present-day Afghanistan in the west and Myanmar (Burma) in the east.

Land revenue was major source of income for the EIC and its collection was a major concern for the company. The commercialization of agriculture increased. With the rise of a new class of manufactures in industrialized Britain, there was an overhauling of the EIC's trading system. The company lost absolute privilege in commerce in 1813. British goods then flowed abundantly to India. The latter was becoming a supplier of raw materials to Britain and a consumer of British finished products. The drain of wealth from India continued, with profits from business being transferred to Britain. The EIC purchased goods from India out of the revenue that was collected from Bengal and sent it home. Great Britain drained resources and wealth from India.

The rule of the company had witnessed the revolts of peasants, tribal people, and landowners. The revolt of 1857 (the so-called *Sepoy* mutiny) engulfed large parts of India. It also sounded the death knell for the EIC: Queen Victoria's (1819–1901) proclamation of November 1, 1858, brought the Indian subcontinent under the direct rule of Great Britain.

See Also: Dutch East India Company; India; Pakistan; United Kingdom.

Bibliography. S. Babu, *Merchants of Politics: East India Company and the Dawn of the Raj* (Dominant, 2006); H. V. Bowen, *The Business of Empire: The East India Company and Imperial Britain, 1756–1833* (Cambridge University Press, 2006); H. V. Bowen et al., *The Worlds of The East India Company* (D. S. Brewer, 2002); K. N. Chaudhuri, *The Trading World of Asia and The English East India Company, 1660–1760* (Cambridge University Press, 1978); Brian Gardner, *The East India Company: A History* (McCall, 1972); John Keay, *The Honourable Company: A History of The English East India Company* (Macmillan, 1994); M. S. Naravane, *Battles of the Honourable East India Company: Making of the Raj* (A. P. H. Publishing, 2006); Om Prakash, *Emergence of the East India Company* (Anmol, 2002); K. C. Sharma, *East India Company* (Vista International, 2007); Antony Wild, *The East India Company: Trade and Conquest From 1600* (Lyons Press, 2000).

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Brunei

Brunei (Brunei Darussalam) is an Islamic sultanate located on the northern coast of the island of Kalimantan (Borneo) facing the South China Sea. It is divided into two sections, separated by territory (the Limbang Valley) of the state of Sarawak, Malaysia. The Sultan, His Majesty Sultan Haji Hassanal Bolkiah, is concurrently the prime minister, defense minister, finance minister, and head of religion (Islam) for the country. In the tradition of Islamic sultanates, the government of Brunei is autocratic and is classified as an absolute monarchy.

The Sultanate of Brunei was a major power in the region from the 15th to the 17th centuries, including control over the current Malaysian states of Sabah and Sarawak and north beyond the Sulu Sea. After conflicts with Spain and attacks by pirates, the Sultan eventually gave much of the country (mainly Sarawak) to the Scottish adventurer James Brooke in 1841. Brooke established a raj in Sarawak and installed himself as a "white rajah." Brunei also began ceding territory to Great Britain and eventually became a British protectorate in 1888.

Brunei was occupied by the Japanese during World War II and returned to its British protectorate status in 1945. Brunei was invited to become a part of Malaysia when it was formed in 1963 but refused, mainly on economic grounds, not wanting to grant control to Kuala Lumpur of its extensive oil and natural gas resources. It regained full independence again in 1984, at which time it joined the Association of Southeast Asian Nations (ASEAN), the Organization of Islamic Conference (OIC), and the United Nations.

Brunei has a legislative council but its members are appointed and it has only token power with regard to approving the budget. There is a constitution but it was suspended after an armed rebellion in 1962. When the legislative council was reactivated in 2004, a number of direct restrictions were placed on it by the Sultan. Individual rights remain limited and Freedom House classifies press status as "Not Free."

The economy of Brunei is built around oil and natural gas, which account for more than half of gross domestic product (GDP) and more than 90 percent of exports. The discovery of oil at Seria in 1929 has resulted in development in the country that has kept it ahead of all other Southeast Asian countries except Singapore. It has one of the world's largest liquefied natural gas (LNG) plants. Roughly 90 percent of the LNG produced is sold to Japan. In 2008 cooperation with China in the development of Brunei fisheries was undertaken. Recently, South Korea has also become a major customer. With a per capita GDP of more than US$25,100 (PPP $51,000), Brunei is on a par with the European Union at US$26,300. Life expectancy is more than 75.5 years and the infant mortality rate is low at less than 13 per 1000 live births. An indicator of modern prosperity is the low fertility rate of 1.94.

Brunei has considerable ethnic divisions, with distinct separations between Barunay (including the Sultan and his family line), Iban, Dayak, and other Malays (roughly 60 percent together), plus substantial numbers of Chinese (14 percent), Indians (6 percent), British (10 percent), and Koreans (9 percent). Citizenship is strictly controlled in favor of Malays, with many Chinese having registration documents but no citizenship. The Chinese and South Asians are a commanding presence in the economy, far outweighing their numbers, while the Malays are heavily represented in government service and in agriculture. The numbers of Chinese in the country may be undercounted.

Vestiges of Brunei's empire remain in its border and island disputes with Malaysia and its claims against China and others in the Spratly Islands. Sea bottom exploration for oil, natural gas, and other minerals continues to be critical to Brunei's economic future.

See Also: Association of Southeast Asian Nations; China; Malaysia.

Bibliography. BP USA, *Brunei: Country Study Guide* (International Business Publications, 2008); Economist Intelligence Unit, "Brunei Country Report" (June 2008); R. H. Hickling, *A Prince of Borneo* (Graham Brash, 1985); G. Saunders, *A History of Brunei* (Oxford University Press, 1994); D. S. Ranjit Singh, *Brunei 1839–1983: The Problems of Political Survival* (Oxford University Press, 1991); Third Point Systems, *Brunei: A Strategic Assessment* (1985).

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BSE Sensex Index (Bombay Stock Exchange)

The BSE Sensitive Index (Sensex) is a value-weighted index tracking the performance of 30 stocks on the Bombay Stock Exchange (BSE).

The Bombay Stock Exchange was established in 1875, and in the 21st century it lists more stocks (4,700) than any other exchange in the world. By market capitalization, it is the 10th-largest exchange in the world, and the largest in south Asia. The Sensex was first compiled in 1986, using 1978–79 as its base year, with a starting value of 100 points. The inflation-adjusted rate of return since its base year has been about 9 percent per annum. The index passed the 1,000 point mark in July 1990, doubling in the next year and a half, doubling again in the following two months to pass 4,000 points on March 30, 1992. Growth has been steady, though slower, since then.

Like stock exchanges worldwide, the BSE has suffered from the American subprime mortgage crisis and related credit crisis. The 10 worst single-day falls in the BSE's history all date from 2006 on; most were in 2008. The Sensex was volatile all through that period, experiencing not only its worst falls but its most rapid climbs, with the three fastest 1,000-point climbs in the index's history occurring in the autumn of 2007.

The 30 stocks tracked by the Sensex are the largest and most traded stocks on the exchange, accounting for about one-fifth of the market capitalization of the huge exchange. As of the beginning of 2009, the 30 stocks on the BSE Sensex are:

- Associated Cement Companies Limited, a Mumbai cement company operated by the Swiss corporation Holcim.
- Bharat Heavy Electricals Limited, India's largest infrastructure and energy-related manufacturing company.
- Bharti Airtel, the largest cellular service provider in India.
- DLF India, India's largest real estate developer.
- Grasim Industries, a textile manufacturer that expanded into building materials and chemicals.
- Housing Development Finance Corporation (HDFC), a bank focused on home mortgages.
- HDFC Bank Limited, a commercial bank opened by HDFC after India began allowing private sector banks in 1994.
- Hindalco Industries, an aluminum manufacturer.
- Hindustan Unilever, India's largest consumer products company, a majority stake of which is owned by the Anglo-Dutch company Unilever.
- ICICI Bank, formerly Industrial Credit and Investment Corporation of India, India's largest private bank.
- Infosys Technologies Limited, a multinational IT company headquartered in Bangalore.
- ITC Limited, formerly Imperial Tobacco Company, one of the country's most profitable com-

panies, a conglomerate dealing in everything from cigarettes to hotels to greeting cards.

- Jaiprakash Associates, a housing industry company.
- Larsen and Toubro, a diversified Indian conglomerate with major holdings in construction.
- Mahindra & Mahindra Limited, a conglomerate with operations in IT, infrastructure, automotives, financial services, and farm equipment.
- Maruti Suzuki, one of the largest automobile manufacturers in South Asia.
- National Thermal Power Corporation, the largest power company in the country.
- Oil and Natural Gas Corporation, the company responsible for most of India's natural gas and oil production.
- Ranbaxy Laboratories Limited, the country's largest pharmaceutical company.
- Reliance Communications, a telecommunications company.
- Reliance Industries, a large conglomerate with holdings in petroleum, clothing, and fresh food.
- Reliance Infrastructure, a large power company.
- Satyam Computer Services, an IT company.
- State Bank of India, the nation's largest bank.
- Sterlite Industries, a metals and mining group.
- Tata Consultancy Services, a software and consulting company.
- Tata Motors, a vehicle manufacturer.
- Tata Power, an electricity company with a focus in hydroelectric power.
- Tata Steel, the world's fifth-largest steel company.
- Wipro, an IT company.

See Also: Company Profiles: South Asia; India; Indian Oil; Stock Exchanges.

Bibliography. Gurcharan Das, *India Unbound: The Social and Economic Revolution from Independence to the Global Information Age* (Anchor, 2002); Arvind Panagariya, *India: The Emerging Giant* (Oxford University Press, 2008); Jorge Dige Pedersen, *Globalization, Development, and the State: The Performance of India and Brazil Since 1990* (Palgrave Macmillan, 2008); Robert J. Shiller, *Irrational Exuberance* (Broadway Books, 2006).

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BT

British Telecom (BT) Group plc is the world's oldest communications company. BT can trace its lineage back to the late 1800s, when, following the Telegraph Act of 1892, the lines of the two private companies that provided the bulk of the then United Kingdom (UK) telephone network were purchased by the government and later in 1912 were run as a government department as part of the General Post Office (GPO) under the Postmaster-General. BT's age means that it has either created or played witness to all of the major events of the global telecommunications industry. The various phases of its development make it an interesting case for those who study trends of privatization and deregulation of nationalized industries and networked utilities.

Until 1969 UK telephony was treated as a natural, statutory monopoly, until following the Post Office Act it became a nationalized industry, becoming "Post Office Telecommunications" (POT). Finally, on April 1, 1984, POT was privatized under the trading name British Telecom (from 1991 "BT"). Today, BT Group is made up of four principal businesses: BT Openreach, BT Retail, BT Wholesale, and BT Global Services. BT is currently a vertically integrated conglomerate offering a range of communication services to domestic and corporate customers based on the strategic resource of its infrastructure and associated services. Although a private company, BT is still expected to act for the public good, for example, connecting consumers to the fixed-line network and providing public call boxes.

In the UK, the degree to which BT can leverage its ownership of the majority of the telecommunications infrastructure is controlled by the UK Government Office of Communications (Ofcom). In response, BT has sought expansion and new markets through global ventures, experiencing mixed results. For example, a joint venture and proposed merger by acquisition with MCI Communication Corporation and the formation of a 50/50 joint venture with AT&T, both to obtain a foothold in the United States, ultimately failed. However, successful acquisitions included the Italian telecommunications operator Albacom and financial infrastructure provider Radianz from Reuters.

The UK government has been keen to stimulate competition in the deregulated telecommunications market; however, efforts to dislodge BT from its virtual monopoly status have been unsuccessful. A distinct example was the government drive to create "Broadband Britain." The government forced BT to allow other broadband providers to use BT exchange equipment to provide commercially viable alternatives for consumers, but the rate at which this was done and ensuing problems with the financial sustainability of early competitors in the immature marketplace led to the government turning to BT to provide leadership and accelerate market development. In the domestic arena, BT is doing this by aggressive pricing, leveraging existing technologies, and its tradition of owning the telecommunications access point in the home, providing a "triple-play" product, bundling broadcasting, telephony, and broadband internet access.

This success is a two-edged sword as broadband internet and mobile communications increasingly negate the BT advantage of ownership of fixed lines and therefore its traditional revenue streams. The international technological and commercial convergence of the telecommunications, information technology, and content industries has created many alternative ways to move voice, data, and video communication. In response, BT is currently developing the 21st Century Network (also known as 21CN), a network based on internet protocol technology, which will replace all existing networks to enable seamless voice, data, and video communication between any static or mobile digital device.

To exploit this infrastructure and entrench BT further into the domestic market, it is making preemptive strategic alliances, for example, with Intel to explore wireless working, outsourcing with Accenture, and multimedia entertainment and online gaming with Microsoft. BT's first-mover advantage in the UK and vast technological, financial, and intellectual resources have become barriers to entry to the UK telecommunications market and a strong platform for global joint ventures and mergers and acquisitions, such that it seems not even the best efforts of the UK government can change this in the short term.

See Also: AT&T; Deregulation; Privatization.

Bibliography. BT, *A Short History of BT's World* (British Telecommunications, 1998); BT, "BT's History," www.btplc.com (cited March 2009); Massimo Florio, "Does Privatisation Matter? The Long-Term Performance of British Telecom Over 40 Years," *Fiscal Studies* (v.24/2, June 2003); John Harper, *Monopoly and Competition in British Telecommunication: The Past, the Present and the Future* (Pinter, 1997); Colin Turner, "Issues in the Mass Market Deployment of Broadband: An Analysis of British Telecommunications' (BT) Strategy," *Info: the Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media* (v.5/2, 2003).

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Bulgaria

Bulgaria is a country in southeastern Europe that lies south of Romania, north of Greece and Turkey, and has a coastline along the western edge of the Black Sea. Since its reestablishment as an independent country in 1878 after the rule of the Ottoman Empire (from 1422), Bulgaria has faced an economic dilemma: How to raise the standard of living despite a backward rural economy and a meager industrial and savings basis? How to build a balanced society beyond agrarian majorities in favor of entrepreneurial middle classes and bourgeoisies? At first, it relied on export of agricultural commodities to north-central Europe. It called for foreign direct investments to fuel the lean state budget and to finance the basic networks of railroads. Its banking structure took a long time to become efficient, under the aegis of the central bank and inflows of German, Austrian, and French money.

Some signs of take-off occurred at the turn of the 20th century, but Bulgaria failed to enlarge significantly its territory through the Balkan Wars (1912–13) and remained a small country, all the more because it had to submit to reparation payments after having joined Germany and Austria-Hungary in World War I. A predominant agrarian economy and unequal ownership of farms put brakes on growth and diversification, which stopped during the 1930s and 1940s.

After World War II Bulgaria joined the Soviet-controlled economic area Council for Mutual Economic Assistance (COMECON). It benefited from some European globalization thanks to the injection of money by the Soviet Union: The massive land reform transformed agriculture into an efficient sovkhoz-type collectivist sector, exporting wheat and maize to the Soviet Union. The centrally planned industry was specialized into a few segments—with exports of electricity produced by nuclear plants and also of ground resources (lead, zinc), followed by agricultural machinery, truck motors, buses and trucks, and machine tools, thus benefiting from a high level of investment against gross domestic product (GDP) and from the introduction of skills in mechanics and upstream in steel and pig iron. The Black Sea coast welcomed tourists from the entire Communist area. Bulgaria had no genuine margin to maneuver but its standards progressed, thank to this artificial dependency on Soviet money, engineering, customership (75 percent of exports), and energy supplies.

Such rigid dependency was revealed after the fall of the Berlin Wall in 1989, because all of a sudden the Bulgarian economy was swallowed by a crisis of low productivity, while a desperate lack of inner capital and savings became apparent. To counter this chaos, Bulgaria had to rebuild a state economic administration, fight against bribery, and try to stimulate private investment and entrepreneurship for peasants, retail trading, small and medium-sized enterprises in light industry, services, and the hotel and tourism business. The European Bank for Economic Development and the European Union provided financial help. But Bulgaria had to consider whether to open its economy to foreign investors and thus lose economic autonomy or to keep some nationalistic strongholds.

The first strategy took shape in the name of liberalism and moreover of employment. This led to large investments from foreign banks, utilities, and service firms (German ones using Bulgarians as truck drivers throughout Europe). Other investments were made in real estate and tourism and in the food industry. Foreign direct investment was led by Austria (21 percent) in 1996–2007, the Netherlands (16 percent), Greece (9 percent), and Great Britain (9 percent). Such "positive" globalization did not create enough employment, and Bulgarians commenced emigrating to western Europe, mainly to work in construction, sending their earnings to their home country. Bulgaria still needs to determine its "specialization" within the new European economic order and within the European Union, which it joined in January 2007. It has missed out, for example, on the car manufacturing plants welcomed by some other countries.

See Also: Eastern Europe; European Bank for Reconstruction and Development; European Union (EU).

Bibliography. Andy Anderson and Stephane Lambert *Buying a Property: Bulgaria* (Cadogan, 2007); CIA, "Bulgaria," *World Factbook*, www.cia.gov (cited March 2009); Emil Giatzidis, *An Introduction to Post-Communist Bulgaria: Political, Economic, and Social Transformations* (Manchester University Press, 2002); Petia Koleva, *Système productif et système financier en Bulgarie: 1990–2003* [Bulgaria's production and financial systems: 1990–2003] (Harmattan, 2004); John Lampe, *The Bulgarian Economy in the Twentieth Century* (Crown Helm, 1986); John Lampe and Marvin Jackson, *Balkan Economic History, 1550–1950: From Imperial Borderlands to Developing Nations* (Indiana University Press, 1982).

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Bureaucracy

In its broadest sense, *bureaucracy* means domination through the expertise of the official. A bureaucracy is an organization formally established to fulfill its ends through the determination of the means to guarantee the highest administrative efficiency. Its legitimacy rests on the technical knowledge and the observation of the rules legally set forth that guide its action. It is a machine based on accuracy, calculation, continuity, discipline, rigor, and confidence, which guarantee a stable and certain social order.

The origin of the concept can be traced in the texts of Vincent Gournay and G. W. F. Hegel, which referred to the power of civil servants to service the monarchy. Later, social thinkers like Karl Marx, Ferdinand Tönnies, Emile Durkheim, and Robert Michels analyzed through different approaches the impact of the bureaucratic organization on economic activity and the power structure of modern society. However, Max Weber offers a complete theoretical formulation because, in his intention to understand and characterize the progressive transformation of

Western civilization, he noted the technical superiority of bureaucracy and its consequences.

Attributes

Weber described bureaucracy as the most rational way to exercise domination, because it has certain attributes that are not appreciated in social communities organized around charisma or tradition. The bureaucratic organization is based on the distribution of work and responsibilities, so that the competencies of the officials are precisely defined and are articulated through a hierarchical order in which relations of authority are clearly defined. Each officer complies with the administrative tasks assigned by laws and regulations, and does it with discipline, loyalty, and obedience.

In addition, each position is linked to specific technical qualities, so it can be occupied by anyone who meets the requirements. Bureaucratic work is a remunerated and continuous full-time occupation that enables the realization of a career based on promotion considering expertise and merit. The development of the monetary economy facilitated payment in money to the modern official and the establishment of a tax system allowing the collection of funds to sustain the costs of bureaucratic activities of the state. Accordingly, this model assumes the separation of public service and private life, and distinguishes public property of the heritage of the individuals.

Finally, bureaucracy is associated with modern management techniques based on the documentation and written record of each action, giving rise to the collection, classification, and storage of files. In addition, because bureaucracy operates according to clearly defined general rules, it treats each case avoiding arbitrariness and favoritism.

However, the current operation of bureaucracy does not correspond to the ideal attributes. Robert K. Merton pointed out the relevance of analyzing the tensions produced between the formal structure and the real behavior of officials, which gives rise to phenomena such as trained incapacity, occupational psychosis, and professional deformation of officials. The examination of the dysfunctions inherent to the rational model of bureaucracy shows the ritualism produced by the excessive adherence to formalized procedures; the distortion of information produced by hierarchy, centralization, and specialization; the inhibition of initiative and creativity because of the rigid respect of rules; and the hostility and indifference produced by impersonal treatment based on the record.

Under these approaches, some scholars conducted several empirical studies to demonstrate the displacement of initial commitments of bureaucracy and their unintended consequences, the forces that originate the process of formalization and the latent functions of bureaucracy, the processes of change and innovation in widely formalized organizations, and the disruptive effects of hidden relations of power on the bureaucratic system.

From Bureaucratization to Globalization

Weber considered also the consequences of the generalization of bureaucracy, a process that transformed modern society into an iron cage in which citizens were caught by formal procedures that widely restrict their freedom. The inevitable bureaucratization of the world was appreciated by Bruno Rizzi in the Soviet Union, a centralized state with a huge bureaucratic apparatus that controls economic surplus and any aspect of social life. Capitalist societies were also criticized. James Burnham relied upon the thesis of Rizzi to characterize the process of bureaucratization in the United States, a society increasingly directed by a managerial class that controls the access to the means of production and takes advantage of its position to serve to its own particular interests. These and other experiences have motivated extensive discussions on the effects of bureaucratic power over the freedom of citizens and representative democracy.

Bureaucratization was facilitated by the generalization of division and standardization of work, which led to increased productivity and reduction of costs, encouraging mass consumption. Scientific management, driven by Frederick W. Taylor, and the introduction of the modern assembly line in the Ford Motor Company exemplify this process. These transformations favored the professionalization of management of capitalist companies that were increasingly integrated into conglomerates controlled by professional managers appointed by the board of stakeholders.

In addition, the state created large public enterprises in strategic sectors such as communications, transport, and energy to support private investment and macroeconomic stability. It also created a large bureaucratic system to offer public services demanded by cities and towns, and addressed the needs of education, health, and social security of the most disadvantaged sectors of the population. Finally, in the arena of politics, political parties were impelled to adopt bureaucratic structures to attract the masses and get better conditions for electoral competition. Overall, these trends implied the constant expansion of bureaucracy and the integration of an enormous army of bureaucrats with technical skills acquired by specialized professional training.

The huge size of the state apparatus related with bureaucratization was harshly criticized in liberal thinking, which opposed the growing economic and social action of the state. Ludwig von Mises, Frederick A. Hayek, Milton Friedman, and others argued that Keynesian policies attack individual liberties, disrupting the natural functioning of the economy. From the 1970s, when the failure of the welfare state was evident, liberalism promoted the free market, labor flexibility, and democracy as the antidotes for bureaucratization and state interventionism. Globalization arises then as a stage of reorganization of economic activities of the world under the principles of individual freedom, economic competition, and flexible organization.

The new liberal times have redefined the role of the state, establishing clear limits to government action, and introduced new forms of management and organization based on entrepreneurialism. Managers, consultants, and researchers have spoken increasingly about post-bureaucratic organization and the advantages to adopting flexible and flat structures to promote participatory working groups and the incorporation of dynamic networks of exchange and cooperation. These new organizational forms encourage high value added work, based on knowledge that drives the formation of a new economy of intangibles.

This transformation has been possible thanks to the dizzying development of new information technologies and to the integration of a complex global information network that facilitates transactions in real time and at a distance. As a result, bureaucracy has faced a process of decentralization and delocalization, giving way to more flexible virtual structures, articulated by computer networks and mobile devices for storing, transmitting, and communicating. Thus, the key question nowadays is whether these changes imply the removal of bureaucracy or its transformation into a "cybercracy" as an emerging organizational design that sustains the exercise of domination through the network.

See Also: Centralization; Management Science; Regulation; Standardization.

Bibliography. Stewart R. Clegg, David Courpasson, and Nelson Phillips, *Power and Organizations* (Sage, 2006); Paul Du Gay, ed., *The Values of Bureaucracy* (Oxford University Press, 2005); Marshall W. Meyer, *Change in Public Bureaucracies* (Cambridge University Press, 2008); Alexander Styhre, *The Innovative Bureaucracy: Bureaucracy in an Age of Fluidity: The Innovative Bureaucracy* (Routledge, 2007).

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Business Cycles

Economists and historians have described a number of different cycles in economic history, patterns that we can see repeated over and over again, from the three-to-five-year Kitchin inventory cycle to the millennia-long cycle of civilization described by futurist Alvin Toffler. These cycles describe fluctuations in various activities or trends; while popular books are often sold on the premise that they are predictable both in frequency and in effect, it's broadly true that the less specific the predictions of such a cycle, the more the data will bear it out.

When we talk about "the business cycle," for instance, or "a business cycle" as a unit of time in American history, we are generally speaking of the theory put forth by Clement Juglar, a 19th-century French economist who posited a 7–11 year business cycle tied to the credit cycle. The modern notion of the business cycle is not purely Juglar's—far from it—but builds on his suggestions and incorporates the work of Friedrich Hayek, Gustav Cassel, Arthur Spiethoff, and others. The idea of cyclical booms and busts, depressions and periods of prosperity, was especially compelling in the years following the worldwide Great Depression, to which many modern schools of economic thought can date their origins.

The easiest and most common statistic to track in discussing business cycles is real gross domestic product (GDP)—the total output produced by an economy. Since 1820, after the nation got on its feet following the expenses of the War of 1812, the United States has shown steady and significant growth in its real GDP, an average increase of 3.6 percent per year. That upward trend alone does not tell the story, however; it doesn't even accurately describe the plot arc. Within that period there have been many short-term fluctuations, contractions of the economy followed by increases.

Those fluctuations, experienced by every capitalist economy and apparently an unavoidable feature thereof, are our business cycles. The two phases of the business cycle are the expansion and the contraction—at any given time, the economy is doing one or the other, though with respect to business cycles we look not at day-to-day trends but longer-term developments. During the expansion, the real GDP increases until it reaches a peak, at which point it declines during the contraction. The contraction reaches a trough, at which point the economy again expands.

Since the Civil War, there have been 29 business cycles in the United States, of varying lengths. The shortest was 17 months (August 1918 to January 1920) with a 10-month expansion, and the longest was a bit over 10 years (July 1990 to March 2001), with an expansion of exactly a decade. The variability of the cycles' duration undermines the appeal of those popular futurism books that claim to be able to tell us what the economy will be like in 2020 or 2030, and at first glance may seem to leave us with nothing but "the economy will get worse, and then better, and then worse, and then better again." However, even that simple fact is interesting—while it may seem obvious that every contraction or expansion must stop eventually, the cyclical nature still sheds light on American economic history, and provides an opportunity to investigate the inciting causes of the phases' cycles.

Business cycles are characteristic of all capitalist economies, a fact that was highlighted after the Great Depression, when all the major capitalist economies of the world experienced contraction and all saw their real GDPs begin to rise again by the end of the decade. A casual read of a history text sometimes misses this fact, as well as the existence of the cycles themselves, because histories will generally use the language of the time—and the phrases that economists and the public have favored for expansions and especially contractions have shifted over time.

Contractions were originally called *panics*, as in the banking panics of the 19th century, but because that word implied a root cause in the hysterical actions (and overreactions) of the public, it was replaced by *crisis*, from which no such things can be inferred. Even *crisis*, though, implies a drastic situation instead of an ordinary part of the economic cycle—and the word sounds overblown for less severe contractions. The familiar *depression* took hold, eventually supplanted by the carefully neutral *recession*, which is the term most commonly used now—ever since the Great Depression, there has been a sense, especially among the public, politicians, and media, that the term *depression* should be reserved for contractionary phases that are long lasting with a deep impact on the American lifestyle. And there are, of course, always euphemistic phrases to be found, like *growth correction* (which even usually clear-headed economist John Kenneth Galbraith used) and *rolling readjustment*. However transparently those terms may be designed to ease the public mind, they are not actually wrong—they do emphasize the cyclical nature of contractions and expansions.

The terms for expansions do not vary nearly as much, because they are not as headline-grabbing, aren't talked about as much. Usually *boom* or *recovery* will suffice, depending on how rapid the expansion is, and how bad the trough of the preceding contraction was. Compatible with the euphemistic tendencies in referring to contractions, though, expansions are often treated as a success, something to be proud of—quite often, expansions are spoken of as something that was accomplished, while contractions were something that happened or were suffered through.

The Great Depression and Beyond

It is not always obvious how to determine the endpoints of a business cycle. The National Bureau of Economic Research defines a recession, for instance, as a period of significant decline in total output, income, employment, and trade, "usually lasting from six months to a year"—but even that definition leaves wiggle room. The most well-known business cycle in American history lasted from August 1929 to May 1937—the Great Depression, minus its last two years (when the economy was expanding, but was still far from recovery). The unemployment rate averaged 18.4 percent and rose as high as 25 percent, while real GDP fell 27 percent and took seven years to recover to its pre-Depression level. Many saw it as the death throes of capitalism, long awaited, long feared. In contrast, more than 50 years after the end of the Depression, the United States experienced its longest expansion, from March 1991 to March 2001, a period of post–Cold War, pre-9/11 stability that was also the nation's longest business cycle.

Since the Depression—when, whether coincidentally or not, presidential administrations began consulting more closely with economists, and the field of economics itself saw a boom—business cycles have been less severe. In the 10 cycles since the end of World War II, contractions have lasted an average of 10 months, while expansions have averaged 57 months—a figure helped, no doubt, by the steady growth of the Clinton years and the general prosperity of the early Cold War. Even in the most severe recession of that period, July 1981 to November 1982, output fell barely 3 percent (versus 27 percent in the Great Depression) and unemployment reached 11 percent (25 percent in the Great Depression). Before World War II, expansions were about half as long, contractions about twice as long.

Inflation has also been a constant since the Depression. In all but three of the years since—and every year since 1954—prices have increased, regardless of the phase of the business cycle. During expansions, prices rise faster—labor costs increase during expansions, which leads to accelerated price hikes; shortly after the expansion peaks, labor prices tend to fall, putting less pressure on rising prices. The rate of inflation, then, tends to follow a cycle that closely shadows the business cycle, while inflation itself more or less persists as a constant.

During the Great Depression, which is part of the best-known business cycle in American history, unemployment in the United States averaged 18.4 percent. The photo shows unemployed men in a bread line under the Brooklyn Bridge in the early 1930s.

Much of the work of economists since the Depression has been the study of recessions and how they might be prevented or minimized. John Maynard Keynes, the foremost economist in the Depression's aftermath, blamed declines in aggregate demand—declines in the number of goods and services sought—for recessions, because such declines lead to businesses reducing production and possibly jobs. His recommendation, issued while the Depression still raged, was for the government to intervene to increase demand, either by reducing taxes (leaving more money in consumers' pockets) or increasing government spending to "pump money into the economy," a prescription that has long since become familiar. This sort of manipulation is called countercyclical fiscal policy, because it is designed not only with business cycles in mind but with the explicit aim of changing them. (For his part, Juglar blamed overinvestment, overextension, and rampant speculation for recessions, essentially arguing that they were as bad as they were because the expansions that preceded them were "false" expansions, booms inflated by irresponsible and unsustainable financial behavior. Juglar was writing well before the Great Depression, but nothing about it contradicts him in the broad points.)

World War II seems to have borne out Keynes's theories. The prolonged, high-tech, expensive war, fought with massive amounts of manpower and technology, with extraordinary and unheard-of efforts put into research for the war effort, rejuvenated the American economy—and accustomed many women to the workplace, which helped in the coming years by (in essence) providing more available workers. The existence of the war makes it difficult to say what would have happened to the economy without that massive spending and the historically low levels of unemployment caused by the one-two punch of military enlistment and increased domestic labor demand. Some economists believe the Depression would have ended around the same time without those effects. It is a bit like dropping a brick on a spider and then debating whether it would be just as dead had you only dropped a shoe; it's not that the question is without merit, it's that circumstance has placed a definitive answer out of reach.

See Also: Attitudes and Attitude Change; Buying Motives/Behavior; Consumer Behavior; Contagion; Gross National Product; Mortgage Credit Crisis of 2008.

Bibliography. Samuel Bowles and Richard Edwards, *Understanding Capitalism* (Harper & Row, 1985); Bureau of Economic Analysis, *Survey of Current Business* (v.82/8); John Kenneth Galbraith, *Money: Whence It Came, Where It Went* (Houghton Mifflin, 1975); Angus Maddison, *Monitoring the World Economy 1820–1992* (Development Centre of the Organisation for Economic Co-operation and Development, 1995); U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970* (1975).

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Business-to-Business

Business-to-Business (B2B) exchanges take place between two or more companies. The overall size of sales revenues attributed to business-to-business transactions is much larger than that of the consumer market. Sectors that are traditionally characterized as business-to-business are institutional, such as healthcare and education, the government, and various commercial enterprises. The products represented are typically intended for use as a manufacturing intermediate, support service, or in the day-to-day business operation.

A powerful segment of commercial enterprises is represented by original equipment manufacturers (OEMs) such as General Motors, John Deere, and Hewlett Packard. Original equipment manufacturers typically make large purchases and may have developed detailed product and vendor specifications. A second commercial enterprise consists of users, who typically purchase products for use in manufacturing other products for sale. They purchase products that support the operations necessary to manufacture their products. John Deere becomes a user when it purchases lubricants for use in its production facilities. It is also a user when it purchases copy machines for use in its corporate offices. Industrial dealers or distributors constitute a third category of commercial enterprises that operate in the business-to-business environment. John Deere may use dealers and distributors who are responsible for handling materials sold directly to the end-user. It is also a consumer supplier when it sells directly online to residential customers.

International business-to-business transactions are defined by the nature of interaction that takes place, the participants involved, and the intended use of the product that is the focus of the trade, while being carried out across country boundaries. Companies may sell to both business-to-business and consumer markets. For example, BP sells products directly to the consumer by selling fuel and motor oil through its retail gasoline outlets. It also sells fuel and lubricants for use in industrial applications such as aviation, mining, construction, and marine operations. GE sells appliances and consumer electronics. It also sells centrifugal compressors to the gas and oil industry and locomotives to the rail industry. John Deere sells residential mowers, along with commercial mowers for lawn services, mowers for golf courses, and agricultural, forestry and construction equipment.

The business-to-consumer market and business-to-business market require very different business and marketing strategies, especially pertaining to communication and sales activities. Business-to-business transactions may be very complex, depending on the size of the business, involving groups from various functional areas, who are very knowledgeable concerning required product performance. Due to the sophistication of business-to-business purchasers, it is necessary for the sales team supporting the customer to also be knowledgeable, not only with the direct customer, but also with the final consumer industry being served.

Business-to-business interactions typically are more complex than business-to-consumer because the expenditures represent large financial outlays and mistakes may result in costly delays or product failures that negatively impact the final end-user performance. For example, the purchase of an automobile from a retail dealer is generally a business-to-consumer transaction. The purchase of the constant velocity joints, used in front-wheel drive vehicles, by the manufacturer for use in the assembly of the automobile is a business-to-business transaction.

Before the automobile manufacturer makes the purchase, a purchasing manager or group of managers may initiate vendor reviews to qualify preferred suppliers, develop product quality and part specification guidelines, and make arrangements for the engineering lab to test parts from various suppliers; a production manager may be involved in the decision as it relates to delivery times and packaging requirements. Environmental health and safety personnel will be notified to ensure the safety and proper environmental protocols are followed. Detailed shipping and pricing requirements are developed. There may be a bidding process, in which a number of qualified suppliers provide quotes for pricing and service. Business-to-business transactions may occur across many company borders. The rubber for the constant velocity joints may be made in China, the metal made in Japan, the lubricants made in the European Union, for use in a car assembled in Mexico and then shipped to the United States for final distribution.

The consumer purchasing the car may be focused on price, quality, reliability, fuel economy, image, and resale value. The promotional campaign to the consumer may rely on emotional appeals. In the business-to-business transaction, the manufacturer is concerned about conformance to specifications, vendor reliability, shipping options, delivery times, meeting safety requirements, environmental regulations, not just on the finished car, but on every component that goes into manufacturing each part of the product from a variety of suppliers representing a large number of cross-border transactions. The purchaser evaluating a vendor for a multimillion-dollar contract must be more rational and knowledgeable about the product that is being considered. The value of the product to the buyer is an essential part of determining the perceived risk associated with the purchase. The vendor's promotional activities generally revolve around product quality, meeting specification requirements, and support with supply chain issues.

Drivers of Business-to-Business Markets

As they gain more power in the marketplace, consumers are demanding value and quality at an appropriate price. This is a common trend throughout the economy and the business-to-business environment is not immune to this consumer mindset. The key phrase is overall cost. There are many hidden costs associated with using a product. The first is obviously the amount paid for the product, but this is only one aspect. As a product is developed for market introduction, business-to-business suppliers are aware of not only the amount paid for the product, but also the costs to use, store and dispose, the time consumed in the purchasing transaction and usage pattern, and the amount of inconvenience that the customer tolerates throughout the entire process.

Current business market drivers include requirements for extended life, economic benefits, environmental and societal issues, and international product stewardship. In the future, globalization, industry consolidation, and customer-supplier relationships will also impact the manner in which new products are developed and introduced to the business market.

Advancements in technology and the reduction in trade barriers are contributing to the integration and interdependency of businesses, increasing the competitive intensity among businesses that operate in the current economy, therefore elevating the importance of understanding business-to-business transactions as companies build strategy to meet the long-term needs of their global customers. International expansion offers a potential way for companies to increase growth, especially when facing a saturated domestic environment.

The major incentive that motivates businesses to expand into international markets is the saturation of their domestic market; the need to reduce manufacturing costs through either sourcing in cheaper production facilities overseas or increasing volume in the domestic manufacturing facility through exporting is also driving international expansion. External incentives are market driven and are a response to the need to grow beyond the domestic market. Internal incentives focus more on creating a competitive advantage. As the global marketplace increases in size and competitiveness, the initial route to internationalization may be a necessity in order to supply components to a customer that has engaged in foreign direct investment.

The resource-based view of internationalization emphasizes the importance of the accumulation of resources, focusing on the way in which firms can combine resources and create a sustainable competitive advantage. The company begins to feel competitive pressure due to saturation and maturity within its domestic market and starts to consider production offshore to allow cost minimization in many internal areas of operation. Emerging economies, such as those represented by India, China, Brazil, central and eastern Europe as well as other countries in southeast Asia, provide opportunities to improve manufacturing efficiencies due to reduced labor costs and increased resource availability. Cost advantages are achieved through global integration of research and development activities, procurement coordination, and production cost reductions.

Fast-growing emerging markets are also very important to companies operating in the business-to-business arena because, as they develop, there are many infrastructure development needs. Firms operating in the construction, heavy equipment industry, manufacturing consultants, and those in environmental services and technology support represent important business-to-business participants. Companies will also follow their key customers as the larger firms move into emerging markets. For example, as large automobile manufacturers move into China, their component part suppliers may follow in order to meet the production needs of their customer, while maintaining the customer-supplier relationship, creating barriers to competitive entry.

Information technology makes a large contribution to the global expansion of business-to-business activities. The ease of electronic exchange of information across country borders is responsible for improved efficiencies in the coordination of production operations, product development, and purchasing activities. The use of the internet allows suppliers and purchasers to quickly exchange information concerning product performance, industry requirements, and unmet needs. Product development and innovation is improved and the time to market is shortened.

Promotional Activities

The majority of the budget for business-to-business marketing is typically spent on personal selling activities. Face-to-face contact is necessary in order to establish the trust and familiarity necessary to build customer relationships. The majority of promotional activity expenditures for business-to-business promotions are on trade show participation requirements, followed by internet and electronic media costs. There are also costs associated with providing dealer/distributorship support materials. Business consumers are characterized as being educated about their product purchases and therefore seek specification-based information. There is a need for rational justifications and therefore it seems more likely that attributes relating to service, quality, price, reliability, and performance would be stressed in the advertising for a product or company.

However, advertising in specialized trade journals is an important tactic that is playing a greater role in the overall business-to-business marketing communication plan. Business-to-business advertising tends to feature people less often, be less emotional, be facts- and features-focused, and have more informational content than typical consumer ads. The industrial ad has been described as being more rational than the consumer ad. Ads for industrial products also contained more copy discussing product benefits and performance. Informational appeals found in business-to-business advertising center around the needs for removing problems, avoiding problems, reducing incomplete satisfaction, or alleviating normal depletion. Informational advertising seeks to change attitudes or beliefs based on the rational presentation of information concerning the product.

R. Lohtia, W. J. Johnston, and L. Aab have identified four dimensions of a successful business-to-business ad. The dimensions identified were characteristics of the ad, the reader's feelings about their relationship with the ad, the selling proposition, and the company's visibility. The importance of explaining the product and the benefits of using the product in the industrial ad are stressed, as well as providing information concerning product performance and quality. For example, if the product is one that clearly has technical performance advantages, such as a computer, and the audience is an engineering community, then the advertising should encourage information and arguments that make the consumer actively think about that product over the alternative.

On the other hand, if marketing the computer to an audience that does not understand the technical differences, then the advertisement should focus on peripheral cues, such as the spokesperson and the image of computer ownership. For example, Nike uses Tiger Woods as a spokesperson for its golf balls so that the consumer buys Nike golf balls because they want to play golf like Tiger. The golf balls may be made of the same materials, same compression, and same hardness as other balls, but Nike wants the consumer to buy without too much thinking. The golf ball manufacturer is concerned about whether the raw materials it is purchasing will provide the performance necessary to meet the needs of Nike. Given the reported sophistication of industrial buyers and the high financial and operational risk associated with purchasing decisions, one would expect an advertising strategy for industrial products to consist of producing high involvement, informational messages.

The Buying Process

Overall, the buying process in the industrial setting is more complex and generally more conservative, with a greater reliance on group decision making. The initial step in the buying process consists of need recognition, usually as a result of identification of a problem. For example, specification changes may dictate a change in a raw material that requires investigation into a new supplier.

A decision-making group may form, consisting of production personnel, engineering and product development managers, purchasing representatives, and environmental health and safety members. This group will develop detailed specifications concerning product performance and vendor support requirements. Identification of potential suppliers will be made, and proposals and samples from the qualified vendors will be evaluated. The supplier of choice is then contacted and the supply details relating to delivery, storage, packaging, and pricing are negotiated. A review of supplier and product performance is continually made. The formation of the decision-making unit contributes to the complexity of the business-to-business exchange. Each member brings a different perspective to the purchase decision. The complexity of the decision requires close monitoring by potential suppliers and a focus on personal selling.

Relationship Management

The evolution of competition in a global business arena has led to an increase in the importance placed on interorganizational relationships involving customers, suppliers, competitors, and government agencies. An important factor in establishing the foundation for building customer-supplier relationships is an analysis of the value chain associated with the product. The value chain is defined as the collection of all activities involved in designing, manufacturing, marketing, delivering, and supporting a product.

Value chain analysis considers not only internal linkages, such as the coordination between research and development and marketing, but also external activities, such as relationships with suppliers, agents, or customers across and between countries. Each step in the value chain offers an opportunity for analysis and modification, allowing the firm to increase utility to customers. An extended breakdown of the primary interactions and processes involved at each link of the chain, assessing the responsibilities among all the entities involved is necessary to reach the root activities where modifications can be made to improve the entire process. A thorough analysis of the value chain focuses on answering the question of how customer value will be created. Participants up and down the supply chain are considered important members of the product supply team. Integration is necessary to improving costing and innovative efforts.

Traditionally, customer relationship management developed in the business-to-consumer transactional environment. This may due to the nature of the purchase transaction. As previously noted, the business-to-business purchase appears, on the surface, to be straightforward and technically oriented. Typically, the transaction is handled through the use of personal selling. A salesperson, or a team consisting of a salesperson and a technical support representative, calls on the customer directly. The buyer and seller are very knowledgeable of product requirements. If the product meets the pricing and performance requirements and the vendor is an approved supplier, the decision would appear to be simple. Even though the business-to-business market represents a smaller customer base, the customer purchases are much larger in scale, giving the business-to-business customer more power in the relationship.

The transaction may seem straightforward, void of any personal relationships, but the truth is that people, personalities, cultural aspects, and personal agendas are very important aspects that must be taken into account. The purchaser may be buying for an organization and therefore be more objective in making their decision, but subjective issues will also play a role.

Because of the increase in global competitive intensity, suppliers must find new ways to differentiate and encourage customer loyalty. There is currently a shift in business focus toward recognizing the competitive advantage of strong customer-supplier relationships. Building close customer-vendor relationships is an important strategy to employ while building a competitive advantage, especially when the customer base is small in number but large and powerful in terms of financial importance.

Advancements in information technology have led to the introduction of cost savings processes such as vendor-managed inventory (VMI) and online order processing, all under the umbrella of customer relationship management. The maintenance of two-way communication between the customer and supplier is necessary to ensure the goods and services offered fit the needs of the consumer. Moving the focus from providing products to providing solutions to customers' problems, in some cases, provides value to the customer that may be translated into better profitably, or, in the least, an advantage in the vendor decision process. Working together provides an advantage to the purchaser and the vendor as unmet needs may be discovered earlier and better solutions developed. This improves efficiencies, resulting in lower costs, for both sides of the business equation.

Ethics

With the close working relationship that may develop between the buyer and supplier in business-to-business transactions, breaches in ethical conduct are a serious concern. Ethics are problematic in that there is a general lack of agreement concerning the definition of ethical behavior versus unethical behavior across country borders, especially when there are no clear-cut legal ramifications. In order to create a successful relationship between supplier and purchaser, there has to be an element of trust and freedom to share information.

Shared information concerning product development, pricing, and future plans represent areas in which ethical dilemmas can form. In some cases, proprietary information may be transferred from company to company. It is important to have controls in place to ensure confidential information that is shared does not fall into competitors' hands. In international relationships, this problem may become more pronounced as there may cultural differences with respect to confidentiality. There are also differences in business practices allowed between countries.

Ethics is also an issue concerning product supply and environmental responsibility. Questions arise concerning the quality of products that are sent to unsophisticated markets. The temptation arises to send products of lesser quality to areas where they will not be detected. This is a problem in dealing with underdeveloped countries. Concerns also develop when two countries have different requirements related to the safety and environmental impact of products that enter or leave their borders.

Many companies have developed an internal code of ethics that they require their employees and vendors to follow. For example, international trade within the chemical industry exceeds $500 billion annually, second only to automobiles. The chemical industry is one of the largest and most technically advanced manufacturing sectors engaged in world trade. As such, the industry exerts a positive influence on the health of the world economy only as it maintains its trade performance and strong global competitiveness. The increasing speed of industrialization, urban development, and international growth has placed heavy demands upon antiquated and informal systems of managing environmental and ethical issues. Chemical producers have focused on establishing programs aimed at creating the perception that they are establishing and complying with domestic voluntary environment risk management programs.

Dupont voluntarily spends millions of dollars annually above and beyond the legal requirements on environmental projects. It has a published code of ethics. The company has established a multilingual ethics and compliance hotline, with a specialist, not employed by Dupont, available to discuss with the caller any lack of compliance with the ethical guideline issue around the clock, every day.

Strategic Perspectives

As emerging markets grow and competitive intensity increases, players in business-to-business markets will need to adapt. Two areas that are evolving are building brands and utilizing e-commerce to facilitate global reach. Branding can be defined as the strategy utilized to create a position in the customer's mind. The position provides information to consumers concerning the attributes the product or company represents. The brand relates not only to the naming, symbols, slogans, or other physical aspects associated with the company or product, but also includes psychological factors, such as trust within the relationship and reputation within the industry. The brand represents value to the customer and can be a point of differentiation in a complex, competitive, international business environment.

As discussed earlier, advancements in information technology and e-commerce represent an opportunity for improving supply chain communication and coordination. It allows products and services to be marketed across borders, creating a business environment seemingly without boundaries. It provides another support tool to build customer relationships as teams can conference across borders and exchange information without time constraints in secure sites. E-commerce also acts as an extension to the business-to-business distribution channel. Integration of ordering and supply logistics allows both the supplier and customer to reduce transaction costs. Improvements in international security and the expansion of technology infrastructure will increase the importance of e-commerce in global business-to-business transactions.

The success of any strategy relies on the premise that only a healthy competitive industry can continue to develop and improve its performance and that strategies will be developed based on the needs of the corporation and the geographic location in which it is operating. The customer must find value in purchasing from companies possessing strong integrated customer management programs.

See Also: Branding; Competition; Corporate Social Responsibility; Customer Relationship Management; Globalization; Marketing; Wholesale Sector.

Bibliography. J. C. Anderson and J. A. Narus, *Business Market Management: Understanding, Creating, and Delivering Value*, 2nd ed. (Prentice Hall, 2004); M. D. Hult and T. W. Speh, *Business Marketing Management: B2B*, 9th ed. (Thompson, 2007); J. D. Lichtenthal, "Business-to-Business Marketing in the 21st Century," *Journal of Business-to-Business Marketing* (v.5/1,2, 1998); R. Lohtia, W. J. Johnston, and L. Aab, "Business-to-Business Advertising: What Are the Dimensions of an Effective Print Ad?" *Industrial Marketing Management* (v.24, 1995).

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Buying Motives/Behavior

Buying behavior, a component of consumer behavior, involves how people, in their roles as individual, household, and organizational consumers, seek satisfaction of their needs and wants through product acquisition and use. The focus is also often on the motivating factors that drive consumers to buy a certain brand of product. It can thus be said that buying behavior concerns *how* and *why* consumers acquire products.

Marketers must understand the buying behavior of consumers if they wish to maximize the probability of long-term success. Unfortunately for marketers, understanding buying behavior is much more an art than an exact science. The resultant challenges for marketers can be great in culturally diverse nations. These challenges are compounded when doing business in multiple countries, each with its own norms of behavior, preferences, and way of doing things—not to mention its own unique set of often complex motivating factors—that drive buying behavior.

In recent years, marketing scholars and managers have realized that long-term success is predicated not on making one-time sales to as many customers as possible but rather on the building and maintenance of trust-based relationships with a select group of targeted customers. It is also understood that establishing and maintaining these relationships involves a complex chain of events. This chain of events begins with the marketer consistently meeting customer needs, wants, and expectations. This, in turn, leads to high levels of customer satisfaction.

High levels of satisfaction facilitate the development of customer loyalty—wherein consumers habitually acquire your brand as a result of the experience-based belief that your brand is superior to competitive offerings. Loyalty implies that customers trust you to consistently meet their needs, wants, and expectations—to the point where they do not even consider buying competitive brands. High levels of customer loyalty allow the marketer to build and maintain profitable relationships with customers.

However, building customer relationships is not as easy as suggested above. In order to successfully meet customer needs, wants, and expectations—the first step in the relationship building process—marketers must first understand the multitude of often complex, ambiguous, and even subconscious motivating factors that drive the buying behavior of their targeted customers. When doing business internationally, understanding these motivating factors is predicated first and foremost on understanding the cultural background of targeted customers. This requires that marketers determine which aspects of a given culture most significantly influence buying behavior. They then need to understand how these cultural factors are likely to impact buying behavior.

Although culture is impossible to adequately define in several sentences—even pages—it can be viewed as the collection of shared meanings, rituals, norms of behavior, traditions, and preferences of a given society or subset of its people. Culture surrounds us and impacts all that we do. This includes what we do as consumers—the food we eat, the clothes we wear, the places we shop, and why we prefer one brand of a given product type over others. The chances of marketing success are thus much higher when products are consistent with key cultural aspects of targeted consumers. When this consistency exists, consumers are motivated to at least consider buying your product. When it is not present, consumers may be motivated to avoid your product.

Cross-Cultural Considerations

In the 1980s, it was hypothesized that the forthcoming global diffusion of products and consumption patterns characterizing Western "consumer culture" would necessarily lead to a homogenization of culture around the globe. There was, at that time, considerable debate over whether or not product adaptation would be necessary—based largely on the belief that marketers would be able to create standardized "global products" meeting the needs, wants, and expectations of all consumers worldwide. The homogeneous "global consumer culture" has not yet materialized and the "adaptation vs. standardization" debate has long since ended. Today, business scholars and managers understand that there are still cultural differences from country to country that significantly impact buying behavior. They also realize that this cultural heterogeneity necessitates some level of strategic adaptation.

Consider, in this regard, the United States and Mexico. The two nations are geographically proximate to one another and are also both intimately involved in the global economic system (as close partners by virtue of the North American Free Trade Agreement). Many U.S. marketers do business in Mexico and many Mexican businesses have large operations in the United States. Joint ventures between U.S. and Mexican firms abound. In addition, there has been cultural borrowing between the two countries—witness the popularity of salsa, tortillas, and other food products at least inspired by traditional Mexican food in the United States as well as the conspicuous presence of U.S. movies and fast food restaurants and other retailers in Mexico. In the U.S.-Mexico border region, cultural aspects of the two countries have essentially melded into a culture unique to the area.

However, lurking beneath the surface of these easily observable similarities are cultural differences that significantly impact buying behavior in the two nations. Take, for example, differences in values and time orientation. The United States is a highly materialistic and highly individualistic nation running on linear separable time. This means that U.S. citizens typically: (1) believe that it is appropriate—if not important in defining who and what one is—to accumulate possessions (particularly status goods), (2) define themselves and judge others on the basis of individual achievement, and (3) feel that time is an economic resource that is to be used efficiently and that, therefore, planning for future time expenditures is critical (with precise amounts of time set aside for certain activities, which are ordered in sequential fashion). U.S. consumers are, as a result, often highly motivated to acquire goods that allow them to display status to others and be more efficient and productive with their time.

Mexico is not a highly materialistic culture. It is also very collectivistic in nature. Further, Mexico, like many other Hispanic cultures, runs predominantly on what is known as circular or cyclic time. As a result, compared to their U.S. counterparts, Mexican consumers: (1) do not place as much importance on the possession, accumulation, and display of material goods, (2) are more likely to define themselves and judge others on the basis of how well one plays their role within a group (e.g., the family, the church, or a work group), and (3) see little reason to "hurry all the time" and be as efficient as possible with time. As a result, Mexican consumers are not nearly as motivated as U.S. consumers are to acquire, possess, and display status goods. Further, "saving time" is not the driving force behind product acquisition that it is in the United States.

Consider, within the context of U.S.-Mexico cultural heterogeneity, cellular telephone buying behavior. In the United States, it is estimated that around 85 percent of all people have a cell phone. This should not be surprising—cell phones hold vast potential to use time more efficiently and can be displayed as a status symbol. As one might expect, cell phone penetration rates in Mexico are considerably lower—approximately 66 percent. It can thus be said that cultural factors help drive U.S. consumers, more than their Mexican counterparts, to believe that they "need" a cell phone.

However, it is perhaps more important to understand that cell phones are bought for varying culture-based reasons in the United States and Mexico. As previously stated, primary motivating factors for cell phone acquisition in the United States include desires to "save time" and display status. In Mexico, key reasons for product acquisition include the fact that a relatively high percentage of Mexicans live in large, crowded metropolitan areas and, more importantly, the existence of the often large, extended/multi-generational family as the central organizing unit of highly collectivistic Mexican society. Cell phones are purchased in Mexico not so much to "save time" or display status as they are to organize family-centered activities among family members spread out across large urban landscapes. Smart international marketers understand that cross-cultural differences that impact buying behavior such as these need to be incorporated into marketing strategy.

See Also: Branding; Brand Loyalty; Consumer Behavior; Consumer Needs and Wants; Consumption; Cultural Norms and Scripts; Culture-Specific Values; International Marketing Research; Marketing.

Bibliography. C. Samuel Craig and Susan Douglas, "Beyond National Culture: Implications of Cultural Dynamics for Consumer Research," *International Marketing Review* (v.23/3, 2006); David Luna and Susan Forquer Gupta, "An Integrative Framework for Cross-Cultural Consumer Behavior," *International Marketing Review* (v.18/1, 2001); Michael Solomon, *Consumer Behavior: Buying, Having, and Being*, 8th ed. (Pearson/Prentice Hall, 2009).

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Buyout

A buyout is a purchase of an entire company or of a controlling interest in a company by another company. The purchase is usually viewed as an investment. A buyout can take a number of forms. Small business buyouts are common in capitalist countries. Most businesses are small entrepreneurial operations. They may be as simple as a "mom and pop" store, a franchise, a motel, or another small business that has been able to produce enough business to gain the owners enough net profit for living and for reinvesting. Sale of their business may be for any number of reasons: health, age, a desire to return to their home country, or to change careers.

The buyouts that usually attract the most public attention are corporate buyouts. These types of purchases have been made since the beginning of corporate capitalism. In some cases, the purchases are of bankrupt companies. In others, the buyouts are of companies in financial distress because of a crisis in its product, financing, or labor relations. Or it may be that the company is an agribusiness that has been broken by a bad harvest.

Corporate buyouts can happen when companies see an opportunity to purchase a company with something of significant value to the buying corporation. The buyout may be to gain market share, or to gain access to technology developed or held by the corporation being sought, or to eliminate technology, or to obtain assets held by the purchased company. In the latter case, a company that owns oil fields may be an attractive buyout target because the buyer can add the assets to its balance sheet. The oil can be pumped and the reduction in the assets value charged against taxes.

Buyouts have been conducted by corporate raiders who seek to capture a company in a hostile takeover and then to use the assets for other purposes. In some cases, buyouts may be made in order to break up a company and sell its units because the parts of the company are worth more than the company as a whole. Leveraged buyouts have been common in recent decades. In some cases, the stock of the company acquired in the acquisition is turned into junk by the wholesale mortgaging of the company, making its own bonds into junk bonds. In other cases, loans that are treated as assets are used to create several layers of borrowing to make the purchase of a company valued in the billions of dollars.

See Also: Acquisitions, Takeovers, and Mergers; Bankruptcy; Corporate Change.

Bibliography. Yakov Amihud, ed., *Leveraged Management Buyouts: Causes and Consequences* (Beard Books, 2002); Stuart C. Gilson, *Creating Value through Corporate Restructuring: Case Studies in Bankruptcies, Buyouts, and Breakups* (John Wiley & Sons, 2001); Rick Rickertsen and Robert E. Gunther, *Buyout: The Insider's Guide to Buying Your Own Company* (AMACOM, 2001); Roy C. Smith, *Money Wars: The Rise and Fall of the Great Buyout Boom of the 1980s* (Beard Books, 2000).

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CAC 40 Index (Paris)

The CAC 40 is the foremost of several related French benchmark stock indices tracking the performance of stocks on Euronext Paris (formerly the Paris Bourse), and is one of the most-watched Euronext stock indices.

The index takes its name from the Cotation Assistée en Continu (CAC), the electronic trading system implemented on the Paris Bourse in the late 1980s and used for all listed stocks by 1989. CAC was based on the CATS (Computer Automated Trading System) developed for the Toronto Stock Exchange in the 1970s, and used a double auction algorithm to set prices and match orders, helping to automate and centralize aspects of the exchange over the decades that the open outcry system has gradually fallen out of favor. CAC has itself since been replaced by other systems, as computing and telecommunications have become more sophisticated.

The CAC 40 was established at the end of 1987, with an initial base value of 1000 points, equivalent to a market cap of 370,437,433,957.7 francs. As of December 2003, the basis of the index switched from total market cap to free float market cap, the basis used by most other major indices. At each quarterly review of the index (the third Friday of March, June, September, and December), the Conseil Scientifique, an independent committee, evaluates the 100 stocks on Euronext Paris with the highest free float market capitalization over the previous 12 months. From that 100, 40 stocks are chosen—not the top 40, but the 40 that, combined, form the most useful benchmark and are suitable as underlying assets for derivatives. Market dominance is often a factor, such that the leading stock in a given industry may be chosen rather than the higher market cap second-place stock in another industry.

The composition of the CAC 40 and related indices listed in this entry is current as of the start of 2009. The stocks of the CAC 40 are:

- Accor, Europe's foremost hotel group.
- Air France, an airline company with a fleet of 622 aircraft.
- Air Liquide, a producer of industrial and medical gas.
- Alcatel-Lucent, a technology, communications, and services company.
- Alstom, an infrastructure manufacturer for the energy and transportation industries.
- ArcelorMittal, the world's leading steelmaker.
- Axa, Europe's largest insurance group.
- BNP Paribas, France's largest banking group.

- Bouygues, an industrial group with media and telecommunications concerns as well as its construction business.
- Cap Gemini, an IT services company.
- Carrefour, a distribution group running thousands of supermarkets and discount stores.
- Crédit Agricole, a European banking group.
- Danone, a food processing group, most of the products of which are dairy or beverages.
- Dexia, a European bank and public finance company.
- EADS, the leading European company (and second-largest in the world) in the aeronautics and aerospace industry.
- EDF, France's leading electric company.
- Essilor, a manufacturer of corrective lenses and optical instruments.
- France Télécom, the leading French telecommunications company.
- GDF Suez, the leading natural gas supplier in Europe.
- Lafarge, a producer of building materials.
- Lagardère, a large media group.
- L'Oreal, the worldwide leader in cosmetics.
- LVMH, owner of luxury brands such as Louis Vuitton, Givenchy, Dom Perignon, Glenmorangie, and Christian Dior.
- Michelin, a tire manufacturer.
- Pernod Ricard, the second largest producer in the world of wines and spirits, including Glenlivet, Seagram's, and Malibu rum.
- Peugeot, the second-largest automobile manufacturer in Europe.
- PPR, a luxury products group that owns brands such as Gucci and Yves Saint Laurent.
- Renault, France's second-largest automobile manufacturer.
- Saint Gobain, a manufacturer of construction materials.
- Sanofi-Aventis, a leading pharmaceutical group.
- Schneider Electric, a manufacturer of electrical distribution equipment.
- Société Générale, one of the "old banks" of France, and one of its largest retail banks.
- STMicroelectronics, a semiconductor maker.
- Suez Environnement, a provider of environmental services like waste treatment and water distribution.
- Total, an oil and gas group.
- Unibail-Rodamco, a commercial real estate group.
- Vallourec, a steel tube manufacturer.
- Veolia, an environmental management services company.
- Vinci, a construction company.
- Vivendi, a media and telecommunications group.

Launched at the end of 2002, the CAC Next 20 is composed of the 20 stocks ranked highest in market capitalization that are not listed in the CAC 40. The stocks of the CAC Next 20 are: ADP, Atos, Origin, Casino Guichard, CGG Veritas, CNP Assurances, Dassault Systemes, Eiffage, Eramet, Hermes, Klepierre, Nataxis, Nexans, NYSE Euronext, Publicis, Safran, SES, Sodexo, Technip, TF1, Thales.

The CAC Mid 100, created in 2005, lists the next 100 largest stocks, after the 40 and 20. The stocks of the CAC Mid 100 are: Alpes, Alten, Altran Technologies, ANF, April Group, Areva CI, Arkema, Bains Mer Monaco, Beneteau, Bic, Biomerieux, Boiron, Bollore, Bonduelle, Bongrain, Bourbon, Boursorama, Bureau Veritas, Camaieu, Canal +, Carbone Lorraine, Cegedim, Ciments Francais, Club Mediterranee, Delachaux, Derichebourg, EDF Energies Nouvelles, Esso, Euler Hermes, Eurazeo, Eurofins Scientific, Eutelsat Communications, Faiveley, Faurecia, Fimalac, Financiere Odet, Foncière des Régions, Foncière des Murs, Gecina, Gemalto, Générale de Santé, Groupe Eurotunnel, Groupe Steria, Guerbet, Guyenne Gascogne, Havas, Icade, Iliad, Imerys, Ingenico, Ipsen, Ipsos, JC Decaux SA, Kaufman et Broad, Korian, Laurent-Perrier, LDC, Legrand, Lisi, Manitou BF, Mauriel et Prom, Mercialys, Metropole TV, Neopost, Nexity, Nicox, Norbert Dentressangle, NRJ Group, Orpea, Pagesjaunes, Pierre Vacances, Plastic Omnium, Rallye, Rémy Cointreau, Rexel, Rhodia, Rubis, S.E.B., Saft, Scor SE, Séché Environnement, Séchilienne Sidec, Sequana, Silic, Sopra Group, Sperian Protection, Stallergenes, Stef TFE, Teleperformance, Theolia, Thomson, Ubisoft, L'union Financière de France Banque, Valeo, Vetoquinol, Vicat, Vilmorin & Cie, Virbac, Wendel, Zodiac.

The CAC Small 90 lists the next 90 stocks after the 40, 200, and 100. The stocks of the CAC Small 90 are: ABC Arbitrage, Affine, Akka Technologies, Alès Groupe, Assystem, Audika, Aurea, Avenir Telecom, Aviation Latecoere, Bastide Le Confort, Belvedere, Boizel Chanoine, Bull Regpt, Catering International Sces, Cegereal, Cegid Group, Chargeurs, Cnim, CS, Devoteam, Entrepose Contracting, Etam Developpement, Euro Disney, Europacorp, Exel Industries A, Fleury Michon, Foncier, Gameloft, Gascogne, Gaumont, GFI Informatique, Gifi, GL Events, Groupe Crit, Groupe Flo, Groupe Open, Groupe Partouche, Haulotte Group, Hi-Media, High Co, Hiolle Industries, IMS, Infogrames, Inter Parfums, Internationale de Plantations d'Heveas, Lacie S.A., Le Noble Age, Lectra, Linedata Services, Locindus, LVL Medical Groupe, Maisons France, Manutan International, Meetic, Metabolic Explorer, Metrologic Group, Montupet SA, Mr Bricolage, NextRadioTV, Parrot, Pharmagest International, PSB Industries, Radiall, Recylex S.A., Robertet, Rodriguez Group, Samse, Sartorius Stedim Biotech, Seloger.com, SII, SMTPC, Soitec, Spir Communication, Store Electronics, Sucriere de Pithiviers-Le-Vieil, Sword Group, Synergie, Tessi, Thermador Groupe, Tonnellerie Francois Freres, Touax, Toupargel Groupe, Transgene, Trigano, Viel et Compagne, VM Materiaux, Vranken-Pommery, Wavecom.

There are two additional relevant indices. The SBF 120 (Societe des Bourses Francaises) tracks the CAC 40 and 80 additional stocks from the CAC Next 20 and CAC Mid 100. The SBF 250 tracks the CAC 40, CAC Next 20, CAC Mid 100, and CAC Small 90.

See Also: BNP Paribas; Bouygues; Company Profiles: Western Europe; EADS; France; France Telecom; Peugeot; Stock Exchanges.

Bibliography. Benoit Mandelbrot and Richard L. Hudson, *The Misbehavior of Markets* (Basic Books, 2006); Robert B. Reich, *Supercapitalism: The Transformation of Business, Democracy, and Everyday Life* (Vintage Books, 2008).

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Call Center

Call centers are used by all types of business entities ranging from small telemarketers to large multinational corporations (MNCs) in order to promote, sell, or service their product offerings. The advent of globalization and the intensification of competition worldwide have prompted the necessity to deliver services and respond to inquiries from customers, suppliers, shareholders, and other stakeholders effectively and quickly. Call centers cater to such needs and help firms to promote their products and services from a distance with efficiency, flexibility, and speed. As a consequence, the global call center industry has been growing worldwide at a record pace since the late 1980s. In addition to increased efficiency, the optimization of customers' and shareholders' value is the major motivation behind the worldwide growth of the industry which, to a certain extent, could be seen in the context of cost reductive "global Fordism" strategies.

While outsourced call centers may offer savings of up to 40 percent, backlash over job losses in the West is growing.

Typically, a call center can manage a considerable volume of calls simultaneously by screening and forwarding them to the relevant customer service representatives capable of handling the required information. Call center employees receive inbound or make outbound telephone calls using information and communications technologies (ICT). Automatic call distribution (ACD) and remote electronic access (REA) supported by high-speed, high-bandwidth telecommunications are instrumental in managing operations.

As an industry that emphasizes knowledge and e-commerce as the way to do business, the call center does not fit the traditional staged model of internationalization. The traditional model considers a systematic progression through four different stages of firm internationalization beginning with limited exporting activities and culminating with the establishment of foreign production/manufacturing facilities. Indeed, it is an industry that could easily be considered "born global."

Call centers may serve multiple purposes. In addition to business-to-customer (B2C) interactions, call centers may promote business-to-business (B2B) communication, and are a tool to maintain an ongoing relationship with other stakeholders, including suppliers and distributors. Public-sector organizations have started using call centers as a means to improve service delivery to citizens and businesses (G2C and G2B). Call center activities support Dunning's concepts of "alliance capitalism" and the "knowledge economy" somewhat, as call centers enhance the ability of firms to access customers, suppliers, competitors, and collaborators from a distance, reducing the need for face-to-face communication and spatial transactions.

There is a preference among many MNCs to outsource call center operations to developing countries in order to optimize profit and minimize costs. It is argued that outsourced call centers offer significant savings that could jump to a remarkable 40 percent when outsourced to countries such as India, the Philippines, or South Africa.

However, operating costs in places like India are rising. In addition, many consider the jobs created in call centers in developing countries to be at the expense of similar jobs lost in the West. Such controversies are fuelling popular discontent and backlash in the West, resulting in the closure of many call center operations in developing countries. Moreover, some human rights activists consider call centers to have harsh work environments, where staff usually work long hours with poor pay and under strict guidelines and constant surveillance. Accordingly, some activists have dubbed them "electronic sweatshops."

See Also: Globalization; Information Systems; Near-Shoring; Off-Shoring; Outsourcing.

Bibliography. James C. Abbott, *Designing Effective Call Centers* (Robert Houston Smith Pub., 2008); J. H. Dunning, "Regions, Globalization and the Knowledge Economy: The Issues Stated," in J. H. Dunning, ed., *Regions, Globalization and the Knowledge-Based Economy* (Oxford University Press, 2000); B. Garson, *The Electronic Sweatshop: How Computers Are Transforming the Office of the Future Into the Factory of the Past* (Simon and Schuster, 1988); Renee Paulet, "Location Matters: The Impact of Place on Call Centres," *Journal of Industrial Relations* (v.50/2, 2008).

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Cameroon

The Republic of Cameroon is a unitary republic of central and western Africa. It is bordered by Nigeria to the west; Chad to the northeast; the Central African Republic to the east; and Equatorial Guinea, Gabon, and the Republic of the Congo to the south. Cameroon's coastline lies on the Bight of Bonny, part of the Gulf of Guinea and the Atlantic Ocean. The country is called "Africa in miniature" for its geological and cultural diversity. Natural features include beaches, deserts, mountains, rain forests, and savannas. The highest point is Mount Cameroon in the southwest, and the largest cities are Douala, Yaoundé, and Garoua. Cameroon is home to over 200 different ethnic and linguistic groups. The country is well known for its native styles of music, particularly makossa and bikutsi, and for its successful national football team. English and French are the official languages.

Cameroon has been recognized as an independent state since 1961, following the integration of separate French and British colonies into one united, bilingual country. Cameroon is improving its governance by adopting a new national governance program and an anti-corruption program. Cameroon's per capita GDP (PPP) was estimated as US$2,421 in 2005, one of the 10 highest in sub-Saharan Africa. Major export markets include France, Italy, South Korea, Spain, and the United Kingdom. Cameroon is part of the Bank of Central African States (of which it is the dominant economy) and the Customs and Economic Union of Central Africa (UDEAC). Its currency is the CFA franc.

Red tape, high taxes, and endemic corruption have impeded growth of the private sector. Unemployment was estimated at 30 percent in 2001, and about 48 percent of the population was living below the poverty threshold in 2000. Since the late 1980s, Cameroon has been following programs advocated by the World Bank and International Monetary Fund (IMF) to reduce poverty, privatize industries, and increase economic growth. Tourism is a growing sector, particularly in the coastal area, around Mount Cameroon, and in the north.

Resources and Infrastructure

Cameroon's natural resources are better suited to agriculture and forestry than to industry. An estimated 70 percent of the population farms, and agriculture comprised an estimated 45.2 percent of GDP in 2006. Most agriculture is done at the subsistence scale by local farmers using simple tools. They sell their surplus produce, and some maintain separate fields for commercial use. Urban centers are particularly reliant on peasant agriculture for their foodstuffs. Soils and climate on the coast encourage extensive commercial cultivation of bananas, cocoa, oil palms, rubber, and tea. Inland on the South Cameroon Plateau, cash crops include coffee, sugar, and tobacco. Coffee is a major cash crop in the western highlands, and in the north, natural conditions favor crops such as cotton, groundnuts, and rice. Reliance on agricultural exports makes Cameroon vulnerable to shifts in their prices. Livestock are raised throughout the country. Fishing employs some 5,000 people and provides 20,000 tons of seafood each year. Bushmeat, long a staple food for rural Cameroonians, is today a delicacy in the country's urban centers. The commercial bushmeat trade has now surpassed deforestation as the main threat to wildlife in Cameroon.

The southern rain forest has vast timber reserves, estimated to cover 37 percent of Cameroon's total land area. However, large areas of the forest are difficult to reach. Logging, largely handled by foreign-owned firms, provides the government US$60 million a year, and laws mandate the safe and sustainable exploitation of timber. Nevertheless, in practice, the industry is one of the least regulated in Cameroon.

Factory-based industry accounted for an estimated 16.1 percent of GDP in 2006. More than 75 percent of Cameroon's industrial strength is located in Douala and Bonabéri. Cameroon possesses substantial mineral resources, but these are not extensively mined. Petroleum exploitation has fallen since 1985, but this is still a substantial sector, such that dips in prices have a strong effect on the economy. Rapids and waterfalls obstruct the southern rivers, but these sites offer opportunities for hydroelectric development and supply most of Cameroon's energy. The Sanaga River powers the largest hydroelectric station, located at Edéa. The rest of Cameroon's energy comes from oil-powered thermal engines. Much of the country remains without reliable power supplies.

Transport in Cameroon is often difficult. Roads are poorly maintained and subject to inclement weather, since only 10 percent of the roadways are tarred. Roadblocks often serve little other purpose than to allow police and gendarmes to collect bribes from travelers. Road banditry has long hampered transport along the eastern and western borders, and since 2005, the problem has intensified in the east as the Central African Republic has further destabilized. Rail service runs from Kumba in the west to Bélabo in the east and north to Ngaoundéré. International airports are located in Douala and Garoua with a smaller facility at Yaoundé. The Wouri River estuary provides a harbor for Douala, the country's principal seaport. In the north, the Bénoué River is seasonally navigable from Garoua across into Nigeria.

The major radio and television stations are state run, and other communications, such as land-based telephones and telegraphs, are largely under government control. However, cell phone networks and internet providers have increased dramatically since the early 2000s and are largely unregulated. Although press freedoms have also improved since the early 2000s, the press is corrupt and beholden to special interests and political groups.

Government Policies

Cameroon has demonstrated its commitment to improving its economy through its participation in the Economic Community of Central African States, whose 11 members aim to secure economic partnership with the European Union. In April 2003 Cameroon adopted its own poverty reduction program that outlines seven country-led areas of focus: (1) controlling inflation and promoting tax and budget stability; (2) diversifying the economy; (3) revitalizing the private sector's ability to deliver social services; (4) developing basic infrastructure and natural resources, while protecting the environment; (5) creating closer ties with other central African countries on matters of trade, finance, transportation, forestry, education, tourism, and other policies; (6) strengthening human resources and the social sector, and facilitating the integration of vulnerable groups into the economy; and (7) good governance.

This strategy aims to support the government of Cameroon's objective of significantly reducing poverty among Cameroonians. Cameroon is now developing its second poverty reduction strategy paper. The Canadian International Development Agency is increasingly working with the government of Cameroon on matters of economic governance.

See Also: Africa.

Bibliography. CIA, "Cameroon," *The World Factbook*, www.cia.gov (cited March 2009); Igor Oleynik and Natasha Alexander, *Cameroon: Country Study Guide* (International Business Pub., 2005); U.S. Department of State, "Background Note: Cameroon," www.state.gov (cited March 2009).

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Canada

Sprawling across the northern half of North America as the world's second-largest country by land mass with nearly 10 million square kilometers, Canada has a diverse economy that ranks in the top 15 of global standings. The annual gross domestic product is approximately US$1 trillion. A federation and constitutional monarchy whose head of state is Queen Elizabeth II, the national capital is at Ottawa, Ontario. There are 10 provinces that range significantly in size and population (Ontario has 13 million, Prince Edward Island 130,000) and three northern territories. Eighty percent of the population lives in cities, with Toronto the largest (pop. 2.5 million, metro area 5.5 million). A member of the G8 group of industrialized nations, Canada is a founding member of the World Trade Organization (WTO) and its predecessor, the General Agreement on Tariffs and Trade (GATT), and is also a member of the North American Free Trade Agreement (NAFTA) with the United States and Mexico.

Economic History

A nation of approximately 32 million people mostly clustered in cities near the Canada-U.S. border, modern Canada was founded in 1867. Prior to that, the country was first a colonial possession of France, and then of Great Britain. Both powers traded extensively with the aboriginal populations that had lived on the land for thousands of years. As such, the country has always been a source of staple resources, and the region was an important element of both France's and Great Britain's mercantilist empires. Basque fishermen first started coming to Canada in the 1500s. France claimed it as its own and colonized New France, in the area in present-day Quebec, starting in 1608. Furs became a leading export, and the Company of One Hundred Associates, the first business association in Canada, was granted a monopoly on business matters in New France. Meanwhile, in 1670, the British granted the Hudson's Bay Company the rights to trade on all the land that had rivers that flowed into Hudson's Bay. This created a lively imperial competition, especially around the fur trade.

Following the defeat of the French at the Plains of Abraham and the Treaty of Paris in 1763, Britain took possession of the colony. With the independence of Britain's American colonies in 1789, refugees loyal to the British crown flooded northward, precipitating colonial changes and population challenges for the existing French-speaking population. In the 1800s, wheat and timber became leading exports to Great Britain. After an uprising in both the French- and English-speaking colonies in 1837, some local independence was granted. Eventually, the scattered British colonies united to form modern Canada, with complete control over domestic affairs, while Britain retained significant say in Canada's international relations. In the 1867 constitution, the federal government was granted wide-ranging powers over economic concerns, with local matters left to the provinces.

In the 19th century, the federal state utilized its powers as the country expanded westward and was linked by a transcontinental railway, completed in 1885. Immigration and settlement followed, with an emphasis on wheat production. Protectionist policies helped to create infant industry, particularly in Ontario and Quebec where farm implements, steel, railways, and consumer goods became important manufacturing sectors. Banking was also a protected field, and financial services have been a strong area since 1867. An emphasis on building infrastructure (railways, canals, bridges) that was largely government-funded brought the state actively into the economy. A long depression in the 1880s and 1890s was soon eclipsed by a wheat boom that saw the population grow significantly, and the nation's economy improve. By World War I, Canada was a choice destination for British capital and European immigrants, and had developed a solid economy with railways, timber, agriculture, mining, and manufacturing as key sectors. World War I also saw the entry of the federal state into the economy with war mobilization and the creation of new federal regulatory agencies, federally-owned companies, and income taxes.

In the inter-war period, the economy expanded dramatically, with new growth in automobile production (largely fueled by companies from the United States) and other consumer goods, the expansion of wheat production, and urban growth (utilities and infrastructure). The overexpansion of the economy, persistent trade issues, and a general worldwide malaise had a profound effect upon Canada, particularly in the agricultural west, where wheat prices plummeted and natural disasters ravaged farms. By the early 1930s, Canada was among the hardest hit of all nations by the Great Depression, with nearly a quarter of the population on relief.

In World War II, the economy expanded massively to meet the challenges of war, as did the federal state's intervention in the economy. Dozens of new federally-controlled companies were created in fields as diverse as synthetic rubber, to construction to, of course, arms manufacturing. Full employment was reached, and while labor problems persisted during the war, recognition of collective bargaining eventually led to labor peace.

These new federal policies, labor peace, and the return of consumer confidence in the postwar period brought an unprecedented level of prosperity. Between the 1950s and the 1970s, Canada experienced its greatest period of sustained economic growth. The population jumped through natural increase and immigration, from five million in the 1930s to 10 million by the 1960s. Autos, natural resources, consumer goods, and the service economy all developed significantly in this period as Canada became much more urban and suburban. Much of this economic prosperity was fueled by American investment. This was particularly true in natural resources, especially fields such petrochemicals, uranium, and refining, but also in other fields such as forest products, mining, and heavy manufacturing. Much of this was direct investment through branch plant operations of U.S. multinationals. Oil strikes in Alberta profoundly changed the dynamic of Canadian development, and provided a boom in growth in the Canadian Prairie. Interventionist governmental policies that helped to create a welfare state in this period also helped to fuel growth.

By the 1970s, the worldwide economic downturn took its toll on Canada, as inflation increased and growth slowed. With some industrial dislocation and the high cost of energy, the central provinces of Ontario and Quebec lost some of their economic primacy within the federation. The passage of free trade agreements with the United States (1989) and then with Mexico (1993) ended the long-standing protectionism that had existed in the economy, and shifted economic ties from an east-west axis, to a north-south one.

Modern Economy

In the 1990s, restructuring shifted the economy to one even more dependent upon services, particularly high technology, but Canadians still remained largely tied to commodity production and manufacturing. By 2008, Canada ranked sixth place in a global ranking for information-technology competitiveness, according to the Economist Intelligence Unit, behind the United States, Taiwan, Britain, Sweden, and Denmark.

Today, Canada has a diversified economy. Natural resources continue as a key element. Oil and gas production in the western provinces of Alberta and Saskatchewan, and the Atlantic provinces of Nova Scotia, Newfoundland, and Labrador have led to high growth rates in those regions. Continued restructuring in Ontario, particularly in the auto industry (the leading export since the 1960s) have slowed growth in central Canada. Service sectors, such as financial services, health, and education have all grown dramatically. There has been a significant increase in the number of leading Canadian firms purchased by foreigners (mainly Americans), which has been a growing concern of Canadians. This is especially true in the mining and natural resource fields where long-standing Canadian firms such as Alcan (aluminum products), MacMillan Blodel (forestry), Molson (beer), Inco (nickel), and the Hudson's Bay Company (retailing).

Nonetheless, many Canadian firms continue to be leaders in their fields. Leading international and domestic firms include Research in Motion, Nortel, and CAE in technology; Magna International, Wescast, and Linamar in auto parts production; Bombardier in transportation equipment; EnCana, Petro-Canada, and Barrick in oil and gas and mining; TD Canada Trust, BMO, and Royal Bank in banking; Manulife and Sun in insurance; Canadian National and Canadian Pacific in transportation services. Virtually all of these companies are traded on the Toronto Stock Exchange (TSX), the country's largest (and the third-largest in North America).

In terms of its external trade, Canada attributes 40 percent of its gross domestic product to external trade. By far, Canada's main trading partners are the United States and Mexico. Every day more than $1 billion of goods crosses the Canada-U.S. border. Canada's merchandise trade with the United States and Mexico has risen from US$112 billion in 1993 to US$235 billion in 2000. Canadian trade with NAFTA countries has more than doubled, while trade with the rest of the world has grown only by 29 percent, chiefly with the European Union and Japan. Along with the auto trade, lumber, agricultural products, and energy (oil and gas) exports constitute the primary trade for Canada. The currency is the Canadian dollar.

See Also: Hudson's Bay Company; Mexico; North American Free Trade Area (NAFTA); United States.

Bibliography. Michael Bliss, *Northern Enterprise: Five Centuries of Canadian Business* (McClelland and Stewart, 1987); Canadian Statistics Agency, www.statcan.ca (cited March 2009); Diane Francis, *Who Owns Canada Now?: Old Money, New Money and the Future of Canadian Business* (Harper Collins, 2008); Amal Henein and Françoise Morissette, *Made in Canada Leadership: Wisdom from the Nation's Best and Brightest on the Art and Practice of Leadership* (Wiley, 2008); *International Business Publications Canada: Country Study Guide* (International Business Publications, 2008); *International Business Publications Canada Customs, Trade Regulations and Procedures Handbook* (International Business Publications, 2008); *International Business Publications Canada Government and Business Contacts Handbook* (International Business Publications, 2008); Kenneth MacLean, *Out of Control: Canada in an Unstable Financial World* (Canadian Centre for Policy Alternatives/James Lorimer, 1999); James H. Marsh, *The Canadian Encyclopedia*, 2nd ed (Hurtig, 1988); D. McCalla, ed., *The Development of Canadian Capitalism* (Copp Clark Pitman, 1990); W. T. Stanbury, *Business-Government Relations in Canada: Grappling With Leviathan* (Methuen, 1986); Statistics Canada, *Canada Yearbook 2007* (Statistics Canada, 2007); Graham D. Taylor and Peter A. Baskerville, *A Concise History of Business in Canada* (Oxford University Press, 1994).

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Candidate Countries

The term *candidate countries* denotes the countries that are advanced in the accession process with the European Union (EU), and have signed a Stabilization and Partnership Agreement with the European Commission. The countries outside the EU can be either in the group of potential future members or countries that will be regarded as good neighbors. As of 2008 the EU candidate countries are Croatia, (former Yugoslav Republic of) Macedonia, and Turkey. Potential candidate countries, per official documents of the EU, are the countries of the Western Balkans: Albania, Bosnia and Herzegovina, Montenegro, Serbia, and Kosovo (the territory under United Nations [UN] administration following UN Security Council Resolution No. 1244 of 1999).

The accession process and candidature begins with the submission of a request for membership from a potential applicant country to the Council of the European Union. The European Commission (acting de facto as the EU's government) assesses the capacity of the applicant as to whether a country meets the accession criteria. The accession criteria were defined at the meeting of the Council in Copenhagen in 1993 and were modified later at the meeting in Madrid in 1995. If the Commission is of positive opinion and the recommendation of the Commission is unanimously upheld by the Council, the formal negotiation process can begin. In fact the candidate country has a relationship not only with the Commission as the representative of the EU, but also with all the member states.

The negotiation focuses on the endorsement of the entire EU legal framework, known as *Acquis Communautaire*. The negotiations are usually fairly slow and meticulous, with discussions about when and how the candidate country will align its legal system with the EU legal framework, and meet in full the EU expectations. The Copenhagen criteria can be summarized as follows: (1) political: stable institutions guaranteeing democracy, the rule of law, human rights, and respect for/protection of minorities; (2) economic: a functioning market economy and the capacity to cope with competition and market forces in the EU, and (3) the capacity to take on the obligations of membership, including adherence to the objectives of political, economic, and monetary union. The Copenhagen criteria were reinforced by the European Council in Madrid in 1995, with a further one added: (4) adoption of the *Acquis Communautaire* and its effective implementation through appropriate administrative and judicial structures. However, it should also be noted that the EU must be able to absorb new members, so it reserves the right to decide when it will be ready to accept them. This is the reason why the candidate country may make excellent progress toward meeting all four criteria for full membership and still not be invited to join.

The pre-accession strategy is designed to prepare the candidate countries for future membership. It encompasses the following frameworks and mechanisms: (1) Europe agreements—stabilization and association agreements; (2) accession partnerships—European partnerships; (3) pre-accession assistance; (4) co-financing from international, i.e., European, financial institutions; (5) participation in the EU programs, agencies, and committees; (6) national program for the adoption of the *Acquis Communautaire*; (7) regular progress reports; and (8) political and economic dialogue.

The first step in the negotiation process for candidate countries is known as screening, where the EU assesses the candidate country's potential to meet the set criteria, and to identify areas where further assistance from the EU is required in order to bring the capacity of the candidate country in line with the expectations of membership. The Commission prepares the report for each chapter, and each country and the candidate country are expected to submit their position, in order for further rapprochement with the EU, that is the Commission on behalf of the EU. The output of the Commission work is the Draft Common Position (DCP), which is the document outlining the position of the EU and its member states toward the candidate country. The moment the Council adopts the DCP, the formal negotiations may start.

Candidate countries are assessed every year by the Commission, which prepares an annual progress report that is published in all the official languages of the EU. Also, each year the Commission adopts its annual strategy document explaining its policy on EU enlargement. The progress report is produced for all the member countries, and reflects both on their performance and the outlined policy of the EU. The so-called enlargement package also contains proposals to the Council for revised European and Accession partnerships for each country; the Commission also lists areas where further reforms are needed.

Financial Assistance

Candidate countries and to some extent "countries which may become candidate countries," that is, the countries of the Western Balkans, are eligible for financial assistance from the EU in the process of accession or preparation for the accession process. From 2007, these countries (candidate and "pre-candidate" countries) may be recipients of the Instruments for Pre-Accession Assistance (IPA), a program that has replaced the multitude of various programs aimed at these countries.

In order to achieve each country's objectives in the most efficient way, IPA consists of the following five components: (1) transition assistance and institution building; (2) cross-border cooperation (with the EU member states and other countries eligible for IPA); (3) regional development (transport, environment, and economic development); (4) human resources development (strengthening human capital and combating exclusion), and (5) rural development. The first component is more directed toward the potential candidate countries in the Western Balkans where there is a need to build the capacity to develop a fully functional civil society and functioning market economy. It is fully under the administration of the

EU Directorate-General for Enlargement. The second component targets not only the candidate countries and those that are most likely expected to achieve candidateship status in the foreseeable future, but to the countries that are neighbors of the EU and would fall in the category of the countries that may be eligible for support under the European Neighbourhood and Partnership Instrument (ENPI).

The other three components (regional development, human resources development, and rural development) are, generally, exclusively targeting candidate countries, as their aim is to bring the candidate country into line with the EU countries and enable it to reach the status of a functional full member of the EU. These components are managed by the respective Directorate-Generals of the Commission and are integrative measures. Regional development is led by the Directorate-General for Regional Policy, human resources development by the Directorate-General for Employment, Social Affairs and Equal Opportunities, and the rural development is led by the Directorate-General for Agriculture and Rural Development.

Before the IPA program was launched, the EU had an array of financial assistance programs targeting different groups of the countries. The best known program is Phare, initially developed in 1989 to support the transition and rapprochement with the EU of Central and Eastern European Countries (CEECs), but later spreading to some of the countries in the Western Balkans.

From Phare other programs have been developed and evolved out of it, most notably the CARDS program (Community Assistance for Reconstruction, Development and Stability in the Balkans), which focused from 2000 on supporting potential candidate countries in the Balkans, primarily the Western Balkans. From the very outset in 1989, the Phare program was to deal with supporting the process of bringing these (target) countries to the EU. However, the remit was somewhat changed at the Copenhagen criteria, where the Phare program was charged with the following objectives: (1) strengthen public administration and institutions to function effectively inside the European Union; (2) promote convergence with the European Union's extensive legislation (the A*cquis Communautaire*) and reduce the need for transition periods; and (3) promote economic and social cohesion.

Other Programs

Other programs that new member states of the EU enjoyed when they were candidate countries include (1) Instrument for Structural Policies for Pre-accession (ISPA); (2) Special Accession Program for Agriculture and Rural Development (SAPARD); and (3) Community Assistance for Reconstruction, Development and Stabilization (CARDS). The SAPARD component was in operation between 2000 and 2006 and generally marked as a successful one. Similarly, CARDS program was launched in 1999, made operational in 2000 and has to a large extent been replaced by IPA, although the EU agency established to implement the assistance to the Western Balkans is still operational, although its mandate is until the end of 2008; unless another (most unlikely) extension is granted. Interestingly, Turkey as a candidate country has always had a separate program of support, although it has been genuinely developed following the format and experience of other programs targeting other candidate countries. Also, new member states, and the former candidates, have received significant support in the first two years of EU membership, through so-called transition facility, while Bulgaria and Romania enjoyed the extra support during the first year of their EU membership.

To support the candidate countries and potential candidate countries (and recently, countries targeted through good neighbor policies) the EU has launched other related programs, like (1) the Technical Assistance and Information Exchange Instrument (TAIEX); (2) twinning, and (3) SIGMA. The twinning program assumes the appointment of short-term resident twinning advisers who share good practices and facilitate the adoption of EU-endorsed policies and practices. SIGMA is an instrument jointly developed by the EU and OECD that has been focusing on public administration reform and capacity building in the target countries.

Accession Procedure

When all criteria are met in full, the Accession Treaty lays down clearly terms and conditions of the entry (accession), and stipulates any issues of importance for the transitional phase, as the future member may exercise some options, for a number of years, before applying the EU legislation to the letter. The accession procedure requires the positive recommendation of the Commission, which the European Parliament (EP) has to endorse, and all the member states have to ratify the treaty, as well as the democratic bodies in the candidate country (as a rule the parliament or the equivalent). The treaty normally stipulates when the membership of the EU begins and as of that date the candidate country becomes a full member of the EU.

To a large extent the EU has closely followed the criteria stipulated in Copenhagen and developed further at the later summits discussing enlargement, but it is also noted that the enlargement of the EU has been politically motivated, and exercised in groups. The overall economic and political performance of the new member states of the EU demonstrates that there are wide differences in their achievements in either or both economic and political spheres. It is also possible to conclude that the enlargement process that is to include the countries of the Western Balkans is possibly the last logical step in the enlargement of the EU in the foreseeable future, as it may be concluded that the dominant thinking is shifting from "enlargement of Europe" to "completing the process." However, the open question is what will happen with the Turkish application, as now the EU could state that what is important is whether the Union can absorb the new member state or not—not whether the member state meets the criteria.

Historically the EU had waves in which the membership has been expanded and it is most likely that this policy will be extended when it comes to the countries of the Western Balkans, while Croatia may be in a position to join the EU on its own. Although the economic criteria for membership is quite often emphasized (or even overstated), the political factor is the prevalent one and drives the decision-making process notwithstanding some level of sentiment and political alignment between the current member countries and those applying for membership.

See Also: Common Market; Eastern Europe; Economic Union; European Union; Regional Integration; Transition Economies.

Bibliography. E. Brimmer and S. Fruehlich, *The Strategic Implications of European Union Enlargement* (Johns Hopkins University, 2005); N. Nugent, *European Union Enlargement* (Palgrave Macmillan, 2004); M. Sajdik and M. Schwarzinger, *European Union Enlargement: Background, Developments, Facts,* Central and Eastern European Policy Studies, vol. 2 (Transaction Publishers, 2007); S. Trogan and V. N. Balasubramanyam, eds., *Turkey and Central and Eastern European Countries in Transition: Towards Membership of the EU* (Palgrave Macmillan, 2001).

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Canon

Canon, a world leader in the imaging industry, traces its foundation to 1933 with the Precision Optical Instruments Laboratory that sought to compete with Germany in 35 mm cameras. The founders, Goro Yoshida and Saburo Uchida (brothers-in-law) researched German cameras, introducing the "Kwanon" prototype camera in 1934. Takashi Mitarai, Uchida's friend and a gynecologist, provided capital. They trademarked "Canon" in 1935 and subsequently introduced the Hansa Canon, Japan's first 35 mm camera, for ¥275, roughly half the price of a German Leica. The laboratory incorporated as a joint-stock company in 1937 with ¥1 million in capital, listing on the Tokyo Stock Exchange in 1949. The company was renamed Canon Camera Co., Inc., in 1947 to simplify the brand and corporate image, becoming Canon, Inc., in 1969 to reflect the company's broadened product profile.

World War II meant that Canon produced military aircraft cameras and developed X-ray equipment, supported by Mitarai's medical connections. Post–World War II government efforts to support the recovery of the Japanese economy translated into cameras being designated as a key export product in

Now a world leader in cameras and other imaging products, Canon suffered losses in the early 1970s but rebounded.

1947. Canon's emphasis on high-quality precision cameras and lenses became quickly known among professional photographers. Japan's first mass-produced camera, the Canonet (1961), sparked a boom in the industry for its low price (¥19,800) and high quality. Canon's Cine 8T (1956, ¥48,000) was awarded the Good Design "G" mark the following year by Japan's Ministry of International Trade and Industry (MITI). The L1 35 mm camera, Canon's first completely original 35 mm camera that allowed it to break away from a Leica-type design, also won the "G" mark.

In 1959 the Projector P-8 was launched, followed by a zoom-lens 8 mm cine camera in 1960. The Canon F-1, a professional-use single-lens reflex (SLR), was introduced in 1971, positioning Canon as a market leader. In 1976 Canon launched the AE-1 SLR, the world's first computerized camera (¥85,000). Canon introduced the NP-1100 in 1970, Japan's first plain-paper copier (¥880,000), a success story because it did not infringe on Xerox's wall of 600+ patents. Additional successes were the LBP-4000 laser-beam printer in 1975 and the BJ-80 inkjet printer in 1985. Since 2000 Canon's digital camera offerings have ranged from the compact IXY Digital to the professional EOS Digital SLR series.

Global Presence

Overseas sales did not come easily at first for Canon. Despite efforts in 1955 to set up a sales office in New York, Canon was forced to rely on other U.S. sales relationships, first with Scopes Co., Ltd., from 1958–61 and then with Bell Howell. To consolidate sales, Canon dissolved all local sales contracts by 1974 and shifted to direct sales through Canon Sales Co., resulting in $137 million in sales in 1976. In 1971 Canon's first overseas production facility was established in Taiwan, which soon became a world supply hub for the popular Canonet. Today, manufacturing is located in such locations as Oita (Japan), Taiwan, Malaysia, and China to capture nuances in world market demand and keep prices for consumer goods reasonable.

Takeshi Mitarai became president in 1942 and led Canon for 32 years, implementing such innovative management policies as a monthly salary system (1943), employee health examinations, the "San-Ji Spirit" of spontaneity, autonomy, and self-awareness (1952), and Japan's first five-day workweek (1966). Canon was forced to record its first-ever loss in the early 1970s, citing quality failures with desktop calculators and intense competition. Management took the full blame and offered the 1976 Premier Company Plan as a vision to improve Canon's competitive ability.

Under the leadership of Ryuzaburo Kaku, president from 1977 to 1989, Canon grew quickly. Kaku also helped develop and promote Canon's *kyosei* philosophy of living and working together for the common good. Fujio Mitarai, nephew of T. Mitarai, was named president in 1995 and helped Canon overcome the collapse of Japan's economic bubble via the Excellent Global Corporation Plan announced in 1996. Mitarai was named head of Nippon Keidanren in 2006 and shared leadership of Canon with Tsuneji Uchida.

As of December 31, 2006, Canon recorded net sales of $34,941 million; net income of $3,826 million; 219 consolidated subsidiaries; and 118,499 employees worldwide. Main business areas are business machines, computer peripherals, office imaging products, business information products, cameras, and optical products.

See Also: Hewlett Packard; Japan; NEC; Quality.

Bibliography. Canon, Inc., www.canon.com (cited March 2009); C. E. Dyer, *The Canon Production System* (Productivity Press, 1987); G. Lewis, ed., *The History of the Japanese Camera* (International Museum of Photography, 1990); Kiyoshi Tokuda and Nikkei, *How Canon Got Its Flash Back* (John Wiley & Sons, 2004).

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Capital Account Balance

The capital account balance measures the net value of transactions involving financial assets between residents and nonresidents of a country. It is equal to the difference between funds acquired from the rest of the world (capital inflows) and funds provided to the rest of the world (capital outflows) in a specific period of time. The capital account balance shows whether a country is a net debtor or a net creditor on a flow basis. If capital outflows are greater than capital inflows, the country in question is a net creditor and runs a capital account deficit. In contrast, being a net debtor means that capital inflows are greater than capital outflows; the capital account is in surplus.

The flow of funds between countries takes various forms. The capital account, under the balance of payments accounting, makes a distinction between direct investment, portfolio investment, reserve assets, and other investment. Direct investment refers to the establishment of a resident enterprise or the acquisition of a lasting interest in a resident enterprise by nonresidents. Portfolio investment denotes transactions in equity and debt securities such as stocks, bonds, and money market instruments. Reserve assets usually consist of foreign exchange reserves held by monetary authorities. The category of other investment covers transactions pertaining to financial assets such as trade credits, loans, and demand deposits. The capital account balance is the sum of net positions in direct investment, portfolio investment, reserve assets, and other investment.

The accounting identity of the balance of payments system implies that the balance on the capital account has a reverse sign of and is equal to the balance on the current account. In other words, the capital account and current account balances sum up to zero. While this accounting identity is true by definition, data collection, reporting, and estimation errors cause a statistical discrepancy between the two. This discrepancy is reported under the category of net errors and omissions.

A further understanding of the capital account balance can be obtained by analyzing its relation to national income. Consider a country where the consumption and investment of its residents and the spending of its public sector are greater than the national income. In a global economy, this excess demand is met by imports, which are financed through funds from the rest of the world. Thus, being a net debtor means that the residents of a country can spend beyond what they produce and can finance this excess spending by borrowing from residents of other countries.

The magnitude of the capital account balance does not—by itself—throw much light on a country's economic strength and health. For example, the absolute size of the funds acquired by the United States in each calendar year is the biggest in the world. Nevertheless, the stock of the U.S. foreign debt as a percentage of its gross domestic product is small compared to the majority of developing and emerging market economies.

A country can remain as a net debtor as long as private and public economic agents in the rest of the world are willing to provide funds. However, running a capital account surplus increases the stock of foreign debt held in a country. As the stock of foreign debt increases, the willingness of foreign creditors to provide funds diminishes. Thus, a country cannot run a capital account surplus indefinitely.

A stop in the funds acquired from the rest of the world forces an adjustment in national consumption and investment. The severity of adjustment increases if the stop of funds is accompanied and followed by a reversal; that is to say, if a country transitions from receiving funds to sending funds in a relatively short amount of time. In the past, many developing and emerging market economies had to endure severe economic crises as a result of sudden stop and reversal of foreign capital inflows.

See Also: Capital Flight; Currency Exposure; Current Account; External Debt; Foreign Direct Investment, Horizontal and Vertical; Foreign Exchange Reserves; Foreign Portfolio Investment; International Capital Flows; National Accounts; Net Capital Outflow.

Bibliography. Barry J. Eichengreen and Ricardo Hausmann, eds., *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economies* (University of Chicago Press, 2005); Giancarlo Gandolfo, *International Finance and Open-Economy Macroeconomics* (Springer-Verlag, 2001); International Monetary Fund, *Balance of Payments Manual*, 5th ed. (IMF, 1993); F. Machlup, "Three Concepts of the Balance of Payments and the So-Called Dollar Shortage," *Economic Journal* (v.60, 1950); Jeffrey D. Sachs, ed., *Developing Country Debt and the World Economy* (University of Chicago Press: 1989); Robert M. Stern, *The Balance of Payments: Theory and Economic Policy* (Aldine, 1973); U.S. Department of Commerce, *The Balance of Payments of the United States: Concepts, Data Sources, and Estimating Procedures* (U.S. Government Printing Office, 1990).

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Capital Adequacy

Capital adequacy is a measure of a financial institution's ability to absorb potential losses resulting from various risks to which it is exposed. Financial institutions are required to maintain a certain minimum amount of capital in order to ensure their soundness and the stability of the financial system as a whole. Capital adequacy concerns led to tumbling stock prices of many of the world's largest financial institutions in 2008.

The Basel Committee on Banking Supervision establishes standards for the calculation of minimum capital. The current set of standards was initially published in 2004 and is known as the Basel II Framework. The Framework aims to minimize the difference between regulatory and economic capital. Two types of capital are measured—tier I and tier II capital, with tier I being the most reliable form of capital and consisting primarily of shareholders' equity. Tier II capital is limited to 100 percent of tier I capital. The minimum capital adequacy ratio is 8 percent of the risk-weighted assets. Total capital that banks are required to set aside should cover for three types of risk: credit, market, and operational.

Credit risk is defined as the risk of losses arising from a borrower's nonpayment on its obligations. The Basel II Framework permits banks a choice between two broad methodologies for calculating credit risk: Standardized or Internal Rating–Based, or IRB. Standardized methodology relies on external credit risk assessment by the major rating agencies, whereas the IRB approach uses credit risks systems developed internally by banks, and requires explicit approval of the bank's supervisor. Such approval is subject to certain minimum conditions and disclosure requirements. Under the IRB approach, banks can use their own estimates of risk components that include measures of the probability of default, loss-given default, the exposure at default, and effective maturity.

The IRB methodology is further subdivided into two approaches: foundation and advanced. Under the foundation approach, financial institutions can use their own probability of default and rely on supervisory estimates of other components. Under the advanced approach, banks can also use their own estimates of other risk components.

Market risk refers to the risk of losses that arise from movements in market prices and the resulting decrease in the value of investments. For measuring market risks, banks can use two main valuation methodologies: marking-to-market and marking-to-model. Marking-to-market represents at least daily valuations of positions at current market prices for the same or similar instruments. It means that a security is recorded at its market value rather than book value. The Framework encourages banks to mark-to-market as much as possible. Where it is not feasible, however, banks are allowed to use marking-to-model, which is defined as any valuation that needs to be extrapolated or otherwise calculated based on financial models. Just as with credit risk, for calculating capital requirements for market risks, banks can use either the Standardized methodology that relies on external assessment, or the Internal Measurement approach. Banks that rely on internal models are required to have in place a comprehensive stress-testing system.

Operational risk is defined as the risk of loss resulting from faulty internal processes, from human mistakes or systems failures, or from external events. Legal risks are included in the notion of the operational risk, but strategic and reputational risks are not. For operational risk there are three methods of calculation, listed in order of increased sophistication and risk sensitivity: the Basic Indicator approach, the Standardized approach, and the Advanced Measurement approach. Banks using the Basic Indicator approach must hold capital equal to the average over the previous three years of a certain percentage of positive annual gross income. In the Standardized approach, banks' activities are divided into eight business lines, and the capital requirement for each line is calculated by multiplying gross income by a factor assigned to that business line. Under the Advanced Measurement approach, banks develop increasingly risk-sensitive operational risk allocation techniques.

See Also: Bank for International Settlements; Basel Committee on Banking Supervision; Credit Ratings; Mortgage Credit Crisis of 2008; Risk Management.

Bibliography. Kern Alexander, Rahul Dhumale, and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press, 2006); Bank for International Settlements, www.

bis.org (cited March 2009); Basel Committee for Banking Supervision, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework Comprehensive Version* (Bank for International Settlements, 2006); Atsushi Miyake and Tamotsu Nakamura, "A Dynamic Analysis of an Economy with Banking Optimization and Capital Adequacy Regulations," *Journal of Economics and Business* (v.59/1, 2007); Janine Mukuddem-Petersen and Mark A. Petersen, "Optimizing Asset and Capital Adequacy Management in Banking," *Journal of Optimization Theory and Applications* (v.137/1, 2008); Mansur Noibi, "Prudential Regulation of Islamic Banks: An Analysis of Capital Adequacy Standards," *Journal of Islamic Banking & Finance* (v.24/4, 2007); Hal Scott, *Capital Adequacy Beyond Basel: Banking, Securities, and Insurance* (Oxford University Press, 2005).

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Capital Budgeting

Many organizations charge their finance department with overseeing the financial stability of the organization. The chief financial officer (CFO) may lead a team of financial analysts in determining which projects deserve investment. This process is referred to as capital budgeting. It is an example of how an organization may conduct a cost-benefit analysis. There is a comparison between the cash inflows (benefits) and outflows (costs) in order to determine which is greater. Capital budgeting could be the result of purchasing assets that are new for the organization or disposing some of the current assets in order to be more efficient. The finance team will be charged with evaluating (1) which projects would be good investments, (2) which assets would add value to the current portfolio, and (3) how much is the organization willing to invest into each asset.

In order to answer the questions about the potential assets, there are a set of components to be considered in the capital budgeting process. The four components are initial investment outlay, net cash benefits (or savings) from the operations, terminal cash flow, and net present value technique. Most of the literature discusses how the capital budgeting process operates in the traditional, domestic environment. However, as the world moves to a more global economic environment, consideration needs to be given to how multinational corporations will conduct the capital budgeting process when operating in countries outside their home base.

International Capital Budgeting

International capital budgeting refers to when projects are located in host countries other than the home country of the multinational corporation. Some of the techniques (i.e., calculation of net present value) are the same as traditional finance. Financial analysts may find that foreign projects are more complex to analyze than domestic projects for a number of reasons. There is the need to distinguish between parent cash flow and projects cash flow. Multinationals will have the opportunity to evaluate the cash flow associated with projects from two approaches. They may look at the net impact of the project on their consolidated cash flow or they may treat the cash flow on a stand-alone or unconsolidated basis. The theoretical perspective asserts that the project should be evaluated from the parent company's viewpoint since dividends and repayment of debt are handled by the parent company. This action supports the notion that the evaluation is actually on the contributions that the project can make to the multinational's bottom line. There will also be a need to recognize money reimbursed to the parent company when there are differences in the tax system.

The way in which the cash flows are returned to the parent company will have an effect on the project. Cash flow can be returned in the following ways:

- Dividends—it can only be returned in this form if the project has a positive income. Some countries may impose limits on the amounts of funds that subsidiaries can pay to their foreign parent company in this form.
- Intrafirm debt—interest on debt is tax deductible and it helps to reduce foreign tax liability.
- Intrafirm sales—this form is the operating cost of the project and it helps lower the foreign tax liability.
- Royalties and license fees—this form covers the expenses of the project and lowers the tax liability.

- Transfer pricing—this form refers to the internally established prices where different units of a single enterprise buy goods and services from each other.

Among the other factors that analysts must consider are differences in the inflation rate between countries, given that they will affect the cash flow over time. Also, they must analyze the use of subsidized loans from the host country since the practice may complicate the capital structure and discounted rate. The host country may target specific subsidiaries in order to attract specific types of investment (i.e., technology).

Subsidized loans can be given in the form of tax relief and preferential financing, and the practice will increase the net present value of the project. Some of the advantages of this practice include (1) adding the subsidiary to project cash inflows and discount, (2) discounting the subsidiary at some other rate, risk free, and (3) lowering the risk-adjusted discount rate for the project in order to show the lower cost of debt.

Other steps may include determining if political risk will reduce the value of the investment, assessing different perspectives when establishing the terminal value of the project, reviewing whether or not the parent company had problems transferring cash flows due to the funds being blocked, making sure that there is no confusion as to how the discount rate is going to be applied to the project, and, finally, adjusting the project cash flow to account for potential risks.

See Also: Cash Management; Managerial Accounting; Risk Management.

Bibliography. Shahid Ansari, *The Capital Budgeting Process* (McGraw-Hill/Irwin, 2000); Stanley Block, "Integrating Traditional Capital Budgeting Concepts Into an International Decision Making Environment," *Engineering Economist* (Winter, 2000); Adrian Buckley, *International Capital Budgeting* (Prentice Hall, 1995); Neil Seitz and Mitch Elllison, *Capital Budget and Long-Term Financing Decisions* (South-Western College Pub., 2004).

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Capital Controls

Capital controls are measures used by governments to restrict the flow of money in and out of a country. There are many forms of capital controls, ranging from administrative requirements for transactions (e.g., allowing transfers of funds only with permits, prohibitions on certain types of transactions) to market-based controls (e.g., a tax on types of transactions, use of multiple exchange rates to discriminate against a class of transactions).

Almost every nation has relied on some form of capital controls at some point in its history, and capital controls became widespread during World War I and continued to be common through the mid-20th century. More recently, economic crises in the 1990s in Brazil, Chile, Colombia, Malaysia, and Thailand led to short-term impositions of capital controls. Where capital controls exist, they play an important part in business decisions about whether to invest in a country since controls can prevent repatriation of the investment and profits.

In an open economy without exchange or capital controls, money flows into an economy when investors perceive opportunities and out when they perceive risks. For example, if a country has higher interest rates than other countries and a stable currency, money will flow into the economy. On the other hand, if investors perceive a risk that a country will devalue its currency, they will seek to shift their money into a more stable currency. Such transactions limit the ability of governments to set monetary and fiscal policies in accordance with domestic political priorities by subjecting them to market discipline. Capital controls allow governments to avoid this financial market discipline.

The capital controls imposed during World War I enabled the belligerent governments to have a higher inflation rate (effectively a tax on wealth) than they could have sustained had investors been able to shift their wealth into nonbelligerent currencies. Proponents of capital controls also argue that they help countries avoid short-term, destabilizing capital inflows and outflows by speculators and facilitate effective taxation by making it harder for the wealthy to shift substantial assets abroad.

Malaysia's experience in 1998–99 illustrates how capital controls operate. Thailand's devaluation of its currency in 1997 sparked a widespread financial crisis across Asia, as investors sought security by moving their assets out of Asian currencies. To stop capital being withdrawn from Asian economies, the International Monetary Fund pushed governments in the region to raise interest rates. Because higher interest rates would reduce economic growth by making it more costly to obtain capital, the Malaysian government imposed restrictions on withdrawal of capital in September 1998, banning transfers from domestic to foreign bank accounts and otherwise restricting withdrawal of capital from Malaysia for one year. A few months later the government lifted the ban but imposed a heavy tax on capital withdrawals. The government also fixed the exchange rate for the country's currency.

By preventing capital withdrawals, the government was able to prevent financial markets from exerting pressure on the fixed exchange rate. Supporters of the policy argued that it bought the government time, allowing the crisis sparked by the Thai devaluation to recede. Opponents argued that it freed the government to abandon needed financial reforms by insulating it from financial market pressures.

Opponents of capital controls note that controls are costly in five important ways. First, capital controls are costly to implement both for governments and for those subject to the controls. For example, Malaysia's program in the 1990s required highly intrusive financial sector regulations to prevent evasion. Second, controls on capital reduce beneficial transactions as well as harmful ones by making all capital transactions more expensive. Since markets depend on liquidity for their efficient operation, loss of liquidity can result in general welfare losses. Third, the imposition of capital controls itself sends a bad signal to the financial markets about an economy, potentially exacerbating the problems that led to the imposition of the controls in the first place. Fourth, capital controls result in political allocation of valuable rights to make international capital transactions, which can lead to corruption. Finally, by partially insulating economies from financial market pressures, capital controls can undermine efforts at necessary fiscal and monetary policy reforms.

One form of capital control that has gained considerable popular support in recent years is the "Tobin tax," named after James Tobin, the economist who first proposed it. A Tobin tax would tax short-term capital movements across borders, with the aim of discouraging speculation. Antiglobalization activists around the world have embraced the Tobin tax, as have a number of European and Latin American politicians.

See Also: Asian Financial Crisis; Capital Flight; Capital Repatriation; Globalization; International Capital Flows.

Bibliography. Akira Ariyoshi et al., *Capital Controls: Country Experiences with Their Use and Liberalization* (International Monetary Fund, 2000); Barry Eichengreen, *Global Imbalances and the Lessons of Bretton Woods* (MIT Press, 2007); Christopher Neely, "An Introduction to Capital Controls," *Federal Reserve Bank of St. Louis Review* (November/December 1999).

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Capital Flight

Capital flight is a phenomenon that occurs when market investors withdraw money from an economy because they have lost confidence in its prospects of growth. International and domestic causes of capital flight are debatable. The monetarist position and the post-Keynesian position mark the boundaries of this debate. The chicken-versus-the-egg problem is preeminent: To garner investor credibility, what should be given priority—growth or equity? Theoretically, growth can create equity in the long run. But, empirically, huge social inequalities (initial or developing) within or between states tend to create social conflict that can decimate growth. Hence, the two camps differ over whether financial globalization and integration of markets is productive for growth and equity. To assess this, they look at macroeconomic fundamentals, i.e., money, output, and consumption that determine supply and demand.

Monetarists tend to emphasize theoretical claims that supply of capital/"sound money" will universally create growth through rational investor actions based on cost-benefit calculations. On the other hand, post-Keynesians tend to emphasize the empirically contingent impact of capital allocation on distributive justice for labor. Hence, they point to irrational market sentiments that misalign capital allocation and productive output and reduce income and consumption demand. Consequently, policy prescriptions differ. Monetarists argue for universal policies of political neutrality of states, auto-regulated/free markets and capital account liberalization. Post-Keynesians prefer historically contingent political intervention in the domestic and global market for purposes of growth and welfare.

Monetarists argue that competitive markets create efficient/rational capital allocation. They claim that equity will occur automatically through trickle down effects of economic growth. Post-Keynesians advocate for politically proactive policies of safety nets to ensure that winners compensate losers. Given that labor engaged in productive output of trade and services is mostly internationally immobile, due to immigration barriers, social insurance would reassure them. It would give them confidence to build capabilities and compromise with capital about wages/income to ensure conflict-free growth. Creating investor credibility is then critical to prevent capital flight, but the difference lies in the focus—capital or labor.

The monetarists posit that it is the lack of long-run macroeconomic fundamentals of growth that generates loss of credibility for international capital and results in capital flight as a form of market discipline. The post-Keynesians point out that it is the lack of market-friendly capital controls that forces governments to take protectionist measures against the short-run excesses of capital mobility that destroy the macroeconomic fundamentals and result in capital flight. The cause and effect, in essence, are reversed in the two arguments.

For monetarists, a stable macroeconomic environment is ensured through low inflation and currency stability to ensure that output and consumption are not affected. Hence, imprudent fiscal and monetary policies of expansion need to be avoided. This can be achieved through political neutrality. For monetarists, governments act expediently to stay in power, and hence, they can never be committed to consistent low inflation. Populist policies of market intervention then result in workers rationally adjusting their wage demands based on future inflationary expectations. Hence, long-term trade-off between inflation and unemployment is impossible. All attempts by government to boost employment, to manage demand and consumption through expansion only result in inflation without real growth. Policies of expansion result in rent-seeking from entrenched interest groups like labor unions. Labor unions demand high wages and, being unrelated to productivity, this leads to increased costs of output. This leads to labor market rigidities and inflationary price spirals. High inflation leads to currency instability. As currency value depreciates in the face of inflation, purchasing power parity falls. This leads to export-import imbalances and balance of payment crisis. As trade deficits and debts increase, loss of confidence by market investors and capital flight occurs.

Other Factors

Monetarists point to other related factors critical to investor confidence and prevention of capital flight. First, the degree of market integration through trade or stock markets will determine the level of development of the domestic economy. Development itself creates confidence in that it creates prospects for growth that draws in capital. Second, the strength of the regulatory environment or the degree of transparency of rules creates confidence. For example, political independence of central banks ensures that monetary policies are geared toward austerity to ensure low inflation as a pre-condition for economic growth and exchange rate stability. Third, the degree of asset-specificity will determine the cost of collecting information about prospects of the economy and create the degree of risk averseness.

For example, foreign direct investment (FDI) is least liquid, and being locally situated, can have more access to information, and hence, is less risk averse. In contrast, bond capital that lends to governments is highly liquid, has difficulty collecting information given the collective action problem of scattered investors, and hence, is highly risk averse. To prevent the flight of risk-averse capital, nonpolitical institutions are critical. Institutional strength increases transparency, reduces transaction costs, enables cost-benefit analyses, and ensures rational behavior.

Counterarguments

The politically normative post-Keynesians offer strong counterarguments to the monetarist claims. They point out that the monetarists' argument is internally inconsistent. If money is neutral in the long run, it cannot also be a source of growth. Why should governments care for "sound money" if there is going to be no fundamental change in the real economy? They indicate that while governments pursue low-inflation orthodoxy there are serious distributive effects in terms of creating inequality by hampering policies designed to rectify unemployment and create growth.

More critically, post-Keynesians point out that the rational expectations assumptions of the monetarists are based on unrealistic expectations of perfectly functioning markets, perfect information, and perfectly rational actors that result in indeterminate predictions about capital flight. They point out that there are market imperfections like concentration of institutional investors that lead to inefficient allocation of capital. Moreover, investors with short time horizons and performance pressures for furthering their own careers are likely to pursue irrational herd-like market behavior rather than individual rational cost-benefit calculus through careful evaluation of available information. This irrationality leads to speculative flows that impact real-time economic decision making within an economy. The sudden expansion of credit leads to asset price bubbles and consumption booms. This leads to currency appreciation "overshoot" as market expectations undergo irrational exuberance about growth expectations.

As consumers start relying on paper wealth in terms of rising asset prices, they engage in risky behavior of borrowing more, consuming more, and saving less. As domestic savings fall and open capital accounts provide the lure of cheap money, investors of local origin undertake unstable, short-term borrowing in hard currency to finance long-term projects. With the economy expanding on the basis of these reflexive asset bubbles—where expectations shape the reality—the outcome is unstable macroeconomic fundamentals. When the economy collapses under negative external shocks, like oil price shocks, currency devaluates drastically. This leads to devalued assets, high debts, and inflation. This causes capital flight as both international investors and domestic savers shift their assets abroad.

The credit crunch impacts further investment and affects local production and exports leading to a contraction of the economy. There is then increasing political demand for protection. With these kinds of market imperfections, growth is hampered, forcing governments to take protective measures to safeguard populations against the harshness of the vagaries of the market through expansionary policies geared to create safety nets. This creates loss of market confidence and results in cumulative capital flight.

Overall, capital flows in disequilibrating ways. "Hot money" flows for quick turnovers and quick profits and there is less productive capital-asset formation in the form of long-term FDI and fixed local capital. However, such market distortions can be corrected through strong political institutional structures—primarily the state undertaking growth measures.

Post-Keynesians point out that capital flight also depends on the capability of states to coordinate and create international regimes and institutions to regulate capital. This regulation would constrain herd-like behavior of investors that spreads contagion of financial crises and weakens economic fundamentals. However, in the current context of an international regime of neoliberalism that delegitimizes capital controls, governments have been forced to open up their economies to generate credibility even if they do not have the necessary domestic institutional strength.

Government Control

International institutions like the International Monetary Fund and the World Bank by advocating capital account liberalization as part of their development package conditionalities have further created an unstable financial system. The system is prone to crises of capital glut or crunch depending upon unstable and irrational market sentiments that lead to capital inflows and capital flight. While the Bank for International Settlements regime has sought to monitor capital behavior through increasing regulations, the regulations lag behind the rapid pace of technological growth that allow capital to evade and exit. Hence, government control of markets is critical.

Mixed economies like China and India that exercise significant government control over their economies have not lost out in terms of growth or ability to attract capital and prevent capital flight (e.g., the Asian financial crisis). Hence, a balance between growth and equity, free market and political intervention is critical.

See Also: Asian Financial Crisis; Bank for International Settlements; Capital Controls; Capitalism; Currency Speculators; Current Account; Free Markets; Globalization;

International Monetary Fund; Labor Standards; Mundell-Fleming Model; Open Economy Macroeconomics; Sustainable Development; World Trade Organization.

Bibliography. Philip Arestis, "Post-Keynesian Economics: Towards Coherence," *Cambridge Journal of Economics* (January 20, 1996); Victor A. B. Davies, "Postwar Capital Flight and Inflation," *Journal of Peace Research* (v.45/4, 2008); European Network on Debt and Development, "Addressing Development's Black Hole: Regulating Capital Flight," www.eurodad.org (cited March 2009); Ilene Grabel and Ha-Joon Chang, "Reclaiming Development from the Washington Consensus," Symposium on "The 15th Anniversary of the Washington Consensus: What Happened? What's Next?" *Journal of Post Keynesian Economics* (v.27/2, 2004–05); Adam Harmes, "Institutional Investor's and Polyani's Double Movement: A Model of Contemporary Currency Crises," *Review of International Political Economy* (v.8/3, 2001); John Harvey, "A Post Keynesian View of Exchange Rate Determination," *Journal of Post Keynesian Economics* (v.14/1, 1991); Andrew Van Hulten, "Capital Flight and Capital Controls in Developing Countries," *Progress in Development Studies* (v.7/4, 2007); Ian Katz, "Capital Flight to South Florida," *BusinessWeek* (June 25, 2007); Jonathan Kirshner, "The Political Economy of Low Inflation," *Journal of Economic Surveys* (v.15/1, 2001).

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Capital Gains Tax

A capital gain (loss) is an increase (decrease) in the value of an asset, such as that realized from the sale of stocks, bonds, precious metals, and property. Since a capital gain is an addition to economic well-being, theoretically it should be included in a comprehensive income tax base. However, in the interest of administrative ease, capital gains are taxed on a realization basis (when the asset is sold) rather than on an accrual basis (when the gain is earned). Deferring taxes in this way makes a big difference in return because the deferral allows the investment to grow at the before-tax rather than the after-tax rate of interest. In effect, the government gives the investor an interest-free loan on taxes due.

Not all countries implement a capital gains tax and most have different rates of taxation for individuals and corporations. In the United States, individuals and corporations pay income tax on the net total of all their capital gains just as they do on other income, but the tax rate for individuals is lower on "long-term capital gains," which are gains on assets that had been held for over one year before being sold, in order to reward long-term asset-holding. The tax rate on long-term gains was reduced in 2003 to 15 percent or to 5 percent for individuals in the lowest two income tax brackets, although in 2011 these reduced tax rates are scheduled to revert to the rates in effect before 2003, which were generally 20 percent. Short-term capital gains are taxed at the higher, ordinary income tax rate. Countries without a capital gains tax include Argentina, Belgium, Hong Kong, Mexico, Netherlands, Germany, and Singapore.

The primary argument for a lower tax or no tax on capital gains is the avoidance of the "lock-in" effect, so called because the tax system tends to lock investors into their current portfolios. The postponement of realization in order to avoid the tax results in a misallocation of capital because it no longer flows to the most economically worthy destination, where its return is highest. Exchange inefficiency results because an asset is not being held by those who value it the most. Further, capital gains tax on owner occupied housing discourages mobility, yet another inefficient outcome, since the after-tax price might not be enough to pay for a new equivalent home. Some research has also shown that a lower tax increases the return to investment, thus encouraging the rate of investment and the start of new businesses, which aids economic growth. However, this result is not universally accepted by all researchers in the field.

From an equity standpoint, since capital gains are among the most unequally distributed sources of personal income, any across-the-board capital gains tax cuts will dramatically reduce the share of all income taxes paid by the very wealthiest taxpayers and will increase the share of taxes paid by lower- and middle-income taxpayers. The large consequences of delaying taxes on investment returns provide further benefits to those high-income taxpayers with capital gains income.

See Also: Taxes; Corporate Income Tax.

Bibliography. L. E. Burman and P. D. Ricoy, "Capital Gains and the People Who Realize Them," *National Tax Journal* (1997); E. Engen and J. Skinner, "Taxation and Economic Growth," *National Tax Journal* (1996); M. K. McKee, "Capital Gains Taxation and New Firm Investment," *National Tax Journal* (1998); H. S. Rosen and T. Gayer, *Public Finance* (McGraw-Hill, 2007).

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Capitalism

Capitalism is an economic system characterized by private property and freely functioning markets without central planning. Prices in capitalist economic systems are determined by the free and open exchanges of buyers and sellers guided by self-interest but constrained by both an ethical consensus and the rule of law. While capitalism is widely viewed as the most effective system for generating wealth and higher material standards of living, capitalist economies also go through periods of instability, some of which have raised concerns about the overall appeal of the system.

In addition to concerns rooted in these periodic cycles, other concerns have been raised regarding broader social issues such as the distribution of income. Most economists believe that the benefits of capitalist systems have far outweighed the costs but this article will present both sides of the argument. To understand capitalism in its present form also requires that we consider the historical developments, both intellectual and material, that gave rise to the modern capitalist system.

Historical Development

Capitalist economic systems are relatively new developments in the broad span of human history and gradually evolved over time in response to previous economic systems. Yet the fundamental driving force of market capitalism, self-interested exchange between buyers and sellers, is as old as humanity itself. M. M. Postan and H. J. Habakkuk described evidence that mammoth hunters of the Russian steppes and the Cro-Magnon hunters of central France both obtained Mediterranean shells through long-distance trading. The late Robert Heilbroner wrote of how the Tablets of Tell-el-Amarna described lively trade in 1400 B.C. between the Levantine kings and Egyptian pharaohs. Large-scale enterprise, buttressed by financial systems, was a part of Ming China (1368–1644). In addition, Avner Greif has described how the Maghribi traders, a group of Jewish traders from parts of northern Africa and from Muslim Sicily and Spain, were engaged in long-distance trading throughout the Mediterranean by the 11th century. These traders seem to have enforced contracts, a critical requirement for any successful long-distance trading to emerge, through private coalitions composed of merchants and the agents who worked for them.

While there was little formal enforcement of business agreements at the time, these private coalitions enforced contracts themselves through the sharing of information; in effect, they relied on reputation mechanisms and punished those who violated business agreements. Since the emergence of long-distance trading was an important development on the long, slow path toward capitalism, these institutional developments that made distant trading possible are of central importance.

While important stepping stones on the path toward modern capitalism, none of these examples of early exchange were conducted within the economic system we call capitalism. The term itself was first used in the late 19th century and did not become common parlance until the early 20th century. However, most economists would view capitalism as an economic system that emerged out of the demise of mercantilism in the late 18th century. The mercantilist system had emerged alongside the nation-states of Europe and is generally dated to the early 16th century.

These powerful nation-states grew out of the demise of the highly structured medieval feudal society in which economic activity was centered around a manor, which was a district controlled by an elite member of feudal society called a lord. The manorial system was one in which lords owned property that was worked by landless serfs. This system was one of stagnation and lack of exchange, which contrasts nearly completely with the modern capitalist systems that are identified by constant change and the centrality of the free exchange process. Eventually, medieval feudal society broke down in part because of the

Black Death that killed at least one-third of Europe's population beginning in 1348.

The Black Death also intensified social tensions within European feudal society. The sharp declines in urban population (and thus demand) forced down the price of food while wages simultaneously rose because of the shrinking supply of workers. In response, wage controls that sought to prevent wages from rising too far were imposed but these only served to magnify the already rising social tensions. Worker revolts occurred throughout Europe and ultimately altered the economic conditions of feudalism. In the end, these changes gradually brought about freedom for the serfs. If there is any silver lining to the disastrous 14th century in Europe it is that it paved the way for the eventual emergence of capitalism. Yet there was one more step on the path to market capitalism, the economic system known as mercantilism.

Mercantilism

Mercantilism, while not generally viewed as a coherent school of economic thought, can best be described as a system of extensive economic regulations whose purpose was to enhance the power of the nation-state by acquiring as much gold and silver as possible. This was to be done by selling more to foreigners than was purchased from them; that is, the goal was to export as much as possible while importing as little as possible. To accomplish this, the mercantilists established extensive regulations on both international trade and domestic industry. In 1684 Philipp von Hornick enumerated a set of mercantilist policies including those that would promote a large population to drive down wages and thus benefit the merchant class that was most directly engaged in exporting activity.

The mercantilists erroneously viewed international exchange as a zero-sum game; that is, they believed there were winners and losers in international trade and they naturally sought to be on the winning side. Thanks to David Ricardo's seminal work first published in 1817, *Principles of Political Economy*, economists now almost universally believe that international exchange is a positive-sum game; that is, trade benefits both trading partners. Despite its flaws, mercantilism characterized the economic policies pursued by the major European powers from between the 16th and 18th centuries. Indeed, the original 13 American colonies were established by England as a central component of its mercantilist policy.

The Enlightenment

Eventually, both the internal contradictions of mercantilism and the growing intellectual tide that was part of the Age of Enlightenment (roughly from the Glorious Revolution of 1688 to the end of the French Revolution in 1789) cleared the way for the move toward modern capitalism. The establishment of capitalism, while slowly building over the long term, awaited a powerful and penetrating intellectual argument. This argument would have to convincingly make the case that lack of central direction would not, in fact, result in chaos. It would have to be built on foundations that were seemingly contradictory—that an economy composed of individuals who behaved in ways that were solely consistent with their own personal interests would not degenerate into a chaotic war of all-against-all. This was a high intellectual hurdle to jump and required not just a penetrating argument but an intellectual environment that was a least open to radical ideas. It is thus one of those fortunate coincidences of history that the Scottish philosopher Adam Smith was born into the revolutionary period of Enlightenment that largely defined the western world, at least intellectually, in the 18th century. The Enlightenment thinkers sought to apply reason and systematic, logical thinking to all areas of human activity.

Born in Kirkcaldy, Scotland, in 1723, Adam Smith became the father of modern economics with his monumental treatise *An Inquiry into the Nature and Causes of the Wealth of Nations*, which was published in 1776. If one must place a date on the beginning of capitalism, the publication of Smith's magnum opus is not a bad one to choose. In it, Smith argued that markets could harness the innate self-interest that motivates each human being and exploit it for the common good. In perhaps the most well-known line from the *Wealth of Nations*, Smith wrote,

> It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own self-interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantage.

Adam Smith, whose ideas have been central to capitalist arguments, is depicted in this 1790 engraving.

Self-interest, commonly thought to be a private vice, could be turned into a public virtue. This notion had earlier been mentioned by Bernard Mandeville in *The Fable of the Bees* but it was with Smith that it was made part of an overall theory of economic development. Both parties, Smith explained, benefited from the process of voluntary exchange that is a defining feature of capitalism. Yet it is less clear what the impact of self-interested behavior is for society at large. Will this pursuit of self-interest lead to a degeneration of society into a war of all-against-all, as the philosopher Hobbes had most notably argued? How, in other words, is capitalism prevented from simply destroying itself?

The echoes of Smith's eloquent description of the benefits of competitive markets are found in modern mathematical economics (the first fundamental welfare theorem is a mathematical version) and underlie the support afforded free markets by the vast majority of economists. While most economists focus on Smith's *Wealth of Nations*, its predecessor, *The Theory of Moral Sentiments*, is equally important and informs us as to the ethical foundations of capitalism that are often overlooked. Smith's work in fact simultaneously examined both ethics and positive laws in conjunction with market exchange. Smith argued that in the absence of a strong civic ethics we would be forced to rely on increasingly extensive laws which would increase the size and role of the government. This, according to Smith, was the very thing that would stifle economic freedom and prevent the process of growth that he had laid out in the *Wealth of Nations*. Ethical underpinnings were thus central to the success of the capitalist system. Without those underpinnings, the heavy hand of government regulation would be required and would eventually extinguish the very spirit of capitalism.

One of the most counterintuitive ideas that Smith, Hume, and other scholars put forth was how a society that was not regulated from above could still be orderly. The essence of the argument was that the marketplace itself was a form of what the Nobel Prize–winning economist Friedrich Hayek called "spontaneous order." The fundamental problem is that complex social order simply cannot be constructed by a central authority because the information requirement is beyond any person's abilities to manage. The price system, however, aggregates this information and coordinates behavior so efficiently that it seems as if it must be guided or structured in some way. This coordination, while appearing to be the product of some grand design, is actually nothing more than the product of millions of individuals who followed only their own interests. None had any intention of creating overall social or economic order, so the coordination we observe was a beneficial unintended consequence of the pursuit of self-interest. In Adam Smith's words, "man is led to promote an end which was no part of his intention." This is what is known as Adam Smith's concept of the Invisible Hand.

While Smith deservedly gets much of the credit for the intellectual sea change that pushed the Western world toward market capitalism, he was certainly not alone in this. Nor was Smith the first to extol the benefits of self-interested market exchange. Intellectually, other schools of thought had long been laying the groundwork for Smith. Arguments defining the benefits of open exchange go as far back as Ancient Greek antiquity. Aristotle most prominently discussed the benefits of private property in the 4th century B.C.

Aristotle also saw the importance of private property rights, which are fundamental to capitalist economies. While the nuggets of economic thought that we find in Ancient Greece were practically lost in the Dark Ages, a group of Catholic Church scholars known collectively as the Scholastics would revive elements of Aristotelian thought from approximately the 9th to the 13th century. While the Scholastics are most remembered for their erroneous views on just price and usury (prohibitions on interest), they also adopted the favorable views of private property rights from Aristotle and reintroduced them to Western thought.

The French Physiocrats, led by Francois Quesnay, the court physician to Louis XV, forcefully argued in favor of laissez-faire free-market principles and were important in developing the case for free-market capitalism. The Physiocrats focused not on the accumulation of gold and silver as the mercantilists had done, but argued that the true wealth of an economy lies in its net product; that is, the surplus produced by the agricultural sector. Their focus on agriculture as the only "productive" class (note they did not view manufacturing as unimportant but did not believe it produced a net product) led them to the free-market principles later expanded on by Smith and others.

The various mercantile regulations in France negatively impacted agriculture in that country according to the Physiocrats. Internal taxes on the movement of grains between regions, for example, were part of the vast mercantilist regulatory structure that hampered the agricultural sector. There were also internal restrictions on the mobility of labor so that farmers in some regions faced labor shortages that could not be corrected by wage movements, so those farmers were forced to reduce production activities. The Physiocrats thus arrived at their free-market views largely through their emphasis on the importance of agriculture, and they subsequently called for lifting restrictions on internal trade and other regulatory burdens that had been hoisted upon the French economy by the mercantilists.

David Hume, a friend and contemporary of Adam Smith, was also a towering figure of the Enlightenment period who helped to usher in the age of capitalism. Indeed, it was Hume who first launched a devastating intellectual attack on the flawed mercantilist trade policy. In what became known as Hume's price-specie flow mechanism, he explained that the inflow of gold and silver (specie) that was central to the mercantilist policies would only generate higher prices throughout the mercantilist economy. As the prices of exported goods were pushed higher, Hume explained that this would make foreign consumers of those exported goods purchase fewer of them. Maintaining a trade surplus indefinitely was therefore not a realistic national economic objective.

Later economists would expand on and modify the principles of market exchange that were laid out in the late 18th century, but the fundamental intellectual shift had been made. England's Industrial Revolution was under way and the transition to modern capitalism was at hand both there and across the ocean in the burgeoning new American states.

The United States

The American economy got its start with a small British outpost in Jamestown, Virginia, in 1607 but was far from a freely functioning capitalist economy at the time. The British colonized America for the purpose of enhancing British economic power in support of its mercantilist interests. Wide-ranging mercantilist restrictions governed the colonial economy, but even the colonists were generally wealthy compared both to other citizens of the world at that time and even compared to some who live in poverty today.

With the emergence of the new nation after successfully breaking away from British rule, modern capitalist institutions began to emerge, setting the stage for the dramatic economic advances of the 19th and 20th centuries. Alexander Hamilton, the first secretary of treasury under President George Washington, was central in the construction of the early American financial and economic system. These pillars of American capitalism helped to create the conditions needed for the dramatic success that was to come. Hamilton worked feverishly to create an American version of the Bank of England, although he was accused by political opponents of harboring British sympathies partly as a result of this.

Hamilton managed to get his wish and the First Bank of the United States was chartered by Congress in 1791. Hamilton also stubbornly insisted on a powerful manufacturing-oriented economy to the dismay of his political opponents (Thomas Jefferson most prominent among them) who favored a rural agrarian economy. Ultimately, the early American financial system that Hamilton helped build proved resilient despite a variety of problems throughout the 19th century. By the end of that century, the American economy was the most powerful in the world.

With the rise of American capitalism came dramatic improvements in the quality of life. Economic historians use not only data on employment, production, and prices to measure economic performance but often use less conventional economic variables such as height, weight, and average lifespan to gauge living standards. According to the Centers for Disease Control, American life expectancy at birth was 47 years in 1900 but had risen to nearly 78 years in 2005. gross domestic product (GDP) per capita was $4,921 in 1900 (measured in 2000 dollars), yet had risen some 6.7 times to $38,291 by 2007. With the material wealth produced by American capitalism comes an improved living standard as measured either by life expectancy, weight, height, or income.

Even more mundane measures of material progress are telling. The U.S. Census Bureau reports that over 70 percent of poor American households (those households below the official poverty level) now have air conditioning; by contrast, only 12 percent of all U.S. households had air conditioners as late as 1960. While some segments of the American population have benefited more than others, there is no denying that all have experienced dramatic improvements in material living conditions over the last century.

Emerging and Transition Markets

Most of the world seems to have accepted that capitalism, despite its flaws, is effective at generating economic prosperity, so countries from Eastern Europe to China have adopted capitalist elements in recent years. In some cases, the market institutions of capitalism have developed spontaneously. In particular, John McMillan described how a tiny clandestine meeting of households in the village of Xiaogang in China's Anhui Province initiated dramatic changes in the economic structure of that country. Embedded in that story is a stark tale of the differences between that singular institution of capitalist economies, private property, and the communal property that had been brought to China by the communists in 1949.

The institution of private property, like all economic institutions, creates incentives to which people respond in predictable ways. Unlike common property rights under which individuals share output equally, private property rights link work effort to reward and thus incentivize people to work hard and produce as efficiently as possible. Private property rights reforms created linkages between effort and reward that were missing under the old common property rights systems of Chinese communism. China has now, as a result of these and other economic reforms, become a major economic powerhouse. The internal changes in the Chinese economy have resulted in a more than tenfold increase in GDP since 1978. According to the *CIA World Factbook*, over 5,000 domestic Chinese enterprises have created direct investments in 172 different countries and regions.

While it holds long-term benefits, transitioning to capitalism is not an easy task. While capitalism is an effective system for generating aggregate wealth, the specifics of the economic institutions that make up an effective system are much more complex. Simply transferring economic institutions that work well in established Western economies to those in the developing world or to transition economies is not sufficient. As such, there are transition economies that have struggled and that continue to struggle. Over time, however, those economies that manage to successfully implement market-based reforms have the potential of reinvigorating their economies and contributing to broad-based increases in the living standards of their citizens.

Critiques

While economists generally see the benefits of free and open exchange in capitalist economic systems, this is not to say that capitalism is a panacea. Historically, the most prominent critic of capitalism was the German economist and philosopher Karl Marx. Marx's critique, like the man himself, was complex and multifaceted but the essence of his objection to capitalism was that it allowed capitalists to exploit labor. The upper-class capitalists (the bourgeoisie) would eventually find themselves in conflict with the free labor force (the proletariat) because of the separation between capital and labor. The conflict is generated by the ever-present push, because of competition among firms in capitalist systems, to replace labor with capital. As the proletariat were increasingly exploited and eventually replaced by capital, they would rise up in revolt and replace the bourgeoisie as the dominant social class. This, in Marx's view, would create a new socialist order. There are, however, a number of contradictions in Marxist theory that have led most economists to reject it as a valid critique of capitalism.

Despite these problems with the Marxist arguments, there are a variety of other critiques of capitalism. For example, capitalist systems are routinely criticized on grounds of inequality. Capitalist economies are structured around a system of rewards and punishments. Those who find better and more efficient ways to produce are rewarded. Henry Ford, for example, became one of America's most successful businessmen by figuring out a better way to manufacture his automobiles through the assembly line. Those who manage to find novel and unique ways of "building a better mousetrap" have incentives to do so because of the potential profits that are realized only with success. Thus, some people in capitalist economies can rapidly acquire enormous amounts of personal wealth. Others are less fortunate and, through either a lack of skill or simply bad luck, end up on the lower end of the income distribution.

Many who object to capitalism point to the wide divergence in economic standing among citizens of capitalist economies and propose policies to try to level out that income distribution. While one might see the benefits of such policies in terms of fairness, there is a risk of destroying or at least reducing the very incentives that make capitalism such a dynamic and powerful system for wealth creation if these policies go too far. Moreover, it is easy to overlook the extent to which the dynamic nature of capitalist economies distorts simple measures of inequality.

There are opportunities to move up the income distribution over time in a capitalist system that may not be available under alternative economic systems. The U.S. Treasury Department has reported that from 1996 to 2005, as in the previous 10-year period, a majority of American taxpayers moved from one income group to another. This study found that about half of taxpayers who began in the bottom quintile of the income distribution moved to a higher income group within ten years. For those in the top income group in 1996, only one-quarter of them remained in that group in 2005, so movement across the income distribution is not always upward. Nonetheless, static portraits of skewed income distributions in capitalist economies are misleading because they fail to capture this income mobility, which is a unique feature of capitalism.

Other Problems

A variety of other problems are associated with economic growth. For instance, China's rapid growth, which resulted from its transition toward market capitalism, has led to some serious concerns about environmental damage. While it may take some time to solve these problems, there are promising market-based solutions to issues of environmental pollution including carbon taxes and cap-and-trade systems.

Even those who are ardent supporters of capitalist economic systems admit that it is a system characterized by the creative destruction described by Joseph Schumpeter. The very dynamism that can generate enormous wealth for individuals can and does destroy old, inefficient methods of production and can thus displace workers in those industries. Yet it is this fundamental dynamism that has made capitalism the most successful economic system for generating material wealth and rising living standards.

Despite the economic growth that finally occurred with the introduction of capitalism, market economies do experience periodic expansions and recessions. Effective government fiscal (tax and spending) and monetary policy may be able to counter these fluctuations, as argued by the economist John Maynard Keynes and by most macroeconomists today. In his classic book *The General Theory of Employment, Interest and Money*, Keynes argued that the government had an important role to play in stabilizing these fluctuations. It could, he argued, "prime the pump" through deficit-spending during economic downturns. By injecting money into the economy through the use of fiscal policy, Keynes believed the government had the ability and obligation to counter the business cycle itself. Keynes was writing in the midst of the greatest challenge to market capitalism ever experienced, the Great Depression.

The "Roaring Twenties" came to an abrupt end in October 1929 when the U.S. stock market crashed. While not the first sign of impending trouble in the economy (the index of industrial production, for example, had turned down in the summer of 1929), the financial market crash was unprecedented and led to widespread consumer pessimism across the country. Whatever its causes, the Great Depression ushered in a serious challenge to capitalism as inflation-adjusted gross national product (GNP) fell by 29 percent between 1929 and 1933 and about one-quarter of the American workforce was unemployed by 1932–33. Waves of bank failures rocked the financial system, wiping out the savings of millions in an era before federal deposit insurance.

Perhaps most important, intellectual challenges to capitalism and its apparent instability threatened to bring down the system altogether. In many ways that are still apparent today, the Great Depression did fundamentally change capitalism. Government did, as Keynes urged, adopt a more interventionist approach to the economy. Both fiscal and monetary policy have been used to counter business cycle fluctuations, although some economists actually blame government intervention for exacerbating the cycles in the economy. Most prominent among those critics was Milton Friedman, whose work with Anna Schwarz on American monetary history blamed monetary policy itself for the downturns. Considerable disagreement remains among economists on the appropriate degree of involvement of the government in the economy.

The Future of Capitalism

True capitalism, in the strictest sense, does not exist; instead, the United States today might be more accurately described as a system of welfare capitalism. That is, we have redistributive income taxes in which the wealthy pay a higher fraction of their income than the poor, along with a wide range of government aid programs. The government itself has become a very large part of economic activity, employing more people than any other sector of the economy (government employment accounts for approximately 16 percent of total nonfarm employment in the United States).

Nonetheless, the basic tenets of free-market capitalism remain in the United States and are emerging in a growing number of countries around the world. Free-trade agreements, robust private enterprise, and sound capitalist institutions all hold promise for the future. Yet there is no reason to think that the very long process of the development of capitalism will stop here. There will undoubtedly be continued challenges and incremental modifications to the system in the years to come.

See Also: Communism; Globalization; Free Markets; Free Trade.

Bibliography. B. Mandeville, *The Fable of the Bees or Private Vices, Publick Benefits* (Clarendon Press, 1732); K. Marx, *Das Kapital* (Penguin, 1992 [orig. pub. 1867]); J. McMillan, *Reinventing the Bazaar: A Natural History of Markets* (W. W. Norton, 2002); M. Postan and H. Habakkuk, *Cambridge Economic History of Europe* (Cambridge University Press, 1967); J. Schumpeter, *Capitalism, Socialism and Democracy* (Harper, 1975 [orig. pub. 1942]); A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Modern Library, 2000 [orig. pub. 1776]).

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Capital Repatriation

Repatriation is the return of something or someone to its home country, originally referring to the return of soldiers to their homeland at war's end. In economics, it is used to refer to the conversion of money, as when tourists convert their currency back to their native currency when returning from a trip—or when capital from a foreign investment travels back to the country of its source, either through dividends or when a foreign investor sells his holdings.

The repatriation of capital typically refers to the conversion of a foreign investor's earnings into his native currency, which is necessary for him to consider the investment liquidatable. Some governments restrict how much capital can be repatriated in a given time, in order to protect their national economies: If a country that had actively sought foreign investors for a long period were to hit an economic slump, losing that foreign capital to panic selling could be enough to severely exacerbate the slump. Of course, those foreign investors are understandably nervous about investing money they can't get back, and so a balance must be found if investors are to be attracted. Sometimes it is a company trying to attracting the investors, while the government setting the policy remains indifferent—making a compromise position harder to reach.

Countries sometimes temporarily restrict capital repatriation, to prevent such panic or for other reasons. Malaysia suspended capital repatriation in 1998, in the wake of the Asian financial crisis, during which its currency had lost a third of its value and the stock market suffered a 70 percent loss. On the day the ban was lifted a year later, only $328 million was repatriated, of the more than $32 billion that could have been; not only was the attempt to prevent panic selling apparently successful, but the flow of money was delayed to a time when the economy was somewhat more stable. (Many of these foreign investors likely benefited, insofar as in many cases the investments they sold off were worth more in 1999 than they had been at the inception of the ban.) In response to the lift of the ban, the stock market fell less than 2 percent, despite gloomy predictions.

The government at the other end of the repatriation process sometimes enacts special laws, too. When Russia's economy stuttered in the 21st century, a temporary tax amnesty was declared on repatriated capital—meaning that Russians and Russian companies with foreign investments could cash those investments in, turn their money back into Russian currency, and not have to pay taxes on their earnings, if they did so between January and June of 2006. This included previously undeclared income and assets, which in post-Soviet Russia were rampant and had previously been a frequent target of Russian tax authorities. The goal here was simple: To bring money back into the country, for the health of the economy and of the banks (giving them more they can lend out, to the benefit of debtors). Income from repatriating capital is sometimes treated differently from income derived from domestic investments—and when it is, it is usually taxed higher (both to encourage domestic investing and to make up for the lack of tax revenue that would have been generated had the money remained in the country).

In some cases, laws about capital repatriation differ depending on the country to which or from which the capital is repatriated—usually because of treaties between the country in which the investment is made and the country to which the capital is repatriated. Turkey and the United States, for instance, have a bilateral trade agreement protecting the repatriation of capital between the two nations; multilateral trade agreements exist as well. Agreements often also seek to encourage investing by protecting investors from double taxation (in which they are taxed both by their home country and by the country of their investment). In the European Union, investor groups are protected from double taxation but individual investors are not; there are regulations protecting investors within the EU, though, ensuring that tax rates will be uniform.

Developing countries in the midst of reforms or new regimes often encourage capital repatriation for the same reason, as pre-NAFTA Mexico did when it deregulated its economy in the early 1990s, in the attempt to further its recovery from the 1981 financial crisis. Countries wishing to attract foreign investors generally need to offer unrestricted capital repatriation, or at least offer legal guarantees to protect the investors' rights; pursuing a lawsuit in a foreign country is a scenario no investor wants to risk. Often there is a relationship between a country's laws pertaining to capital repatriation and its laws about which domestic companies can be majority foreign-owned; investors typically prefer to deal in countries where foreign control of a company is legal, so that their foreignness doesn't make them a "second-class" investor.

See Also: Asian Financial Crisis; Foreign Direct Investment, Horizontal and Vertical; Investor Protection; Trade Barriers; Trade Liberalization; Trade Sanctions; World Trade Organization.

Bibliography. David F. DeRosa, *In Defense of Free Capital Markets: The Case Against a New International Financial Architecture* (Bloomberg, 2001); Khosrow Fatemi, *Foreign Exchange Issues, Capital Markets, and International Banking in the 1990s* (Taylor and Francis, 1993); Morris Goldstein, *Determinants and Systemic Consequences of International Capital Flows* (International Monetary Fund, 1990); Miles Kahler, *Capital Flows and Financial Crises* (Cornell, 1998); Roger Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management* (Random House, 2001); Maxwell Watson, *International Capital Markets: Developments and Prospects* (International Monetary Fund, 1986).

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Cardinal Health

Nineteenth on the Fortune 500 list, Cardinal Health is one of the leading wholesale drug and health products companies in the world. Ohio businessman Robert Walter founded the company in 1971, as Cardinal Foods, a food wholesaler.

Cardinal Foods expanded its operations throughout the 1970s, ending the decade with its 1979 purchase of the Bailey Drug Company, a regional drug distributor, and reorganization as Cardinal Distribution, distributing both pharmaceuticals and food. In 1983, having expanded to four distribution centers in the Midwest, Cardinal went public. It soon expanded its coverage by buying out the Buffalo-based Ellicott Drug Company in 1984, John L. Thompson Sons & Co. (Peabody, MA) and James W. Daly Inc. (Troy, NY) in 1986, and Leader Drug Stores (Buffalo) in 1987. Most of these acquisitions expanded the pharmaceutical half of Cardinal's business, and the company decided to focus on that exclusively, selling its food distribution operations to Roundy's Inc. Newly reorganized, the company grew rapidly, becoming one of the top two distributors in every region in which it did business by the 1990s.

Expansion from the 1990s on remained within the health services industry. Acquisitions included more drug distributors, but also the Medicine Shoppe pharmacy franchise, the pharmaceutical packing company PCI Services, the surgical product manufacturer Allegiance Corporation, the medical-surgical distribution company Bergen Brunswig, and Owen Healthcare, a hospital pharmacy management company—among others. In 1994 Cardinal Distribution became Cardinal Health Inc., and began to expand beyond its regional coverage to a national focus. By 1996 the company was operating some of its services in England and Germany as well as the United States.

Cardinal.com launched in 2000, the crest of the dotcom boom, and has become the largest healthcare supply online catalogue. After further acquisitions, the company again streamlined, offering its services worldwide under the Cardinal Health brand name, while entering into the pharmaceutical and biotech research field with its acquisition of Magellan Laboratories.

More cutting-edge technologies followed, including the gene insertion techniques developed by 2003 acquisition Gala Biotech. The consultancy firm Beckloff Associates was acquired in 2004 to assist with strategies for bringing biotech and pharmaceutical products to market in the United States, Canada, and the European Union, markets with very specific legal and regulatory concerns.

Increasingly, Cardinal's characteristic approach to doing business and organizing its firm has been to emulate the vertical integration practiced by Andrew Carnegie a century earlier, albeit adjusting for a different industry and different climate. While Pharmacy Benefits Management companies are increasingly affiliated with chains of pharmacies in order to streamline their business, companies like Cardinal go further than that, an approach that could almost be called holistic. As Carnegie controlled the stages of life of steel, and the businesses that shepherded it through them, Cardinal takes a similar approach to pharmaceuticals, maintaining watch over them from their conception and birth through their sale at the point of purchase.

Robert Walter no longer serves as CEO, but has remained on the board of directors, with plans to retire in the summer of 2009.

See Also: Acquisitions, Mergers, and Takeovers; Caremark RX; CVS/Caremark; Vertically Integrated Chain.

Bibliography. Jack W. Plunkett and Michelle LeGate Plunkett, *Plunkett's Health Care Industry Almanac 2009* (Plunkett Research, 2004); S. Rhea, "Cardinal Health Digs Deep," *Modern Healthcare* (April 30, 2007); Robert E. Spekman and Anwar Harahsheh, "Collaborative E-Commerce: Shaping the Future of Partnerships in the Healthcare Industry," papers.ssrn.com (cited March 2009).

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Caremark Rx

Caremark Pharmacy Services, a subsidiary of CVS Caremark Corporation, is a Nashville-based pharmacy benefit management (PBM) company.

Caremark was the name of a unit of Baxter International (established 1931), a global healthcare company headquartered in Illinois. Baxter's Caremark division (originally an independent company called Home Health Care of America) handled its PBM, the third-party administration of medical prescriptions. Doing business as a Pharmacy Benefit Manager entails processing and paying out prescription claims filed by pharmacies, negotiating with pharmaceutical manufacturers, and acting as the middleman between pharmacies and pharmaceutical companies. This often extends to the PBM being responsible for establishing the formulary: the list of medical prescriptions that will be covered by a given benefits plan (with drugs not on the formulary costing the consumer more). Formularies typically encompass all classes of pharmaceuticals but may not include all brands. While consumers see those elisions in terms of the effect on themselves, from a business perspective there is an important effect on the pharmaceutical company: if a PBM includes Drug X but not Drug Y in its formulary, Drug Y is likely to lose business among the customers affected by the PBM's formulary.

Because of this and the bulk purchases that result from working with a large number of pharmacies, PBMs are able to negotiate lower prices, which can translate into additional services for the customer. As a division of Baxter, Caremark pioneered this style of Pharmacy Benefit Management by offering a mail order pharmacy service in 1985, years before online pharmacies would become a going concern. In the same year, Caremark began offering home care services. In 1991, Caremark acquired what was then the largest PBM in the United States, Prescription Health Services. Baxter spun Caremark off the following year, as a separate publicly held company.

In 1996 Caremark was acquired by MedPartners, a separate company founded by the HealthSouth Corporation. MedPartners went into receivership shortly thereafter, because of difficulties it had managing other operations. By the end of the 1990s it streamlined the company, divested itself of all non-PBM concerns, and renamed the company Caremark Rx. In 2004 Caremark Rx merged with another PBM company, AdvancePCS, retaining key members of management and aspects of its business practices. In 2007 it merged with CVS to form CVS Caremark Corporation.

Caremark Pharmacy Services now operates as one division of CVS Caremark Corporation, managing its PBM operations; the other division is CVS/pharmacy. As a result, Caremark now has an established relationship with the pharmacies with which it does business, further bolstering its bargaining position with pharmaceutical companies. It has become one of the leading PBM companies, working with over 2,000 health plans.

See Also: Cardinal Health; CVS Caremark.

Bibliography. Milt Freudenheim, "Caremark, A Spinoff By Baxter," *The New York Times* (June 13, 1992); Jan Crawford Greenburg, "Healthy Penalties in Caremark Fraud Case," *Chicago Tribune* (June 17, 1995).

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Caribbean Community (Caricom)

The Caribbean Community, or Caricom, is a customs union comprised of 15 Caribbean countries. The member states of Caricom are Antigua, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Lucia, St. Kitts, St. Vincent, Suriname, and Trinidad and Tobago. Caricom was established under the Treaty of Chaguramas in 1973 and provides for free trade in goods between member countries and a common external tariff against nonmember countries.

Caricom had its genesis in the failed British West Indies Federation that was established in the late 1950s and represented the first real attempt at Caribbean economic integration. The federation collapsed in 1962, but talks between political leaders in the region on the need to forge closer ties continued at a series of Heads of Government Conferences beginning in July 1963. In December 1965 the

Fishermen in Haiti, where two-thirds of the population work in agriculture and 80 percent live beneath the poverty line. The country is one of the 15 members of the Caribbean Community working toward greater economic integration in the region.

Agreement at Dickenson Bay, Antigua, was executed giving rise to the Caribbean Free Trade Association (CARIFTA). CARIFTA was designed to promote the balanced development of the region by promoting free trade and fair competition. CARIFTA, however, did not function as expected and was replaced by Caricom in 1973.

The Treaty of Chaguramas that established the Caribbean Community and the Caribbean Common Market sets out the following objectives for the Community: (1) the economic integration of the member states by the establishment of a common market regime—referred to as the Common Market, this regime was designed to strengthen trade and economic relations between members, ensure the equitable distribution of the benefits of increased economic activity, and promote economic independence for member countries; (2) the coordination of the foreign policies of member states; and (3) functional cooperation between people of member states, including greater understanding in the cultural, technological, and social spheres. It should be noted that under the Treaty of Chaguramas the Caribbean Community and the Common Market are distinct legal entities. This institutional arrangement allowed countries to be members of the Community but not the Common Market.

Article 10 of the treaty provides for the establishment of a number of institutions to achieve the objectives set out above. These institutions include (1) the Conference of Ministers responsible for Health; (2) the Standing Committee of Ministers responsible for Education; (3) the Standing Committee of Ministers responsible for Labour; (4) the Standing Committee of Ministers responsible for Foreign Affairs; (5) the Standing Committee of Ministers responsible for Finance; and (6) the Standing Committee of Ministers responsible for Agriculture.

Each member state represented in an institution is entitled to one vote. Recommendations are made by a two-thirds majority that includes at least two of the more developed countries in the region. Recommendations are not, however, binding on member states. Under the terms of the treaty the administrative affairs of the Community are conducted by the Community Secretariat. The Secretariat is based in Georgetown, Guyana, and its duties include facilitating meetings of the Community and its institutions, initiating studies that relate to economic and functional cooperation issues, and undertaking follow-up actions based on decisions taken at meetings.

As noted, the Community and the Common Market are distinct legal entities. In terms of the Common Market, the Common Market Council is the decision-making organ and is comprised of one government minister from each member state. The administrative functions of the Common Market are undertaken by the Community Secretariat.

Under the provisions establishing the Common Market, member states are prohibited, with certain exclusions, from applying import duties on any product of Common Market origin. The agreement also prohibits member states from applying duties or charges on any product exported from their jurisdiction to a member country. Further, under the agreement quantitative restrictions cannot be imposed on any product of Common Market origin.

It should be noted, however, that the agreement does not prohibit a member country from taking appropriate action to address dumping and subsidized imports. A member state of the Common Market is allowed to impose temporary import restrictions on products coming in from other member states if its domestic industry or sector is in difficulty; i.e., is faced with a significant decrease in internal demand. Such restrictions cannot, in general, be imposed for more than 18 months.

Between 1993 and 2000 an intergovernmental task force was mandated to amend the Treaty of Chaguramas with a view to transforming the Common Market and creating the Caricom Single Market and Economy (CSME).

See Also: Common External Tariff; Common Market; Countervailing Duties; Country of Origin; Free Trade; Free Trade Area of the Americas.

Bibliography. Caricom Secretariat, *Treaty Establishing the Caribbean Community* (July 4, 1973); Caricom Secretariat, www.caricom.org (cited March 2009).

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Carrefour

Carrefour (pronounced kar'fur) is an international hypermarket chain headquartered in Levallois-Perret, France. The name means "crossroads" or "junction" in French. It is the second-largest retailer in the world after Wal-Mart, with 2006 retail sales of $98 billion, income of $2.85 billion, and a compound annual growth rate of retail sales of 2.3 percent over 2001–06. The company reported $1.1 billion net profits during the first two quarters of 2008, a 3.1 percent increase from the year before.

The company was formed by the Fournier and Defforey families in 1959, and opened its first supermarket in Annecy, Haute-Savoie, France, in 1960. In 1963 they created a new store concept, the hypermarket, when they opened in Sainte-Geneviève-des-Bois, France, by selling both food and non-food items in a store with a floor area of 2,500 square meters. It currently operates in over 31 countries using primarily hypermarkets, in addition to other formats such as cash and carry warehouse club, discount department store, supercenter, superstore, and supermarket.

In addition to their presence in France, Carrefour now operates in other countries. In Europe it has opened stores in Spain (1970), Greece (1991), Italy, Turkey (1993), Poland (1997), Belgium (2000), Romania (2001), and Cyprus (2006). In Asia, they operate in Taiwan (1989), Malaysia (1994), China, United Arab Emirates (1995), Singapore (1997), Indonesia (1998), Japan, Oman, Qatar (2000), Jordan, Kuwait (2007), and Pakistan (2008). In the Americas, they have a presence in Brazil (1975), Argentina (1982), Colombia (1998), and in the Dominican Republic (2000). In Africa, their stores are in Tunisia (2001), Egypt (2002), and Algeria (2005).

According to Carrefour's human resources policies, seven specific values are very important to the operations of the company. They include (1) free-

A Carrefour market in a shopping center in Warsaw, Poland, where the company ranks second in the grocery market.

dom: respecting the customers' freedom of choice by offering a variety of store formats and a diversity of products and brands at various price points; (2) responsibility: fully accepting the consequences of the company's actions on the customers, employees, and the environment; (3) sharing: leveraging the expertise and strengths among these stakeholders to create value; (4) respect: for all parties involved and listening to them and accepting their differences; (5) integrity: dealing honestly and keeping their word; (6) solidarity: helping local economies, businesses, and creating jobs, applying fair trade practices; and (7) progress: encouraging innovation and serving the needs of the people.

Since 2006 the company has continued to consolidate its position in France by opening their 218th hypermarket in the country. In Romania, they continue to solidify their position by the integration of five hypermarkets. In Spain, they have acquired four hypermarkets and two gasoline stations from Caprabo. The group is also involved in developing new concepts, like a mini-hypermarket, Carrefour-Express, and accelerating the pace of organic growth. Overall, this has now created 103 hypermarkets and 1.4 million square meters of new sales floor area in this country.

In Taiwan, they have 45 hypermarkets with the integration of Carrefour Tesco. In Poland, the acquisition of Ahold Polska catapulted the group to second place in the country's grocery retail market, with 194 stores, including 15 hypermarkets. In Great Britain, the company is trying to speed up the information on on-shelf availability through tiered information-sharing with suppliers. They expect to increase the level of integration and enhance collaboration. In the Middle East (including Tehran), Carrefour is in the process of opening shops through Majid al-Futtaim (MAF), its United Arab Emirates–based franchisee.

Despite its successes, Carrefour has also had to withdraw from a few markets, including Chile (2004), the Czech Republic and Slovakia (2005), Hong Kong (1998), Japan (2005), Mexico (2005), Portugal (2007), South Korea (2006), Switzerland (2007), and the United States (1993).

The Carrefour group also owns private labels such as *Produits libres* (free products) used for food products such as oil, biscuits, milk, and pasta sold in unbranded white packages at nominal prices. The company has also diversified outside the retail market by beginning to offer Carrefour Insurance Services in 1984, and a real estate property company called Carrefour Property in 2004. Carrefour's real estate valuation of its real property holdings is between $29.7 billion and $35.7 billion.

See Also: France; METRO; Wal-Mart Stores.

Bibliography. Carrefour, www.carrefour.com (cited March 2009); N. Bozorgmehr, "Carrefour Aims to Shake Up Iran's Food Industry," *The Financial Times, London,* FT.com (cited March 2009); Katya Foreman, "Carrefour Profits Up," *Women's Wear Daily* (v.196/46, September 2008); Mim M. Spencer, "Earnings Digest: Carrefour Profit Rises, Shares Increase 7.2," *Wall Street Journal* (August 30, 2008).

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Carrying Costs

Carrying cost is an accounting term that refers to the cost of holding a financial position. The position may be purely financial such as the cost of holding securities. Or, it may be the cost of holding physical inventory for manufacturing, for shipping, or for sale. Businesses all over the world have to handle carrying costs in fairly similar ways because they are the natural conditions of business.

In finance the carrying cost of holding a position is determined by whether it is long or short. If the position is long and is on a margin account then the cost of the interest on the margin account is a part of the carrying cost. However, if the position is short then the dividends become a part of the cost to carry that position. Even if the inventory is financial there has historically been a carrying cost between the time of sale and the time of delivery of the security. Computerized transactions may minimize the handling costs but the carrying costs still have to include the costs of transfers.

Another way that carrying costs are figured is in terms of opportunity costs. If an investor takes a position in a market, then other opportunities are excluded from the capital invested or owed because of that position. If the position is in a piece of real estate then the purchase of a house or a building ties up the capital of the investor so that it cannot be used for other investments, thereby creating a carrying cost until the property is sold.

Carrying costs can be viewed as the cost of doing business that may yield a higher rate of return than the return that would accrue from a risk-free interest rate in a security such as a U.S. treasury bill. The investment earns but it is not cost free, even in the case of a treasury bill, because there is the potential for foregone opportunities. In some very secure investments such as money market certificates of deposit there may also be a penalty for early withdrawal.

When the carrying cost of inventory is calculated there are several factors that cost accounting has to consider. These are the investment in the good(s) such as gasoline, or "widgets," or yarn. Then there is the cost of storage of the product. If the product has any significant hazard such as the flammability of gasoline then the cost rises because of the safety requirements that have to be added to the costs. In addition insurance to cover the inventory adds costs.

The cost of storage includes the cost of warehousing goods which in the case of food, furs, or other perishable products means that careful attention has to be given to the care of the product. This means that not only the cost of the storage facilities has to be figured as part of the carrying cost but so is spoilage and the cost of labor to supervise the inventory until it is moved.

In the case of agricultural commodities the cost may be the cost of grain elevator storage or of some other storage facility. The costs of storage are often figured as a percentage of the spot price. If the commodity is some kind of material such as gold or copper the cost of storage is a part of the carrying cost. In the case of perishable goods the carrying cost includes losses due to aging or to shrinkage. For example, bananas may rot or wine may spoil.

Many governments have inventory taxes that go by a variety of names. Many also have an "intangible tax" on positions held in stocks and bonds. In either case the inventory is taxed according to some formula. Taxes also add costs. Some jurisdictions allow goods in transit to be held in a "free port" position, which means they will not be taxed unless consumed or sold locally.

Inventory Models

To avoid carrying costs businesses may use a just-in-time inventory model (JIT). However, this may on occasion cause delays in production, the loss of sales, loss of good will when customers are disappointed, and even the loss of customers. Instead of a JIT model many firms carry excess inventory at a re-order point that keeps a reserve of stock available for production, use, or sale. This is the cyclical stock model for handling excess inventory. This model allows for delivery of the inventory to be restocked even if there are transportation delays. For example an Italian restaurant would be embarrassed if it were to be out of a basic commodity such as olive oil.

The safety stock model for managing inventory used a built-in period of time to account for supplier lead time to manufacture the goods, if necessary, and to deliver them. There may also be variability in the quality controls of supplies that are due to materials and manufacturing methods that can affect sales and later consumption. An example of lead time is the annual manufacturing of influenza vaccine. It has to be manufactured ahead of time and then delivered globally over the flu season.

A third reason for businesses to carry excess inventory is the psychic stock model. When customers, especially at retail businesses, arrive and see only small quantities of stock, they may feel that their choices are too limited and then look elsewhere to make their purchase. An inventory that is excessive will give the perception of plenty, creating a positive attitude among customers that there are plenty of items available from which to choose.

See Also: Cost Accounting; Inventory; Kanban; Manufacturing Strategy; Supply Chain Management.

Bibliography. Edward Frazelle, *World-Class Warehousing and Material Handling* (McGraw-Hill, 2001); Charles T. Horngren, George Foster, and Srikant M. Datar, *Cost Accounting* (Prentice Hall, 2005); Michael R. Kinney and Cecily A. Raiborn, *Cost Accounting: Foundations and Evolutions* (Cengage Learning, 2008); Courtney Smith, *Option Strategies: Profit-Making Techniques for Stock, Stock Index, and Commodity Options* (John Wiley & Sons, Inc., 1996).

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Cash Management

In the United States, cash management is actually viewed as a marketing term to describe how businesses promote services to their large customers. When looking at this concept from an international perspective, one could define international cash management as the services provided in the international banking arena to support growth and development of multinationals and developing countries.

As more financial institutions begin to participate in the global economic system, process improvement has led to the reduction of communication and information costs as a result of technology. One of the focal points for many multinational corporations is to have the ability to perform financial transactions outside the United States. It is important for these corporations to have the ability to participate in the international trade process. Some of the key banking services that are needed include letters of credit, wire transfers, collections, and foreign exchange. It is important for an organization to have the ability to wire deposits in a timely manner, have the credibility for banks to provide a letter of credit on its behalf, and collect payments quickly and easily.

Technology has made it possible for financial institutions to offer electronic banking to their customers. Electronic banking, also known as electronic fund transfer (EFT), uses technology as a substitute for checks and other forms of paper transactions. Customers find the service beneficial for several reasons:

- Automated teller machines (ATMs): ATMs are electronic terminals that allow consumers to have access to their funds at any time. Financial institutions provide their customers with a card, which allows them to withdraw money from these machines as well as complete other transactions.
- Direct deposit: Many employers have mandated that employees have their payroll directly deposited into a checking or savings account. Once the funds reach the bank, the bank processes the transactions so that their customers will have access to the funds on the morning of their pay date.
- Pay-by-phone systems: A benefit to consumers is when their banks allow them to pay their bills by calling in the transactions and transferring funds between accounts.
- Personal computer banking: Given the use of technology, many consumers will base their banking selection on whether or not they can perform transactions online using their personal computers.
- Point-of-sale transfers: Consumers can use their ATM cards in many stores to purchase retail items. This process is similar to using a credit card, but the funds will come out of a checking account.
- Electronic check conversions: There are times when a consumer may write a check at a merchant's business and the transaction will become an electronic payment at the point of sale.

With the rise of electronic banking's popularity, financial institutions and consumers must be cautious and protect information that is considered private and privileged. In order to avoid a compromised situation, financial institutions must develop techniques that will assist in authenticating online banking users.

See Also: Currency; Electronic Commerce; Electronic Data Interchange; Globalization.

Bibliography. G. Fest, "Double E-Signatures Double the Security," *U.S. Banker* (v.117/2, 2007); J. Large and W. Large, "Back to Basics: Integrating the Domestic Into the International," in *The 2008 Guide to Technology in Treasury Management* (Euromoney, March 2008); J. Large and W. Large, "International Cash Management Review: Global Solutions to Fit All Sizes," in *The 2008 Guide to Technology in Treasury Management* (Euromoney, March 2008); L. Neville, "After the Crash, Here Comes CASH: Why the World's Biggest Banks Want More From Cash Management," *Euromoney* (v.38/462, 2007).

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While Caterpillar equipment like this is sold in 200 countries, the U.S. market still makes up half of the company's sales.

Caterpillar

Employing nearly 100,000 people all over the world, Caterpillar Inc. is the world's largest manufacturer of equipment for the construction and mining industries, as well as manufacturing turbines and engines. The characteristic yellow paint scheme of much of their equipment is as familiar to people in regions where those industries are dominant as are John Deere green and Coca-Cola red. A Fortune 500 company since the list's inception in 1955, it was ranked 50 in 2008, the most recent ranking. As the leader in its industry, it has been one of the 30 companies of the Dow Jones Industrial Average since 1991.

The innovation with which the company is associated, and has been since its inception, is the caterpillar or continuous track. Such tracks, used instead of wheels, are made of rigid plates connected to each other in a belt, laying flat on the ground as the vehicle moves forward. This allows for a much more efficient distribution of weight, significantly reducing the ground pressure of the vehicle. Caterpillar tracks are most associated with vehicles too heavy to use wheels like cars—such as tanks and construction equipment. Early attempts at making a useful continuous track often referred to them as a type of rail, but unlike rails, they allow for more flexibility of movement, remain with the vehicle, and do not need to be laid down ahead of time. The idea of the continuous track had been in circulation since the 18th century, and became the focus of various inventions during the Industrial Revolution when there was more and more demand for heavy vehicles for which wheels were inefficient or simply unusable.

The first effective model was patented in 1901 by Alvin Lombard, for use with steam-powered log haulers. Two years later, the Holt Manufacturing Company paid Lombard's fees for the right to manufacture equipment using his patented tracks, and subsequently purchased a later British continuous track patent, which included a steering mechanism similar to what's in use today. The designs were combined, the term *caterpillar track* was trademarked, and the Holt Manufacturing Company became the Caterpillar Tractor Company in 1925, through a merger with the C.L. Best Gas Traction Company. Holt tractors using caterpillar tracks were used during World War I, to tow artillery, and the tracks were soon adopted for military tanks.

The Industrial Revolution had permanently changed farming, not only by encouraging larger-scale commercial farms, but by revolutionizing the farm equipment industry. The construction industry was just as affected, and the rise of skyscrapers and other modern building types necessitated the widescale manufacture of equipment. Caterpillar adapted to changing technologies, including the shift to internal combustion engines and diesel engines, and expanded rapidly to meet the construction and manufacturing boom following World War II. Its overseas ventures began in

1950, and it has continued to operate multinationally since. Acquisitions of other companies have fueled Caterpillar's expansion, sometimes into other countries—Hindustan Motors Earthmoving Equipment Division was acquired and renamed Caterpillar India in 2000—and sometimes into new product lines, as with Barber Green (Caterpillar Paving Products since 1991), Elphinstone (Caterpillar Underground Mining since 2000), the acquisitions of many engine and engine component manufacturers, and the 2008 acquisition of LOVAT, a manufacturer of tunnel boring machines. Caterpillar products were responsible for the construction of the Hoover Dam, the tunnel under the English Channel, and the U.S. interstate highway system.

In the 21st century, Caterpillar's products are sold in 200 countries, with about half of its sales accounted for in the United States. Caterpillar dealerships are independently owned and operated, and each dealer has exclusive rights to a given geographical area. Repair and maintenance services are offered by the same local dealerships. Caterpillar's 400 vehicles constitute the bulk of its products, and those for which it is best known, and include both tracked and wheeled vehicles, for construction, excavation, and heavy transport. Many of the engines used in Caterpillar's vehicles are of its own manufacture, and are also sold to other companies for use in locomotives, trucks, and generators.

See Also: Dow Jones Index; Transportation.

Bibliography. Ilan Brat, "Caterpillar Enters Navistar Truck Venture," *Wall Street Journal* (June 13, 2008); "Caterpillar Exits Engine Business, Enters Work-Truck Market," *ENR: Engineering News-Record* (v.260/21, 2008); Tim Kelly, "Squash the Caterpillar," *Forbes* (v.181/8, 2008); Jason Leow, "In China, Add a Caterpillar to the Dog and Pony Show," *Wall Street Journal* (December 10. 2007); Qontro Business Profiles, *Caterpillar Inc.* (Qontro, 2008).

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CEMEX

One of the largest building supplier companies in the world, Cementos Mexicanos (CEMEX) produces, markets, and distributes cement, ready-mix concrete, and construction aggregates and materials. It is the world's largest trader of cement and clinker, the leading producer of white cement, and the third biggest cement manufacturer, after Holcim Group from Switzerland and French Lafarge. Headquartered in Monterrey, CEMEX employs over 50,000 people and has established a presence in more than 60 countries, mainly in North and South America and more recently in Europe and East Asia.

The history of CEMEX goes back to 1906 with the foundation and opening of one of Mexico's first cement companies, Cementos Hidalgo, the joint effort of an American-born entrepreneur, J. F. Brittingham, and the Garcia family of Monterrey. In these first years of operations, business blossomed and production capacity more than doubled. The Mexican Revolution forced the company to suspend production and distribution in 1912, as energy supplies failed and communications infrastructure was destroyed. Full resumption of activities was delayed until 1921. Meanwhile, Cementos Portland Monterrey was founded in 1920 by Lorenzo H. Zambrano and family. Following the economic crisis of the Great Depression and a regional war of prices, the two companies celebrated a historic merger that, on January 4, 1931, gave birth to a new company: Cementos Mexicanos.

The next four decades witnessed the rise and consolidation of CEMEX in the northeast of Mexico and the beginning of the conquest of the national market. Expansion of production was first driven by successive enlargements and the modernization of the Monterrey plant—new, larger, and more efficient kilns—and the opening of cement mills in Torreon and Ciudad Valles. This, accompanied by an aggressive commercial strategy, positioned CEMEX as market leader in the northern states of San Luis Potosi, Durango, Tamaulipas, Coahuila, and Zacatecas in addition to its home stronghold Nuevo Leon. In the 1960s, the strategy was coupled with plant acquisitions in Guadalajara, Leon, Ensenada, and Yucatan in central and southern Mexico. CEMEX had moved from the local to the multiregional, and by 1970 it produced and sold over 1 million tons per year of Portland cement, which represented more than 10 percent of the Mexican market.

Growing company size and markets posed new challenges. According to business historian Mario Cerruti, CEMEX contracted with the American management-consulting firm Cresap, McCormkick and Paget to effect structural administrative reorganization. Realization of scale and scope economies led to vertical-integration strategies that translated into the acquisitions of concrete, aggregates, and ready-mix firms at the national level. The financial requirements of such integration and plans to buy Cementos Guadalajara—an important rival—led CEMEX to go public on the Mexican stock exchange in 1976. By 1985, productive integration and the inauguration of the Huichapan plant in Hidalgo, the most modern in Mexico at the time, made CEMEX a key player in the domestic market, accruing around 33 percent of total production. The next challenge was the global market.

International Expansion

In the aftermath of the 1982 debt crisis and the trade liberalization and inflow of foreign capital and competition that ensued, CEMEX realized the threats and opportunities that globalization brought about. The strategy to face it was twofold. First, there was a need to dominate the national market effectively, to prevent foreigners from entering CEMEX's historical territory. Second, there was the opportunity to export and to grow in the American and European markets via the acquisition and improvements in the efficiency of foreign plants. To accomplish the former, CEMEX bought Anahuac in 1985 and the other Mexican giant Tolteca in 1989, turning into the sixth largest producer in the world. To achieve the latter, CEMEX increased exports to the United States throughout the 1980s in an effort to meet a surge in demand from the neighboring economy that offered high prices and paid in hard currency. Successful entry into the United States through the construction and purchase of mills and the creation of distribution networks in California, Arizona, Texas, Florida, and New Mexico signaled that CEMEX had competitive prices and supplied good quality products.

In 1992 CEMEX entered the European market, buying Spanish Valenciana de Cementos and Sanson, making it the world leader in white cement production. Two years later it acquired Cementos Bayano in Panama and Vencemos in Venezuela, followed by Diamante and Samper in Colombia in 1996. The buying spree has continued, adding plants in the Philippines, Indonesia, Chile, and Costa Rica. CEMEX maintains high profit margins and operative efficiency levels. It has become one of the most competitive global firms in the industry.

See Also: Economies of Scale; Economies of Scope; Globalization; Mexico.

Bibliography. Boletín del Colegio de Ingenieros de Ingeniería Mecánica, Eléctrica y Profesiones Afines de León AC, "CEMEX," *En Contacto* (v.10/117, 2007); CEMEX, "CEMEX. Our History," www.cemex.com (cited March 2009); Mario Cerruti and Juan Ignacio Barragán, *CEMEX: Del Mercado Interno a la Empresa Global* (Proceedings of the 5th Brazilian Congress of Economic History, 2003); Datamonitor, "CEMEX, S.A. de C.V. Company Profile" (June 12, 2007).

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Central America

Central America is the isthmus connecting North and South America, and though geographically considered part of the North American continent, it is rarely included in cultural, economic, or political mentions of North America. The North American Free Trade Agreement, for instance, does not include any Central American country. Some discussions of Central America include Mexico, which shares a Spanish heritage with the Central American nations that it does not with the bulk of North America (though this glosses over the long Spanish history of much of the United States and the interconnections of American and Mexican history). With the exception of Belize and Panama—neither of which yet existed—the nations of Central America were members of the Federal Republic of Central America, a democratic state that existed from 1823 to 1840, after the region became independent from Spain. Political instability prevented not only the survival of the republic, but the planned construction of an inter-oceanic canal, an idea that was not realized until the construction of the Panama Canal in the 20th century.

That was not the last gasp of Central American integration, though. Throughout the 20th and 21st centuries, region-wide institutions have developed, moving toward the possibility of a European Union–like regional unity. The Central American Court of Justice that was instituted in 1907 was first proposed by Mexico and the United States, and was hashed out at the Central American Peace Conference that was hosted by Secretary of State Elihu Root. Rather than attempt political union at that time, Root and others suggested that they agree to a common court of justice. The experiment lasted 10 years, until Nicaragua terminated its involvement and the other countries decided not to continue without it; member state governments were unhappy with the extent of the court's jurisdiction, while judges were unhappy with their governments' influence on their decisions.

In the aftermath of World War II, as the world reorganized itself in light of the end of European empires and the beginning of European union, and amidst the growing global conflicts of the Cold War, more serious discussions of integration began. Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua signed a 1951 treaty creating the Organization of Central American States (ODECA) to promote regional cooperation, and reinstituted a regional court, the Corte Centroamericana de Justicia (CCJ). In 1960 the governments of Central America made plans for the Secretariat for Central American Economic Integration, the Central American Bank for Economic Integration, and the Central American Common Market, but when war broke out between Honduras and El Salvador in 1969, integration came to a halt.

It was revived again in 1991, in the aftermath of the Cold War. The Central American Integration System (SICA) was instituted by the countries of Central America with the addition of the Caribbean nation of the Dominican Republic. The CCJ's role was refined to promote peace among member-states, and has jurisdiction over cases between member-states, between member- and non-member states when the latter consents to jurisdiction, between any state and any resident of a member-state, and cases that involve the integration process. Significantly, it also has the power and responsibility to consult with the Supreme Courts of member-states, for the purpose of promoting a common legal philosophy in the region. There is also a Central American Parliament (Parlacen), with directly-elected members, though Costa Rica has not yet ratified its charter and remains a non-participant. Though not as unified as the European Union, SICA certainly represents an intent and goal of Central American unity to a similar degree.

Of the Central American nations, Guatemala is the most populous with about 13 million people, though El Salvador, at half the size, is twice as densely populated. Primarily rural Belize, with 300,000 people, is both the smallest and by far the least densely populated (13 people per sq. km versus the 330 of El Salvador). Critical to the Central American economy is the Panama Canal, which remains one of the most ambitious engineering projects ever undertaken. Proposed for years, not until the advances of the late Industrial Revolution (as well as the resulting adoption of faster ships and impatience at having to travel around the continent) did the canal come to fruition. The canal saves some 8,000 miles of travel, and even today, when air travel has reduced the role of water travel, the canal remains so busy and such an integral part of the international shipping industry that ships over a certain size (the Panamax size, the largest the canal can accommodate) are called super-Panamax ships. In 2008, 14,702 ships passed through the canal, roughly a 10-hour journey.

Country Profiles

Belize is the only Central American country where English is the official language (Spanish, and the local Creole, are "recognized languages"), a reflection of its heritage as a part of the British Empire from 1638 to 1981, during most of which time the country was known as British Honduras. Though one of the least-populated countries in the world, it also has one of the highest population growth rates. The economy is focused on the private sector, especially agriculture; bananas and sugars account for the largest part of the economy. The climate, coast, and Mayan ruins have all contributed to the tourism industry, which grows steadily. The ramifications of the 2006 discovery of oil in the Mennonite town of Spanish Lookout have not yet become clear. The Belize Dollar is pegged to the U.S. dollar at 2:1.

Though Costa Rica has a higher per-capita GDP than many other developing nations, it suffers from rampant inflation (just under 10 percent) and chronic trouble with its infrastructure. Sixteen percent of the country lives below the poverty line, but with the economy growing steadily, it has pioneered social aid and welfare, with its per capita spending on the poor and struggling comparable to that of Western European

Guatemala has an urgent need to develop new exports. In this December 2007 photo, the USAID Director for Guatemala and U.S. Senate Majority Leader Harry Reid tour a vegetable packing plant in Chimaltenango that specializes in nontraditional vegetables.

countries. In an effort to attract foreign investment, tax exemptions have been offered, and companies like Procter & Gamble and Intel have recently opened large facilities. The currency is the colon, which trades at a floating exchange rate, a free market initiative that the government hopes will discourage the long practice of citizens relying on American dollars instead of domestic money.

El Salvador faces significant economic and social problems. More than 30 percent of the population lives below the poverty line, with underemployment widespread (unemployment hovers around 6 percent). One of the poorest Latin American countries, El Salvador is frequently troubled with natural disasters—not only hurricanes, but the earthquakes that result from being on the Caribbean Plate. The government is committed to free market initiatives and has privatized the banking system and much of the infrastructure, including telecommunications. The domestic currency, the Salvadoran colon, was abandoned in 2004, three years after the U.S. dollar was adopted as legal tender and the unit of currency for all accounting and bookkeeping purposes.

The developing company of Guatemala has 29 percent of its population living below the poverty line, and a trade deficit so significant that remittances from Guatemalan expatriates—sending money back home to their families—outweigh export and tourism revenues combined. The export sector of the country is in flux, struggling to find a successful export good. Currently most exports are agricultural—fruits, vegetables, flowers, coffee, and sugar—with textiles secondary. The currency is the Guatemalan quetzal, previously pegged to the U.S. dollar but currently traded at a floating exchange rate.

Honduras enjoys greater economic growth than most of Latin America, about 7 percent a year—but half the country lives below the poverty line, and unemployment sits at a staggering 28 percent. The country is deeply in debt, with international subsidies necessary to keep the government-operated electrical services operating, and price controls on basic commodities to avoid commodity crises. Nevertheless, there are significant natural resources, especially biological resources, from which the country can benefit once its infrastructure is improved and economy stabilized. The currency is the Lempira, which trades at a floating exchange rate.

Primarily an agricultural country, Nicaragua is known worldwide for its Flor de Cana rum; other sources of revenue include cash crops like coffee, sugar, and tobacco, fisheries, mining, and remittances from expatriates. As much as 28 percent of the population lives below the poverty line, and half of them are either unemployed or underemployed. Most of the indigenous population lives on less than $1 a day. Like much of the region, though, Nicaragua has experienced steady economic growth in the 21st century, though thanks to the infrastructure damage and general problems of the civil war of the 1980s, the economy is best described as "recovering" more than "developing." The cordoba trades at a floating exchange rate.

The fastest growing economy in Latin America after Peru, Panama nevertheless has a 28 percent poverty rate. The presence of the canal plays into the fact that the economy is mainly service-based, but other major services apart from shipping and trading include banking, finance, and tourism. Trade is high and inflation low. The balboa is pegged to the U.S. dollar, but the dollar itself is used as often as domestic currency.

See Also: Caribbean Community (Caricom); Central American Common Market; Company Profiles: Central America and Caribbean; Company Profiles: South America; Costa Rica; El Salvador; Guatemala; Panama.

Bibliography. John A. Booth, Christine J. Wade, and Thomas W. Walker, *Understanding Central America: Global Forces, Rebellion, and Change* (Westview Press, 2005); Eliana Cardoso and Ann Helwege, *Latin America's Economy: Diversity, Trends, and Conflicts* (MIT Press, 1995); Jeffry A. Frieden, Manuel Pastor Jr., and Michael Tomz, *Modern Political Economy and Latin America: Theory and Policy* (Westview Press, 2000); Hector Perez-Brignoli, *A Brief History of Central America* (University of California Press, 1989); Ralph Lee Woodward, *Central America: A Nation Divided* (Oxford University Press, 1999).

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Central American Common Market

The Central American Common Market (CACM) is a trade organization originally created for Guatemala, El Salvador, Honduras, and Nicaragua. These four nations signed the General Treaty on Central American Economic Integration on December 13, 1960, in a meeting held in Managua, the capital of Nicaragua. The objective of CACM was to improve the living conditions in Central America by unifying the economies of the four countries and promoting joint development of Central America. The treaty was ratified by Guatemala, El Salvador, and Nicaragua in May 1961 and came into force on June 3, 1961. Honduras ratified the treaty in April 1962 with certain reservations. Costa Rica also joined the CACM in 1963. CACM collapsed in 1969 because of an armed conflict between El Salvador and Honduras, but was reinstated in 1991, when Panama also agreed to cooperate with the association even though it is not a member. The CACM countries cover an area of 163,172 square miles with a population of almost 38 million.

The CACM attempted an import substitution industrialization using protectionist barriers to guard the local industries from global competition. The CACM experiment seemed to be successful as intraregional trade increased significantly, from US$33 million in 1960 to US$1.1 billion in 1980. The intraregional exports as a percentage of total exports grew from 7 percent in 1960 to 26 percent in 1970. By 1967 about 95 percent of the traded goods were duty free. In addition to providing a large protected market for regional goods, CACM also promoted industrial investments and infrastructure development by providing fiscal incentives and creating several organizations for specific infrastructure projects.

Even though CACM made significant progress as mentioned above, the member countries could not carry forward the momentum to take the organization to the next level of economic integration. Several factors led to this stagnation. First, the member states could not undertake structural reforms in their economies, which could have provided a level playing field for all the members and an opportunity to create an economic union. Second, the trade policies were such that they promoted growth of consumer goods industries for which capital-intensive machineries needed to be imported from outside the trade bloc. This meant that CACM countries still faced the foreign exchange problems that they had before the formation of the trade bloc. Third, the member states had some significant differences in terms of their size, economic status, and relations with other countries. The CACM led to further rise in disparities, which resulted in Guatemala, El Salvador, and Costa Rica becoming net creditors and Nicaragua and Honduras becoming net debtors. Besides unbalanced trade, there were also issues related to migration and protection of investment, particularly between Honduras and El Salvador. The disparities were so stark that they led to a four-day war between Honduras and El Salvador in July 1969. In the same year, Honduras quit the CACM, failing to secure concessions from other member states in its favor.

Despite Honduras's exit from CACM, trade continued to grow between other countries in the 1970s. However, a debt crisis and the civil wars in El Salvador and Nicaragua in the 1980s led to a steep fall in intraregional trade. There were no further efforts to revive the organization and the treaty expired in 1982. Efforts were again made to revive the CACM during the eighth summit of Central American Presidents, held in June 1990. The European Economic Community gave active assistance by providing a 120-million European Currency Unit support fund to develop a new payment system for trade. The new payment system was designed to manage creditor-debtor relations on a multilateral basis rather than a bilateral basis. During the 10th summit of Central American Presidents, held in July 1991, the five original signatories to the General Treaty admitted Panama as a nonmember state, but with full privileges in terms of preferential treatment in trade with the member states.

The utility of CACM has been undermined by several other trade agreements in the region, including the North American Free Trade Agreement (NAFTA) between the United States, Canada, and Mexico, and the Dominican Republic–Central America–United States Free Trade Agreement (CAFTA-DR) between the Dominican Republic, Costa Rica, Guatemala, El Salvador, Honduras, Nicaragua, and the United States. CAFTA-DR was signed in August 2004, and ratified by the United States in July 2005 and by all other countries by the end of 2007. All the CACM member countries are also members of CAFTA-DR, making the future role and objective of CACM unclear.

See Also: Central America; Economic Union; Free Trade; Free Trade Zone; North American Free Trade Agreement; Trade Bloc.

Bibliography. CIA, "Appendix B—International Organizations and Groups," *The World Factbook* (cited March 2009); Sebastian Edwards, "Latin American Economic Integration: A New Perspective on an Old Dream," *The World Economy* (v.16/3, 1993); Library of Congress Federal Research Division, "Honduras," *Country Studies*, memory.loc.gov/frd/cs (cited March 2009).

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Central Banks

Since the establishment of the first central bank in Sweden in 1668, the number of central banks has increased to 178 (in 2008). The emergence of new sovereign states saw a corresponding increase in the number of central banks. Central banks have legitimate power to create national currency, an integral part of monetary sovereignty. These banks play pivotal roles in domestic and international economic management. In the past, they financed government war expenditures and economic development projects. Today, the central banks' main responsibility is to keep the rate of consumer-price inflation low and stable to accomplish and maintain economic and financial stability.

The majority of central banks are state-owned. Thus, a central bank governor is essentially a government official. Politicians and governors may have different and conflicting policy preferences. In times of conflicting views between a governor and politicians, central bank independence (CBI) vis-à-vis political authority becomes significant. The key factor behind the move to increased independence has been the theoretical argument that an independent central bank restricts the avenues for political interference in monetary policy decision making. In doing so, monetary policy making can be insulated from electoral effects (i.e., political business cycles) and partisan politics (i.e., economic growth and employment-oriented policies of leftist parties). Central bankers with legal autonomy from the executive and legislative branches of the government are assumed to have the ability to follow objectives that may conflict with these branches.

Not surprisingly, there has been a significant worldwide trend toward increased central bank independence, transparency, and accountability through legal reforms and actual practices. Introduction of legal reforms granting independence to central banks has been a universal temptation for the majority of sovereign states. Especially from 1990 onward, CBI has become a legal standard, and there has been an international trend toward legal independence. The governments in both developed and developing countries deliberately reformed the statutes of central banks to grant them more autonomy in order to achieve and sustain their primary objective: price stability.

A normative support for CBI revolves around the assumption that central bank governors, who place a greater weight on price stability, are more averse to inflation than politicians. However, the trends toward CBI are built on flawed neoliberal economic theory. It is assumed that inflation is caused by money supply growth, which is determined by the central bank. Conversely, in a world of global finance where financial capital moves freely, money supply increase and credit creation are not solely under the control of the central banks. Further, this view omits other inflationary pressures such as increases in primary goods and energy prices.

In regard to empirical evidence, early studies found that CBI and inflation are strongly negatively correlated in developed economies. These findings are questioned by subsequent studies that there is no correlation and causal link between CBI and inflation. Further, there has been no empirical evidence showing a negative correlation between CBI and inflation in developing economies. Nevertheless, in spite of the questions about the theoretical foundations and the mixed empirical evidence for the merits of CBI, the dominant practice of monetary governance is based on the maintenance of price stability where an independent central bank plays a pivotal role.

Transnational central banking culture is reflected in CBI reforms and promoted by ideational entrepreneurs that include organizations such as the International Monetary Fund (IMF), World Bank, and Bank for International Settlements as well as individuals such as governors who are the members of the translational epistemic community of central bankers. However, the critiques of CBI argue that the delegation of monetary policy to a central bank does not apoliticize monetary policy and has important distributional effects. It is argued that the CBI reflects the interests of international financial capital.

There is also a trend toward greater transparency in central banking. On the theoretical level, it is widely held that transparency in monetary policy can enhance the effectiveness and credibility of monetary policy. Monetary policy is considered effective when central banks influence investors' medium-term expectations about the path of policy rates over time. In doing so, central banks have an impact on long-term bond yields and other securities. Such effectiveness can be achieved with the credibility of monetary policy if central banks' actions match their public statements. On the empirical level, it is widely accepted that there is a cross-country positive correlation between transparency and inflation.

Finally, increased independence of central banks raises concerns about accountability. It is believed that independent central bankers should be accountable to elected politicians, who are accountable to the electorate. In doing so, central bank decisions regarding public goods such as price stability can be fully legitimate. More recently, renewed financial turmoil in global markets brought important questions about the role of central banks to strengthen the global financial system and their appropriate role as the lender of last resort. The financial upheaval of 2008 fostered the belief that central bankers would have to act more globally by introducing easier cross-border borrowing.

See Also: Capital Controls; Discount Rate; Inflation; Interbank Market; Interest Rates; Money Supply.

Bibliography. Sang-Kun Bae and Ronald A. Ratti, "Conservative Central Banks and Nominal Growth, Exchange Rate and Inflation Targets," *Economica* (v.75/299, 2008); C. E. V. Borio, Gianni Toniolo, and Piet Clement, *The Past and Future of Central Bank Cooperation* (Cambridge University Press, 2008); Sven-Olov Daunfeldt and Xavier de Luna, "Central Bank Independence and Price Stability: Evidence from OECD-Countries," *Oxford Economic Papers* (v.60/3, 2008); J. De Haan, S. C. W. Eijffinger, and S. Waller, *The European Central Bank Credibility, Transparency, and Centralization* (MIT Press, 2005); S. C. W. Eijffinger and P. M. Geraats, "How Transparent Are Central Banks?" *European Journal of Political Economy* (v.22, 2006); Helder Ferreira de Mendonça and José Simão Filho, "Macroeconomic Effects of Central Bank Transparency: The Case of Brazil," *Cato Journal* (v.28/1, 2008); Anne Dolganos Picker, *International Economic Indicators and Central Banks* (Wiley, 2007); Lorenzo Smaghi, "Central Bank Independence in the EU: From Theory to Practice," *European Law Journal* (v.14/4, July 2008); J. Stiglitz, "Central Banking in a Democratic Society," *De Economist* (v.146/2, 1998); M. Watson, "The Institutional Paradoxes of Monetary Orthodoxy: Reflections on the Political Economy of Central Bank Independence," *Review of International Political Economy* (v.9/1, 2002).

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Centralization

Centralization in the context of an organization relates to the concentration of decision-making authority at the higher levels of management. Its converse, decentralization, is the dispersal of authority from the higher levels to the lower levels of management. If more authority to make decisions is concentrated at the top, we say that the organization is centralized. Real-life organizations do not have absolute centralization or decentralization. The extent of centralization or decentralization varies across organizations, across different divisions and departments, and in the same organization over a period of time. Large organizations generally are believed to allow greater centralization than small organizations, relying on more formalization—the use of rules, procedures, and paperwork. Small organizations can use personal observations and direct contact and so tend to rely on centralization. Thus, there are degrees of centralization and decentralization.

In the contemporary context, there is a bias toward decentralization because it offers several benefits to organizations. Probably the biggest benefit is that decentralization enables delegation of authority from senior managers to middle-level and first-line managers. This makes it possible for the senior managers to concentrate their time and energy on more important tasks of formulating strategies and plans. Delegation of authority to lower levels also allows middle-level and first-line managers to develop their managerial capabilities as they make decisions pertaining to their area of work. This has an added benefit because lower-level managers are in direct contact with the situation requiring decisions. Decentralization speeds up the process of decision making—a vital factor in making organizations respond quickly to emerging situations. An organization that adopts a policy of decentralization could foster a healthy, achievement-oriented organizational climate.

It is not as if centralization is undesirable. Some situations may, in fact, favor centralization. These are situations where the senior managers are required to make decisions and act quickly without waiting for their subordinates' acceptance. Then there are situations where decisions pertaining to the whole organization need to be taken and individual divisions and departments cannot make such decisions. The senior managers also have a better appreciation than the lower level of managers about the external environment, enabling them to make better decisions.

There are many factors that have to be taken into account before an organization centralizes or decentralizes decision making. First of all are the costs involved. If the decision requires heavy investments, then it is more likely that the senior managers would make it. Some organizations also adopt centralization because they wish to have uniformity of policy throughout the organization. How competent the lower-level managers are also determines the degree of centralization and decentralization. The more competent the lower managers, the more likely is the organization to decentralize. Control systems in organizations also often dictate that several aspects of decision making be centralized.

Organizations that operate globally face choices between balancing authority between headquarters and the subsidiaries. When a corporation establishes a subsidiary in a foreign country, its managers must decide how much control they need to maintain over the subsidiary's managers. A headquarters–foreign subsidiary control relationship can be defined in terms of the degree of centralization or decentralization. The question here is how much authority will be retained by headquarters and how much will be delegated to the subsidiary.

Frequently, there has to be a healthy compromise between local autonomy for the subsidiaries and centralized control by headquarters. Such compromise can vary over time depending on the requirements of the overall strategy of the organization. In situations where more authority is decentralized at the subsidiary level, the managers may be able to provide faster response to local conditions but may become too independent and therefore less accountable to headquarters. Where authority is centralized at the headquarters level, there might be better control and uniformity in decision making but this may stifle initiative and prevent empowerment of subsidiary-level managers. For example, Asea Brown Boveri (ABB), a multinational corporation with headquarters in Sweden and Switzerland, attempts a healthy balance between centralization and decentralization by delegating full authority and responsibility for product categories on a worldwide basis to the subsidiaries. ABB headquarters acts as a facilitator of information and knowledge flows between the subsidiaries. Similarly, Honda, Matsushita, Hewlett-Packard, and Dow also grant autonomy to their subsidiaries by empowering their local boards of directors to make decisions and respond to local conditions.

See Also: Accountability; Centralized Control; Control Systems; Empowerment.

Bibliography. Richard L. Daft, *Organization Theory and Design* (South-Western Thompson Learning, 2004); Ricky W. Griffin and Michael W. Pustay, *International Business: A Managerial Perspective* (Pearson Prentice Hall, 2007); Don Hellriegel, Susan E. Jackson, and John W. Slocum, Jr., *Management: A Competency-based Approach* (South-Western Thompson Learning, 2005); Carl. A. Rodrigues, "Headquarters–Foreign Subsidiary Control Relationships: Three Conceptual Frameworks," *Empowerment in Organizations* (v.3/3, 1995).

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Centralized Control

Centralized control, in the context of organizations, means control exercised by a central authority such as top management. Contrary to centralized control, we have the concept of decentralized control where the function of control is delegated to lower levels of management.

In reality, there is no absolute centralized or decentralized control. Having either could be unworkable. Absolute centralized control would keep all decisions related to organizational matters in the hands of the top management, hindering effective functioning of an organization. Extreme decentralization of control, on the other hand, would disperse the decision-making authority within the organization, leaving nothing in the hands of top management. Such a situation would lead to utter chaos as the different units of an organization could work at cross-purposes, each of them not knowing where the other is headed. In practice, therefore, organizations have a combination of centralized and decentralized control.

Organizations need to decide on their optimum level of centralization and decentralization of decision-making authority. Larger organizations would tend to have a higher level of decentralization as such a pattern could facilitate quicker decision making and better responsiveness to the external environment. Older organizations, too, could have a higher level of decentralization as managers have gained enough experience for handling decision-making authority. An organization that has managers of higher-level competence can practice a higher level of decentralization as it has enough confidence to let lower-level managers deal with decision making. Organizations that have managers who have yet to gain the requisite level of competence may have to wait to decentralize the authority for decision making to lower levels.

Controlling is an essential function of management along with planning, organizing, and leading. Controls perform the useful function of ensuring that performance in an organization conforms to the standards so that the objectives of the organization can be achieved. In practice, controls operate through control systems that include rules and regulations, standards, recruitment and selection procedures, and training and development. There are several methods of control that include financial and accounting controls such as budgeting and financial analysis, and physical controls like production control and quality control, and newer methods such as activity-based costing and balanced scorecards.

Any control system operates in the form of a control cycle. This control cycle includes the setting of standards of performance, measurement of performance, comparison of actual performance with standards, and taking corrective action if needed. This is a continuous process and hence called the control cycle.

Centralized and decentralized control has relevance to other aspects of an organization apart from its structure and systems. For instance, information systems within organizations are also designed keeping in view the need for centralization and decentralization of information processing. System design has to deal with the issue of control structure. A centralized information system would thus be a system where information processing is provided by a central facility, while in a decentralized information system such processing would be distributed to various parts of the organization.

Another frequent reference to centralized and decentralized control is found in the case of organizations such as the military, particularly the air force. Centralized control in the context of an air force would mean that the authority to carry out air operations is vested in the hands of a central authority such as an air commodore who provides detailed step-by-step instructions that are to be followed by dispersed air force units. On the contrary, under decentralized control, the authority of decision making related to air operations would be delegated to the front-line airmen on the assumption that they would be best equipped to understand the situation at hand.

Multinational Corporations

Centralized and decentralized control issues also arise in the case of organizations that operate globally. These issues pertain to questions such as: To what extent will the authority for decision making relating to various departments and functions in the organization be centralized at the headquarters or decentralized to the level of subsidiaries? An example of such an issue is that of human resource (HR) management within multinational corporations. From the perspective of headquarters, decentralization may lead to loss of control over subsidiaries while centralization affords economy of operations. From the subsidiaries' view, centralization at the level of headquarters may stifle initiative, creativity, and innovation. Each corporation has to evolve its own unique balance of centralization and decentralization with regard to its HR management policies depending on its strategies. With the advent of Web-based HR applications, it is now possible to centralize payroll, timesheet administration, performance appraisals, annual leave applications, and virtually every other aspect of HR administration. In a situation where operations are spread all over the world, the availability of the internet is a big benefit to multinational corporations.

The debate over the comparative merits of centralization and decentralization of control as well as some other dimensions of organizations, such as power, authority, decisions, and functions is ongoing and inconclusive. Ultimately, it must be a choice somewhere between the pressures on the organization to innovate or economize.

See Also: Accountability; Centralization; Control Systems; Empowerment.

Bibliography. Richard L. Daft, *Organization Theory and Design* (South-Western Thompson Learning, 2004); Don Hellriegel, Susan E. Jackson, and John W. Slocum, Jr., *Management: A Competency-based Approach* (South-Western Thompson Learning, 2005); Richard M. Hodgetts, Fred Luthans, and Jonathan Doh, *International Management: Culture, Strategy and Behavior* (McGraw-Hill Irwin, 2006); Carl A. Rodrigues, "Headquarters–Foreign Subsidiary Control Relationships: Three Conceptual Frameworks," *Empowerment in Organizations* (v.3/3, 1995).

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Certificate of Origin

A Certificate of Origin is a formal document that authenticates the country of origin of merchandise. The Certificate of Origin (CO) is an import document; the import authority of a country establishes the requirements for it. While Certificates of Origin vary across countries, they have a common set of elements. The certificate has a variety of functions that relate directly to the trade agreements between the importing and the exporting nations: Determining whether merchandise has restricted entry, validating compliance to quota arrangements, or establishing the correct duty of inbound merchandise. Trade regions like NAFTA and the EU require Certificates of Origin to determine whether merchandise should receive the preferential treatment accorded member nations. To be valid, an officially sanctioned organization as determined by the importing country must issue the Certificate of Origin.

Certificates of Origin, despite broad variations across countries, have a set of common elements: Buyer and seller information, an indication whether the exporter is the manufacturer of the goods, the actual country of origin of the goods, a description of the goods, and the Harmonized System (HS) code for the goods. The HS code is a universal commodity code like the standard industrial classification codes (SIC). It functions as a standardized classification system for coding transactions across borders in order to track information and simplify compliance with trade agreements, e.g., collecting tariffs. It is important to note that the descriptions and amounts on the CO must match the comparable entries on the invoice. Discrepancies on certificates can delay or deny entry of goods and result in substantial costs to the exporter.

In order to enforce trade agreements, countries need to have an accounting system for trade. The data for this accounting system comes from trade documents like the Certificate of Origin. There are three common uses for Certificates of Origin. First, they can signal to an import authority that an importer is attempting to bring restricted goods into the country. Restricted entry problems can easily occur when there are more than two countries involved in the trade and when the countries have different trade regimes. Canadians, for example, can import Cuban cigars into Canada; U.S. firms may not import Cuban goods. To prevent a company in Canada from importing Cuban cigars and then reexporting them to the United States, the importer requires a Certificate of Origin. Similarly, import authorities use Certificates of Origin to maintain quota systems. A country may require that a prearranged percentage of an assembled auto may come from foreign parts. This requires a complicated accounting system to assure auto assemblers meet this standard. Most commonly, nations use Certificates of Origin as the basic documentation tool for tariffs. For some trade partners, goods may enter the country duty free (U.S. goods enter Canada without duty). It is important to the importing country that only goods from approved trading partners in pre-approved HS codes enter without paying duties.

Some countries participate in complex multilateral trade agreements like the European Union or the North American Free Trade Agreement (NAFTA). In these agreements, internal member nations receive preferential treatment relative to nonmembers. This preferential treatment usually includes the minimization or elimination of tariffs and quotas. These trade agreements often require a specialized form like the NAFTA Certificate of Origin. The NAFTA CO is an especially complicated trade document. It requires delineation of origination materials (raw materials or assemblies that come from within NAFTA), nonoriginating materials (similar to above but that come from outside NAFTA), and regional value content—in essence, the percentage of a good that comes from origination materials. Companies that purposely provide false information can receive fines from $10,000 to $100,000 in addition to paying the required tariffs.

Each importing country designates an officially sanctioned organization to issue certificates. The official body may be a governmental organization such as a national customs bureau or a nongovernmental organization like a chamber of commerce.

See Also: Export; Harmonized System; Import; North American Free Trade Agreement; Tariff; Trade Pact.

Bibliography. J. Anson et al., "Rules of Origin in North-South Preferential Trading Arrangements with an Application to NAFTA," *Review of International Economics* (2005); P. Brenton and M. Manchin, "Making EU Trade Agreements that Work: The Role of Rules of Origin," *The World Economy* (2003); J. M. Finger, "The Political Economy of Administered Protection," *American Economic Review* (1982); J. Foley, *The Global Entrepreneur*, 2nd ed., (Jamric Press, 2004); E. G. Hinkleman, *International Trade Documentation* (World Trade Press, 2002).

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Chaebol

The Korean word *chaebol* is used to refer to the highly diversified business groups contributing to the post–World War II industrialization in South Korea. Family ownership has not been significant in chaebols; despite this, the control of chaebols by founding families is typically due to cross-shareholding. For example, the chairman of a chaebol and his family might hold 10 percent of three core firms, and the three core firms in turn could own equity in some 20 or 30 affiliates. The chaebol family will therefore have effective control of an affiliate when the core firm holds 50 percent of it singly or jointly.

The roots of chaebols can be traced to the Land Reform Bill in 1950, an attempt by the Korean government to compensate the landlords' loss of land with opportunities to invest in former Japanese-owned plants. The chaebols were further involved in Korea's export-led development strategies since the 1960s. By entering into industries selectively targeted by the government, they were able to obtain cheap loans, tax deductions, tariffs, and subsidies that provided the basis for their economic influence in the economy. The top 20 chaebols' shares of Korean manufacturing output increased from 7 percent to 29 percent between 1972 and 1982.

During the 1980s, the Korean government switched to more indirect and functional support of strategic industries. In research and development (R&D), tax deductions were replaced by allowances of tax-free reserves for expenses incurred. Korean chaebols responded to the policy incentives and upgraded themselves; examples of such strategic orientation included Samsung and LG's investment in the forefront of display and semiconductor technology. The chaebols' investment in R&D also enabled them to pursue growth strategies via integration into the technologically sophisticated inputs. By the early 1990s, the chaebols accounted for Korea's significant shares in world exports within categories such as consumer electronics goods; paradoxically, chaebols were having one of the lowest corporate profitability levels in the world. The chaebols' technological capability also paved the way for their expansion abroad during the 1990s.

Overall, chaebols' influence in the Korean economy can be seen in the fact that the top five chaebols accounted for approximately 10 percent of gross national product by 1998. In addition, they had diversified vertically and horizontally, the latter being in unrelated business areas. Hence, the chaebol Samsung consists of affiliates ranging from consumer electronics, electronic components, shipbuilding, insurance, hotels, department stores, public relations, and amusement parks.

The acceleration of liberalization within the Korean economy under its first civilian president, Kim Young Sam, in 1993 had led to a massive inflow of foreign capital into Korea. The chaebols therefore switched from their traditional reliance on government loans to foreign loans in financing, which resulted in a surge of debt/equity ratios before the Asian financial crisis. The top 10 chaebols attained a debt/equity ratio of over 500 percent in 1997, which could be considered unusually high among Asian firms.

The reform program initiated by the Korean government after its consultation with the International Monetary Fund (IMF) led to changes in chaebols; the most notable are the decrease of debt/equity ratios and the use of flexible labor strategies. The financial restructuring was achieved by the public listing of stocks and the sales of affiliates. The flexible labor strategy, on the other hand, derived from the U.S. system and was related to the elimination of non-market based practices such as lifetime employment and a seniority-based system for the first time in chaebols' history. The chaebols practiced mass redundancy among permanent employees; these employees were replaced by temporary employees. The chaebols also required remaining employees to take early retirement.

Other new measures included performance incentives and the use of stock options. The restructuring in chaebols, coupled with the reshaping of corporate cultures, has resulted in profitability among the best achievers. For example, Samsung Electronics is currently one of the most profitable firms in Asia and produces quarterly profit figures to market analysts. Though the conception and growth of chaebols during the postwar period had been intertwined with the policy initiatives of the Korean government, their future growth will depend on their abilities to observe market discipline and compete in the fast-changing environment. Only the most efficient chaebols will survive in the long run.

See Also: Hyundai Motor; Korea, South; LG; Samsung Electronics; SK.

Bibliography. S. J. Chang, *Financial Crisis and Transformation of Korean Business Groups* (Cambridge University Press, 2003); D. K. Chung and B. Eichengreen, *The Korean Economy Beyond the Crisis* (Edward Elgar, 2004); C. Harvie and H. H. Lee, "Export-Led Industrialization and Growth: Korea's Economic Miracle," *Australian Economic History Review* (2003); Heon Joo Jung, "Competition and Corporate Governance in Korea: Reforming and Restructuring the Chaebol," *Journal of East Asian Studies* (v.7/3, 2007); S. H. Jwa and I. K. Lee, eds., *Competition and Corporate Governance in Korea* (Edward Elgar, 2004); Sook Jong Lee, "The Politics of Chaebol Reform in Korea: Social Cleavage and New Financial Rules," *Journal of Contemporary Asia* (v.38/3, 2008); OECD, *Economic Survey* (1994).

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Channels

A channel means a narrow but deep route connecting two entities. Business entities use channels to connect themselves with their customers. Most businesses today use two broad categories of channels: communication channels and distribution channels. They use communication channels to carry various kinds of information and messages to different stakeholders. Some examples of commonly used communication channels are television, radio, texts, e-mail, phone, newspaper, fliers, posters, mail, and billboards. Businesses use distribution channels to take their goods and/or services from their premises to the customer's/end user's premises. This entry focuses on distribution channels. Distribution channels are also known as marketing channels or trade channels. They are constituted by a set of interdependent entities called intermediaries or channel partners. Intermediaries operate primarily at two levels: wholesale and retail.

Wholesale intermediaries are those who sell goods and/or services for resale to other intermediaries such as retailers or for business use to industrial, institutional, governmental, or agricultural firms. They may also sell to other wholesalers but are not supposed to sell to individual consumer end users. Wholesale intermediaries may be owned by producers/manufacturers or could be totally independent business entities. Manufacturer's sales branches or offices are examples of manufacturer-owned wholesale intermediaries. Merchant wholesalers, agents, and brokers are examples of independent wholesalers. Merchant wholesalers use many different names to identify themselves: wholesaler, jobber, distributor, industrial distributor, assembler, importer, or exporter. Wholesalers provide market coverage to producers and manufacturers, develop sales contacts, hold inventories, provide credit, and offer customer support.

Retail intermediaries are those who primarily sell goods and/or services directly to individual consumers for personal or household consumption. Some of them, like Office Depot, also sell for business use. They assume many forms and vary in size and format. Retail intermediaries may also be owned by producers/manufacturers or could be totally independent business entities. They may be as small as a convenience store selling daily necessities in the neighborhood or as gigantic as the mass merchandise chains Wal-Mart and Carrefour.

Retailers offer different levels of services ranging from full service to self service. Some of them have physical as well as virtual presence; others like Amazon.com offer only online shopping. A specialty store like The Body Shop offers a narrow product line whereas a department store like Sears offers many product lines. Other major types of retail intermediaries include supermarkets, superstores, discount stores, category killers, off-price retailers, and catalog showrooms. Charles Y. Lazarus has stated that the role of the retailer, regardless of size or type, is to interpret the demands of customers and to find and stock the goods these customers want, when they want them, and in the way they want them. Retailers' power and influence in marketing channels have significantly increased over the last few decades. Indeed, a few retail intermediaries have grown much bigger than several manufacturers supplying them.

Channel partners are tied together with others in distribution of goods and/or services through the allocation of specific roles and tasks. Such allocation creates a channel structure for the firm. Wide variations in channel structures can be seen across the world due to differences in psychological, social, cultural, political, legal, economic, and other demographic factors. Ensuring that the goods and services efficiently reach the target customers when, where, and how they want them is the real function of channels.

See Also: Advertising; Communication Challenges; Distribution; Marketing; Retail Sector; Wholesale Sector.

Bibliography. A. T. Coughlan, E. Anderson, L. W. Stern, and A. I. El-Ansary, *Marketing Channels* (Pearson, Prentice Hall, 2006); Charles Y. Lazarus, "The Retailer as a Link in the Distribution Channel," *Business Horizons* (1961).

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This 2006 Chevron gas station design in Redwood City, California, incorporates solar panels on its rooftops.

Chevron

Chevron Corporation, one of the world's leading energy companies, is headquartered in San Ramon, California, and operates in more than 100 countries. Among its major business activities are exploration and production of oil and gas, refining, transport, and marketing of oil and oil products, manufacturing and sales of industrial chemicals, as well as power generation.

The company's business is quite diversified, in terms of both production capabilities and geographic spread. For example, in 2007 in crude oil and natural gas production Chevron produced 2.62 billion barrels of net daily oil-equivalent, with approximately 70 percent of the volume coming from more than 20 countries other than the United States. Throughout the years, the company also has invested heavily in various capital development projects in oil and gas production, transportation, and sales all over the world, including such countries as Angola, Bangladesh, Kazakhstan, Indonesia, and Nigeria. In addition, Chevron has a wide marketing network in 84 countries with approximately 24,000 retail sites and 13 power-generating properties in the United States, Europe, and Asia. In 2007 Chevron made around $214 billion in revenues and nearly $19 billion in net income worldwide.

The company emphasizes four main corporate-level strategies that it is pursuing on a global basis: (1) financial-return objective: aimed at sustainable financial returns that enable Chevron to outperform competition; (2) major business strategies, upstream: aimed at profitable growth in core areas, especially in the natural gas business; (3) major business strategies, downstream: focused on improving returns and selective growth, with a concentration on synergies, and on continuing investment in renewable energy sources; and (4) enabling strategies companywide: focused on investing in people to achieve corporate strategies outlined above, as well as on building organizational capabilities and leveraging technologies.

Chevron, originally known as Standard Oil of California (Socal), was created as a result of the forced breakup of Standard Oil in 1911. After several transformations occurring mainly due to its many concession ventures in the Middle East, by 1980 the company became entirely owned by the Saudi government. In 1984 the cooperation between Socal and Gulf Oil created the largest merger in world business history at the time, and as a part of the merger, Socal changed its brand name to become Chevron Corporation.

Among Chevron's largest business dealings in the next two decades, the merger with Texaco in 2001 was one of the most prominent mergers and acquisitions to date. Although this merger prompted a brief change of name—to ChevronTexaco—the company decided to return to its Chevron name in 2005, with Texaco and its subsidiaries still remaining a brand under the Chevron Corporation. The same year, Chevron entered into another significant deal, a merger with Unocal Corp., which, thanks to Unocal's sizeable geothermal operations in southeast Asia, made Chevron the biggest producer of geothermal energy in the world.

In addition to its core business, Chevron also develops and commercializes advanced and alternative energy sources such as fuel cells, photovoltaic technology, and hydrogen-based fuel. Overall, the company is investing about $300 million a year into alternative fuel sources research and development and has created a biofuels business unit, implicitly indicating that it is becoming a part of Chevron's core business model. In general, all sorts of biofuels and clean technologies are an important part of the company's business.

Similar to other companies in the petroleum industry that are often a target of much criticism for worldwide political influence and environmental damage, Chevron has been particularly blamed for numerous ecological disasters caused by its allegedly unsound exploration and maintenance practices. For instance, the company has been accused of polluting water supplies in several world regions, including North America (dumping a significant amount of toxic waste and illegally bypassing wastewater treatment facilities in Richmond, California), Africa (Angola), and Asia.

Political influence exerted by "big oil" also remains one of the major criticism points, and has recently emerged once again in regard to Chevron's attempts to impact the industry reorganization plans in California. Even though many corporations and various interest groups participated in the reform planning process, mainly Chevron enjoyed tremendous success in affecting the final report through the work of its paid lobbyist and lawyers. To return the favor, the company has contributed more than $700,000 to governor's committees, the California Republican Party, and a governor-controlled political fund.

In order to combat negativity and boost its public image, Chevron, among many other initiatives, pledged to fight global warming and tackle the issues of alternative energy sources. The company has recently created a new public internet-based forum called willyoujoinus.com, where everyone is invited to join the discussion to help find new, clean, and more accessible ways to provide power to the world and its ever-growing demands.

See Also: Downstream; Ecuador; Environmental Standards; ExxonMobil; Total; Upstream; United States.

Bibliography. BBC News, "Chevron Claims Energy Debate," news.bbc.co.uk (cited March 2009); Chevron Corporation, www.chevron.com (cited March 2009); Tom Chorneau, "US: Chevron Donates to Schwarzenegger, Gets Removal of Restrictions on Oil Refineries in California," *Associated Press*, corpwatch.org (cited March 2009); Will You Join Us, www.willyoujoinus.com (cited March 2009).

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Chicago Mercantile Exchange

The Chicago Mercantile Exchange (CME) is an American financial trading place based in Chicago. Often called MERC, it was founded in 1898 as the Chicago Butter and Egg Board. When the CME began it was a not-for-profit organization. Its purpose was to trade futures contracts on agricultural products. In 1919 it became the Chicago Mercantile Exchange.

In 1987 the CME began use of its Globex trading system. It then began operating an electronic trading system in futures contracts in 1992. By 2004 the system recorded its one billionth trade through the Globex system, which is a modified version of the NSC system developed in Europe for European exchanges. In 2006 the CME improved its ability to electronically trade in interest rate swaps with the purchase of Swapstream, a London based company. Electronic trading entered the CME's electronic system on January 13, 2008. Several months prior to this CME was engaged in developing a commodities futures platform with the Singapore Exchange.

A major step in modernizing the corporate organization of the CME occurred in November 2000 when the CME was demutualized and became a joint stock company owned by shareholders. The CME's demutualization was the first time in American financial history that an exchange had demutualized. In December 2002 it went public. In July of 2007 it completed its merger with the Chicago Board of Trade (CBOT) to become the CME Group through an exchange of

$8 billion in stock. On August 18, 2008, CME's shareholders approved a purchase of the New York Mercantile Exchange (NYMEX) for $8.9 billion in cash and CME stock. The CME and NYMEX systems are to be fully integrated by October 1, 2009. With the NYMEX's trade in energy products, metals, and other commodities, the CME's range of commodities and volume will increase dramatically.

The system of trading developed and used by the CME since its beginning was the open outcry system of trading. The system uses humans to stand and cry out bids to buy or sell. It appears chaotic but allows hundreds of auctions to be conducted simultaneously throughout the trading day. The New York Mercantile Exchange, the Chicago Board of Trade, and exchanges in other countries use a similar system.

The outcry system of trading places traders in a trading pit from which they cry out prices and quantities. These are interpreted by other trades as offers to buy or sell specific quantities of the commodity offered. Because the price is "discovered" through the outcry of traders it provides an efficient way to exchange contracts for commodities for future delivery or for speculation. Because of the din created by many traders shouting out orders to buy or sell, a system of complex hand signals called *arb*, short for *arbitrage*, is used.

The open outcry trading floor system of the CME is linked to the electronic trading platform called the "Globe." It allows those who have signed up to trade to do so electronically from anywhere on the globe. The open outcry system is being replaced by the electronic systems because they are cheaper, faster, and can handle larger volumes. They are also not as vulnerable to manipulation of the market by traders, brokers, or dealers who are making a market. Defenders of the open outcry system argue that personal contact allows traders to read the intentions of others in the market and to make position adjustments accordingly. Currently 70 percent of the CME's trade is through its electronic Globe system.

The CME has the world's second largest futures exchange, and the largest in the United States. It provides a marketplace for trading futures and options on futures. Trade on the CME is in equities, stock indexes, foreign exchange currencies, commodities, and interest rates. It also provides a marketplace for trading in weather and in real estate derivatives. The financial instruments that it uses are either cash or primary instruments (loans, deposits, or securities) or derivatives. The derivatives can be traded through the exchange market or through the over-the-counter (OTC) market. Derivatives are financial instruments that derive their market price from an underlying financial instrument. Stock options are derivatives as are interest rate swaps.

On October 7, 2008, the CME partnered with the Citadel Investment Group to create an electronic trading platform (a trading floor) for trading credit default swaps (CDS). The CDS trading will allow banks and others to spread the risk of default by governments, companies or consumers. The move is expected to provide liquidity in the market for standardized contracts and future derivative markets. The Clearing Corporation will provide clearinghouse services with the Depository Trust and Clearing Corporation providing management of assets.

See Also: Futures Markets; Stock Exchanges; Wall Street.

Bibliography. David Griesing and Laurie Morse, *Brokers, Bagmen, and Moles: Fraud and Corruption in the Chicago Futures Markets* (John Wiley & Sons, 1991); B. Joseph Leininger, *Lessons from the Pit: A Successful Veteran of the Chicago Mercantile Exchange Shows Executives How to Thrive in a Competitive Environment* (B&H Publishing, 1999); Jeffrey L. Rodengen, *Past, Present and Futures: Chicago Mercantile Exchange* (Write Stuff Enterprises, Inc., 2008); Robert A. Tamarkin, *MERC: The Emergence of a Global Financial Powerhouse* (Harper Business, 1993).

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Chicago School/Chicago Boys

The Chicago School was a group of highly influential economists affiliated with the University of Chicago in the last century. The heyday of this group was in the 1950s when economists teaching in the economics department joined forces with professors in other academic areas in the graduate school of business and the law school to set up a group outlook on economic issues based on monetary theory. More than two-thirds of the members of the faculty agreed on the ideas of the Chicago school of thought. These ideas rest on two pillars: (1) enhancing the Marshallian price theory tradition and (2) developing and applying empirical methods for more rigorous testing of theoretically derived hypotheses.

In the public perception, the Chicago School is frequently associated with antitrust economics, but Edward Chamberlain, among others, made an earlier reference to the "Chicago School of Anti-Monopolistic Competition." Two of the leading researchers of this group were awarded the Nobel Prize in Economics: George J. Stigler (1982) and Milton Friedman (1976). Indeed, the track record of winners of the Nobel Prize in Economics affiliated with the University of Chicago is impressive: in addition to Stigler and Friedman, and up to 2008, the list comprises Paul A. Samuelson (1970), Kenneth J. Arrow (1972), Friedrich A. von Hayek (1974), Tjalling Koopmans (1975), Herbert A. Simon (1978), Theodore W. Schultz (1979), Lawrence Klein (1980), Gérard Debreu (1983), James M. Buchanan, Jr. (1986), Trygve Haavelmo (1989), Harry M. Markowitz (1990), Merton H. Miller (1990), Ronald Coase (1991), Gary S. Becker (1992), Robert W. Fogel (1993), Robert E. Lucas, Jr. (1995), Myron S. Scholes (1997), Robert A. Mundell (1999), Daniel L. McFadden (2000), James J. Heckman (2000), Edward C. Prescott (2004), and most recently, Roger B. Myerson (2007).

Principles

Most of the latter economists contributed to fields other than the antitrust issue. Interestingly, Friedrich A. von Hayek was affiliated with the University of Chicago from 1950 to 1962, but he is acclaimed as one of the most prominent members of the Austrian School. Besides his doctrines, he rejected the empirical evaluation of hypotheses and is, therefore, in conflict with the Chicago School's most important principles, namely

- taking a polar position among economist opinions to advocate an individualistic market economy,
- emphasizing the relevance and usefulness of the neoclassical theory,
- describing both an ideal market and the real markets by expressing the features mathematically,
- seeing and applying economic principles to various aspects of human life, and
- insisting on rigorous empirical testing of all hypotheses.

Particularly the latter principle was not commonly accepted among economists at that time, but was emphasized as a frequently neglected element of Positive Economics by Milton Friedman. This empirical testing, in combination with a sophisticated use of mathematics for describing the markets as well as the (aggregated) behavior of agents within these markets, provided members of the Chicago School with a clear advantage in the competition of scientists. By avoiding economic value judgments and establishing operationally meaningful theorems, Positive Economics advanced the dominating research paradigm, although Normative Economics had prominent supporters, notably the Keynesian School. Thus, the Chicago School's credos that competitive markets are the best way to organize economic activities, that most types of governmental regulations are harmful to economic development, and that the monetary system, particularly the amplitude of money supply, has a substantial impact on a nation's economic conditions, are not an opinion that is integrated into economic analysis, but rather the result of applying formal and empirical methods to issues of interest.

However, the results are grounded in the idea of a market, as described in *The Wealth of Nations* by Adam Smith, including the legitimacy of self-interest as well as the allocation of resources and distribution of income by market mechanisms. Self-interest is a productive force because it provides clear and agreeable guidelines for the behavior of agents in the markets. Contrastingly, if self-interest triggers or enforces regulations of market mechanisms, efficiency will be reduced. By emphasizing the efficiency of market mechanisms, a second value proposition is identified. Both mathematical-formal analysis and empirical testing are restricted to the consequences of decisions made or the market mechanisms under consideration. From an economics point of view, these procedures, which are not based on value judgments, enable a comprehensive understanding of market mechanisms. However, this is a teleological position, disregarding the deontological contents of economic analysis. In terms of philosophy of science, this is a value proposition, but it is not an economics value proposition.

A different thread to the Chicago School is made up by the methodology predominating in the "good old" Chicago School's analysis. In the neoclassical tradition, they simplified the analysis with the "as if" assumptions *as if* they were true. Moreover, their analysis is at the core of a mechanistic conception of economic relations and interactions. Evolutionary simulation casts doubt on this mechanistic conception, and particularly the complexity of real markets is counter to traditional formalism. In addition, the basic assumption of striving for rational decisions in market interactions is being challenged.

Nevertheless, besides its success in economic research, the Chicago Tradition has had a substantial impact on political decisions affecting national and international markets. During the Reagan administration, the economic policy of the United States was broadly in line with the Chicago School's doctrines. Moreover, Thatcherism in the United Kingdom, transforming the British economy from one of the weakest into one of the strongest in Europe, attributes its success to seizing the results and suggestions of the Chicago School. Currently, many of the nations in the European Union are privatizing governmental services, such as the postal service, and aim to shift from governmental pension systems to private pension schemes, as advised by Milton and Rose Friedman in their book *Free to Choose*.

The Chicago Boys

The most prominent impact of the Chicago School has been the policy of the Chicago Boys in Chile. The Chicago Boys were a group of students at the Universidad Católica de Chile, who enthusiastically worked on Milton Freedman's Capitalism and Liberty ideas. In 1957–70, about 25 of them prepared their doctoral degrees at the University of Chicago, mainly under the supervision of Arnold Harberger in the Latin American Finance Workshop and Milton Friedman in the Money and Banking Workshop. During the Pinochet era, the following Chicago Boys made a substantial impact on Chilean economic policy: Pablo Baraona (Minister of Economy, 1976–79), Alvaro Bardón (Minister of Economy, 1982–83), Sergio de Castro (Minister of Finance, 1977–82), Jorge Cauas (Minister of Finance, 1975–77), Martín Costabal (Budget Director, 1987–89), Sergio de la Cuadra (Minister of Finance, 1982–83), Maria Teresa Infante (Minister of Labor, 1988–90), Miguel Kast (Minister of Planning, 1978–80), Juan Ariztía Matte (Private Pension System Superintendent, 1980–90), Juan Carlos Méndez (Budget Director, 1975–81), José Piñera (Minister of Labor and Pensions, 1978–80, Minister of Mining, 1980–81), and Emilio Sanfuentes (Economic advisor to Central Bank). Another prominent Chicago Boy is Hernán Büchi (Minister of Finance, 1985–89), who studied for his Ph.D. at Columbia University, but agreed with the Chicago School's doctrine and came second in the 1989 Chilean presidential election.

The Chicago Boys attained economic prosperity (the Chilean miracle) in comparison to other Latin American countries and became renowned for the coherence of their political decisions. However, their success was criticized because of income inequality and for admitting foreign companies to reduce profits and related national tax burdens to zero by calculating transfer prices departing from market prices.

The Tradition

The Chicago School is an economic tradition, but one that has also contributed to related disciplines, particularly sociology and law. Not surprisingly, the University of Chicago hosts one of the most prestigious law schools. These are the rules that are still guiding the excellent research process of the Chicago School: (1) they apply their analysis to all parts of (economic) life; (2) they leave no place for prestige, rank, past honor, or personal sensitivities in their economics workshop system; (3) they require strong discipline and methodological rigor. Since these rules are said to be still effective at the University of Chicago Graduate School of Business, this breeding ground will continue to contribute in two ways to contemporary economics and international management. On the one hand, they are likely to come up with path-breaking models. On the other hand, the results of the "good old" Chicago School highly impacts recent discussions of supernational institutions and organizations, including the International Monetary Fund and the World Trade Organization, supporting international trade, environmental protection, and healthcare.

See Also: Antitrust Laws; Chile; Financial Market Regulation; Free Markets; Transfer Pricing.

Bibliography. A. Duhs, "Elegance in Economics," *International Journal of Social Economics* (1994); J. Frank, "Natural Selection, Rational Economic Behavior, and Alternative Outcomes of the Evolutionary Process," *Journal of Socio-Economics* (2003); M. Friedman, "The Methodology of Positive Economics," *Essays in Positive Economics* (University of Chicago Press, 1953); M. and R. D. Friedman, *Free to Choose: A Personal Statement* (Harcourt, 1980); H. Laurence Miller, "On the 'Chicago School of Economics,'" *Journal of Political Economics* (1962); Raza Mir, Ali Mir, and Mehdi Hussain, "Re-Examining Imbeddedness: A Critical Analysis of Global Strategic Management," *Academy of Strategic Management Journal* (2006); M. Nerlove, "Transforming Economics: Theodore W. Schultz, 1902–1998. In Memoriam," *Economic Journal* (1999); J. Van Overtveldt, *The Chicago School: How the University of Chicago Assembled the Thinkers Who Revolutionized Economics and Business* (Agate B2, 2007); R. A. Posner, "Theories of Economic Regulation," *Bell Journal of Economics* (1974); G. Stigler, "The Theory of Economic Regulation," *Bell Journal of Economics* (1971); J. Stiglitz, *Making Globalization Work* (Penguin Books, 2006).

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Child Labor

Children have been used as cheap labor from the earliest times of human existence. Historically children were viewed by parents as a source of labor on farms or in areas of "woman's work." Grown children were the "social security" of their parents for whom they would provide. In a great many areas of the world today this system of children as a labor asset is still the norm. It has only been with the rise of modern industrial societies where the economic surpluses are sufficiently large that a leisure class of children attending school instead of working has been affordable.

Well before 1900 reformers began a campaign to reduce or exclude the labor of children from the economy of the United States and from those in Europe. The Census of 1900 reported that over two million children were working on the streets or employment centers of the United States. The report sparked a national movement to reform child labor practices. The Keating-Owen Act of 1916 (Wick's Bill) signed by President Woodrow Wilson was declared unconstitutional by the Supreme Court in the case of *Hammer v. Dagenhart* (247 U.S. 251) in 1918. The Court ruled that the law exceeded the authority of Congress to regulate interstate commerce. In December 1918 Congress passed the Revenue Act of 1919, which included a second child labor law. The law known as the Child Labor Tax Law sought to regulate child labor through taxation. However, the Supreme Court ruled the law unconstitutional in *Bailey v. Drexel Furniture Company* 259 U.S. 20 (1922). The Court reasoned that the power of Congress was being excessively widened so that it interfered with the right of the states to regulate local trade.

In 1924 Congress proposed the Child Labor Amendment to the United States Constitution. The Amendment was actively opposed by some business interests. It failed in the 1920s and 1930s; however, today it is in a state of legal limbo because it could be adopted in the future. Ten more states are needed for its adoption. Because the Child Labor Amendment would lodge exclusive jurisdiction over child labor in the Congress of the United States many states have rejected it. The Amendment was a response to decisions of the Supreme Court of the United States that upheld child employment and rejected state legislative efforts to ban or limit child employment practices. The latest case before the Amendment was proposed was the Supreme Court's decision declaring the Child Labor Law unconstitutional. The law sought to regulate the employment of children in canneries, mills, mines, quarries, manufacturing centers or workshops if under the age of 14. In 1941 the Supreme Court reversed its decision on the *Dagenhart Case* in *U.S. v. Darby Lumber Co.*, 312 U.S. 100. The ruling upheld the constitutionality of the Fair Labor Standards Act, which is still in force today.

Child labor opponents were successful in eliminating the labor of small children from the economy by the 1940s. The exclusion of children from the economy as laborers reduced the supply of labor to the benefit of adults and included them in the controls put on labor sought by labor unions. Today the exclusion of children from the labor markets in Western countries is enforced through child labor laws that impose penalties for employing underaged workers. Household chores, family farm work, and work in a business owned by the child's family is generally excluded.

Child labor laws were enacted to achieve several policy goals. The main goal was the protection of children by restricting their hours of work and the type of work they could perform. More specifically child safety was sought by keeping them from working in places or with things that could put them at risk in hazardous or unsanitary conditions; or by protecting them from overly strenuous or immoral working conditions. Occupations that are dangerous to children include work that poses a physical danger. Operating a log shredding machine, or handling explosives in a quarry are such occupations from which children have been excluded. In general child labor legislation has been applied to commercial enterprises. However, in many jurisdictions restrictions are also placed on nonprofit organizations as well.

Child labor legislation applies to minors and not to children who have reached the age of their majority. However, the age of a minor is defined by these laws which can vary from state to state in the United States or from country to country around the world. For example while 18 is the normal age for a young person's majority, some industries like the steel industry have required parental permission for young people under the age of 21 to work in areas that are hazardous.

Laws in many jurisdictions are clear that parents may not contract away their children through a binding employment contract. The law operated on the basis that benefits conferred by law to children many not be nullified by claims to parental rights. In some states for a minor to work in certain businesses not just parental permission is required. In addition there may be specific conditions, supervision, or other conditions and approvals that are required. Child actors are required to have a tutor who teaches them as a requirement of employment. The requirement is one that must be ratified by the parents. For example children who work may not have their compulsory education disrupted by work. They must be enrolled in a school whether public or private or educated by a tutor.

Employer Responsibilities

When children are employed even with a legal permit it is incumbent upon the employer to assume extra responsibilities. Employer responsibilities include seeing that all employment instructions are carefully issued and followed. The delegation of this duty to subordinates is not sufficient in law to absolve the employer of responsibility if an accident were to happen to the child or if the child were to cause some serious damage in the course of employment. If an employer is given legal notice of failure(s) to engage in due diligence in the employment of a child or children then sterner measures can be employed to force compliance. Among the sterner measures may be penalties or stricter regulations of the actions of subordinates.

Employers who are found guilty of employing under aged children or for work proscribed for children can be punished according to law. Those found guilty of technical violations may be held accountable and their certificate of employment for the child(ren) may be nullified. The penalties for which employers found liable for violations of child employment laws can include criminal penalties, or civil penalties including revocation of a license to employ them. The fact that the actual work was performed through a sub-contracting party such as a natural person or a corporation will not be sufficient to excuse an employer from responsibility as the original employer. Some states still hold employers responsible even if the work methods of independent contractors are outside of the control of the child's employer.

Employers who "in good faith" hire a minor are not excused from liability in case of injury to the child. The representation of good faith is not a defense even if the child lied about his or her age. In the case of injury parents are not necessarily to be held liable for the injury. Tort actions initiated against the party causing the injury may be only for the benefit of the child and not for any losses to the parents. This is because they are third parties that the law is not seeking to protect as it is seeking to do for children.

Child Labor in the Third World

In Third World countries where child labor laws are weak or nonexistent it is common to see babies and small children used as beggars. Their pitiful conditions are used to manipulate the sympathies of adults, often tourists or foreigners, in order to gain donations. It is not unusual for children to be deliberately injured in order to add to their wretchedness as objects of pity.

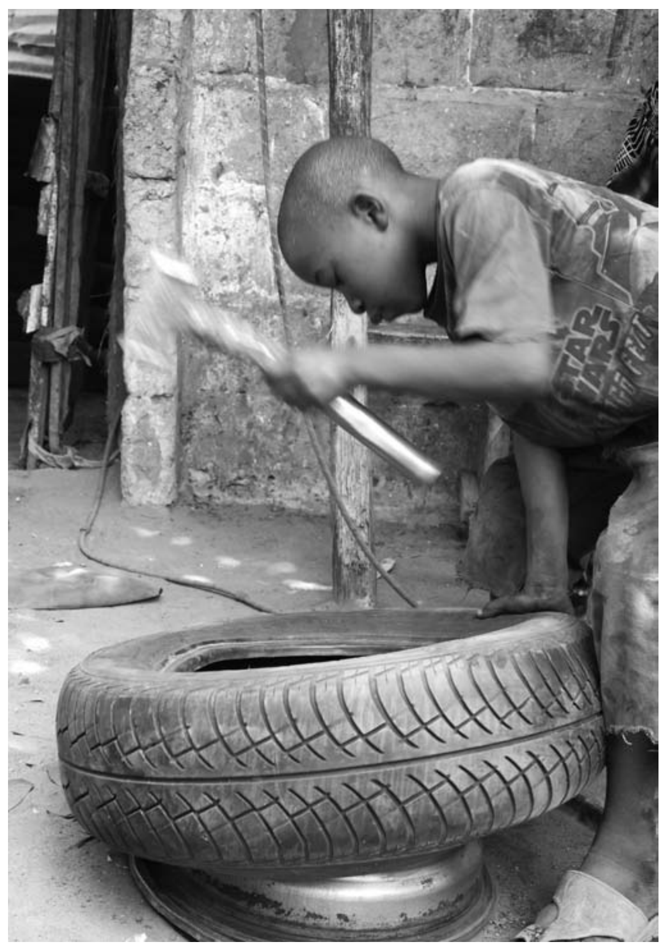
This form of child employment has been observed by Westerners in China, India, and Latin America as well as in other Third World countries.

In Africa child labor has been in such demand that in some countries large numbers of children leave their villages for places to work and never return. In some cases children are sent into the world to work by their parents. In other cases they are simply kidnapped and put to work as virtual slaves. In Brazil it is estimated that there are over two million child workers. Numerous cases of children working to break rocks, carry bricks, do farm work, shine shoes, pound clay, or many other jobs have been observed and documented in some cases. The economy has been growing, but the amount of poverty is such that child labor is tolerated despite the county's laws. The Philippines is estimated to have as many as one million child laborers under the age of 15.

The number of children regularly employed at sustained labor is estimated to be 270 million globally by UNICEF. This figure does not include children employed as domestic help. The United Nations Convention on the Rights of the Child (CRC) holds that child labor is a form of exploitation (Article 32). While it is considered exploitation to employ children before a certain age (excluding home chores and school work), the minimum age for some employment varies between countries. In the United States the minimum age is usually 16. The United States and Somalia were the only countries in the world to not sign the Convention on the Rights of the Child in the 1990s. American conservatives opposed the CRC as a device for the state to take away parental rights and for allowing children to become wards of the state.

Despite the Convention on the Rights of the Child, child labor is common wherever the educational system is weak or non-existent. Among the many occupations performed by children in the Third World are tasks such as factory work, agriculture, selling food or other jobs related to the family business, doing odd jobs on the streets such as polishing shoes, doing repetitive work or in some cases serving as prostitutes. In many countries employers put children to work in hidden locations where they cannot be seen by reformers, the media or labor inspectors. Many are engaged in what have historically been called sweatshops. In the Third World child labor occurs in all types of weather for very small incomes.

One overriding reason for the continued existence of exploitative child labor is the fact that the labor of children supplies poor families with needed income. The short-term income gains for the family may be at the cost of long-term gains from education, but only if it is available. Opposition to limitations imposed by child labor laws is registered at times by youth rights groups. Their claim is that in some cases a child may be eager to earn a living or to provide for the family. In general scholars have concluded that the basic cause of child labor is the poverty of families. Both India and Bangladesh have an estimated 70 to 80 million child workers. Many children who work are below the age of 11. Many work in sweatshops that supply American or European retailers with commodities such as shoes or clothing. Wages usually are limited to a few dollars per week. Child labor in these countries occurs despite Indian and Bangladeshi child labor laws.



There are an estimated 270 million child laborers worldwide, such as this boy working in a tire shop in Gambia in 2008.

Corporate Responses

Retailers and manufacturers accused of ignoring the use of child labor have at times discovered that their accusers were correct and have taken steps to end the use of child labor in their products. In India raids by authorities in 2005 revealed that the embroidery industry in Delhi was employing young children at sweatshop wages. The use of children in the Oriental rug industry is ancient. Rug weaving is performed by young boys from an early age. The work gives then not only income but a future as a weaver. However, the carpet industry in Pakistan has moved beyond the traditional crafts industry of former times. It for at least a time was a center of child labor exploitation.

Companies accused of using child labor have included Wal-Mart, Nike, and the Gap Company. The latter strongly denied the accusation. The Firestone Tire and Rubber Company restructured its operations in its Liberian rubber plantation when it was found that it was involved in child labor practices. A suit brought by the International Rights Fund on behalf of the exploited children was still in court in 2008.

In 2008 Agriprocessors, a kosher meatpacking company in Postville, Iowa, was raided by agents of Immigration and Customs Enforcement. Numerous undocumented workers who were illegal aliens were found, but so were 57 minors. All including those working below the age of 14 were recorded as evidence to be used in prosecuting the company.

Despite decades of progress, child labor is not confined to the Third World. It has been found to continue to exist in Europe and in the United States. In Great Britain a campaign to end child labor sponsored by UNICEF is underway to aid in the elimination of child labor.

See Also: Antiglobalization Movement; Bangladesh; Corporate Social Responsibility; Democratic Globalization; India; Industrialized Countries; Less Industrialized Countries; Off-Shoring; Outsourcing; Sustainable Development; Underdevelopment; Working Hours.

Bibliography. Atenwo Human Rights Center, *Opening Doors: A Presentation of Laws Protecting Filipino Child Workers* (International Labour Office, 2003); Edna Dean Bullock, *Selected Articles on Child Labor* (Kessinger Publishing Company, 2008); Jean-Robert Cadet, *Restavec: From Haitian Slave Child to Middle-Class American* (University of Texas Press, 1998); Holly Cullen, *Role of International Law in the Elimination of Child Labor* (Brill Academic Publishers, 2007); Russell Freedman, *Kids at Work: Lewis Hine and the Crusade Against Child Labor* (Houghton Mifflin, 1998); Christiaan Grootaert and Harry Anthony Patrinos, eds., *Policy Analysis of Child Labor: A Comparative Study* (Palgrave Macmillan, 1999); Wendy Herumin, *Child Labor Today: A Human Rights Issue* (Enslow Publishers, 2007); Gerda Weissman Klein, *All But My Life* (Farrar, Straus and Giroux, 1995); Marvin J. Levine, *Children for Hire: The Perils of Child Labor in the United States* (Greenwood Publishing Group, 2003); Kevin Majors, *Free The Children: A Young Man Fights Against Child Labor and Proves that Children Can Change the World* (HarperCollins, 1999); National Research Council Institute for Medicine, *Protecting Youth at Work: Health, Safety, and Development of Working Children and Adolescents in the United States* (National Academies Press, 1999); Olga Nieuwenhuys, *Children's Lifeworlds: Gender, Welfare and Labour in the Developing World* (Routledge, 1994); Myron Weiner, Neera Burra and Asha Bajpai. *Born Unfree: Child Labour, Education, and the State in India: An Omnibus: the Child and the State in India, Born to Work, and Child Rights in India* (Oxford University Press, 2007); Elizabeth Winthrop, *Counting on Grace* (Random House, 2007); Karin L. Zipf, *Labor of Innocents: Forced Apprenticeship in North Carolina, 1715–1919* (Louisiana State University Press, 2005).

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Chile

Chile is a country on the western coast of South America with a distinctive geography and rich natural resources. After decades of import substitution industrialization policies, the country has been pursing an export-led growth strategy since the late 1970s. Its economy is integrated with the rest of the world as a result of high levels of openness in trade and finance. Following a dictatorship that remained in power between 1973 and 1990, Chile has been democratic and politically stable under center-left coalition governments. The center-left coalition, in power since the end of the dictatorship, has followed the market-oriented economic policies of the previous period with an emphasis on lowering income inequality and fighting poverty. Chile has enjoyed one of the strongest economic growth performances in Latin America over the last three decades. The country is the leading producer of copper and nitrates. While its exports are still dominated by copper, Chilean exports have diversified into nontraditional exports such as wine and salmon. Its economy is stable with low levels of public debt and inflation, and a relatively low level of unemployment. Since 2003 the economy has experienced strong economic growth that is partly driven by the extremely favorable copper prices.

Between 1970 and 1973, after a long history of democracy, Chile succumbed to political polarization and economic crisis under the socialist government of Salvador Allende. The military, under the leadership of Augusto Pinochet, intervened in 1973 and established one of the most repressive regimes in Latin America, which lasted until 1990. The military regime implemented radical reforms, transforming Chile into a market-based and capitalist society. Between 1973 and 1990, Chile became highly integrated with the rest of the world; foreign trade's contribution to gross domestic product (GDP) increased substantially. The expansion and diversification of exports, which began in the late 1970s and strengthened in the 1980s, became the engine of growth. The share of exports in GDP reached 33 percent in 1990, while the share of copper in total exports decreased to 45.5 percent (it was 75.5 percent in 1974).

The center-left coalition (La Concertación de Partidos por la Democracia) that took power in 1990 opted for consensus-building in politics, continuing market-friendly policies, and supporting export-led growth. It also aimed to address the massive poverty and income inequality inherited from the previous regime. As a result of further export diversification and remarkable success in agricultural, fishery, and wood products, Chile grew at impressive rates in the 1990s (the average GDP growth rate was above 8 percent between 1991 and 1997). However, despite gains against poverty since 1990, Chile still has a highly skewed income distribution.

During this period, Chilean trade with the European Union and Asian countries such as Japan and South Korea increased considerably. Chilean entrepreneurs were successful in filling particular niches in advanced industrialized countries (e.g., the supply of high-quality fishery products into Asian markets). Chile supported its export industries by enacting trade agreements (preferential and free) with various countries. Currently, Chile has bilateral trade agreements with more than 50 countries, including free trade agreements (FTAs) with the European Union, the United States, China, South Korea, and Japan. Chile is also an associate member of Mercosur.

Following the Asian financial crisis, the Chilean economy slowed down between 1998 and 2002. Economic growth resumed between 2003 and 2007. At the end of 2007, the Chilean GDP was $164 billion and GDP per capita was close to $10,000. Chilean businesses benefit from low levels of taxation compared to other countries in Latin America. Investment has been strong and Chile continues to attract foreign direct investment (especially in mining). The finance sector in Chile is efficient and profitable. Chilean retail chains (e.g., Falabella, Ripley, Ahumada) are major investors in other Latin American countries. Despite these achievements and continuing success of export industries, the stock of human capital is low in Chile, the educational system is plagued by quality problems, and labor force participation is not at desirable levels.

See Also: Bilateral Free Trade Agreement; Chicago School/Chicago Boys; Company Profiles: South America; Import Substitution; Latin America; Mercosur/Mercosul; Trade Pact.

Bibliography. Central Bank of Chile, *Social and Economic Indicators, 1980–2000* (2002); Simon Collier and William F. Sater, *A History of Chile, 1808–2002* (Cambridge University Press, 2004); Economist Intelligence Unit, *Chile Country Profile, 2008* (2008); Ricardo Ffrench-Davis, *Economic Reforms in Chile: From Dictatorship to Democracy* (University of Michigan Press, 2002); Felipe B. Larraín and Rodrigo M. Vergara, eds., *La transformación económica de Chile* (Centro de Estudios Públicos, 2000); Javier Martínez and Alvaro Díaz, *Chile*: *The Great Transformation* (Brookings Institution, 1996); OECD, *Economic Survey of Chile* (2007); Lois Hecht Oppenheim, *Politics in Chile: Socialism, Authoritarianism, and Market Democracy* (Westview Press, 2007).

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China

China is one of the world's oldest continuous civilizations. The history of China as recorded in traditional historical records extends back as far as 5,000 years. Recorded history is supplemented by archaeological records dating back to the 16th century B.C. Turtle shells with markings reminiscent of ancient Chinese writing from the Shang Dynasty have been carbon dated to around 1500 B.C. Chinese civilization originated with city-states in the Yellow River (Huang He) valley; 221 B.C. is commonly accepted to be the year in which China became unified under a large kingdom or empire. In that year, Qin Shi Huang first united China. Successive dynasties in Chinese history developed bureaucratic systems that enabled the emperor of China to control the large territory.

The entire Chinese landmass tilts from west to east. The Himalayas are a young mountain range, still rising by several feet per century because of the collision of the Indian subcontinent with the Asian landmass. This mountain-building process shapes the entire topography of China, creating a series of mountain ranges that are high and rugged in the west and taper off to low hills in the east. Broadly speaking, the land of China forms three great steps in elevation. The top step is made up of the frigid Tibetan Plateau, which averages more than 4,000 m. above sea level and contains the world's highest mountains. The second step consists of a series of plateaus and basins with an elevation of between 1,000 and 2,000 m. These include the basins in arid northwestern China, the Inner Mongolian Plateau and Loess Plateau in northern China, and the Yunnan-Guizhou Plateau in southwestern China. The third step consists of the plains and low hills of eastern China, where the elevation is generally below 500 m. Even in the east, ranges of relatively low mountains create barriers to north-south transport. The three most important rivers in China, the Yangtze (Changjiang), Yellow (Huang), and Pearl (Zhujiang) rivers, all flow from west to east in accord with the basic topography.

China is the world's most populous nation. About 20 percent of world population is Chinese, down from 30 percent in the 1950s. It is also one of the largest countries, with the third-largest landmass after Russia and Canada. Its land area is 2 percent greater than that of the United States. The western half of China is high and arid, and the population is sparse—only 6 percent of the population lives in the dry, mountainous west; 94 percent of the population lives in the eastern half of the country. China's hilly and complex terrain means that relatively little of the land is suitable for cultivation. The good agricultural land lies in the fertile plains and valleys of the major river systems, separated from one another by hills and mountains. Only 15 percent of China is arable, and there is very little land potentially suited for cultivation that is not already exploited. Over the centuries China has adapted to land scarcity with a labor-intensive agriculture that wrests more total food grain from the soil than any other country.

China has substantial mineral reserves and is the world's largest producer of antimony, natural graphite, tungsten, and zinc. With its vast mountain ranges, China's hydropower potential is also the largest in the world. However, the distribution of mineral and energy resources in China is extremely uneven. The rapidly growing southern coastal regions have virtually no energy resources. Geographic constraints dictate that China must develop in a labor-intensive and, ultimately, knowledge-intensive path. Moreover, unrelenting environmental problems will make economic trade-offs more difficult and complex for the foreseeable future.

The Chinese Economy

The year 1949 appears at first to be a great divide in Chinese history. The government is radically different after 1949, and even more dramatic is the growth performance. Before 1949, China never launched into rapid, modern economic growth. Since 1949, China's economy has grown rapidly, despite sometimes disastrous policies imposed during Maoist times. For more than a century—from the early 19th to the middle of the 20th century—China's economic performance was mediocre at best.

Chinese traditional society was overwhelmingly rural, with over 90 percent of the population living in the countryside. After the People's Republic of China (PRC) was established in October 1949, the Chinese economy was wrenched out of its traditional framework and completely reoriented. China's new leaders turned their backs on China's traditional household-based economy, and set out to develop a massive socialist industrial complex through direct government control. Planners neglected labor-intensive sectors suitable to China's vast population, and instead poured resources into capital-intensive factories producing metals, machinery, and chemicals. The early achievements of coastal enclave industrialization oriented to the Pacific were discarded, and a new inward-directed strategy was adopted. China turned to the Soviet Union as its primary model, as well as its chief trading partner and source of technology. For 30 years, China pursued this vision of socialism and this development strategy shaped virtually every aspect of the Chinese economy.

There were major shortcomings associated with the socialist development strategy. First, the single-minded pursuit of industrial development meant that consumption was neglected. Second, employment creation was relatively slow. Because most industry was capital-intensive and services were neglected, new labor requirements were modest. Third, much of the industrial investment was not only capital-intensive, but also relatively demanding technologically.

Beginning in late 1978, China's leaders viewed China, quite correctly, as a low-income developing country, and the imperative of economic development was constantly on their minds. It was never conceivable to Chinese policy makers that their economy would postpone economic development until after an interlude of system transformation. Since China launched economic reforms at the end of 1978, market transition has extended over almost 30 years. The Chinese leadership has been moving the economy from a sluggish Soviet-style centrally planned economy to a more market-oriented economy but still within a rigid political framework of Communist Party control. Indeed, today China has already spent as long a period building a market economy as under Maoist socialism. China's economy has been transformed by successive waves of economic reform.

China grew fast between 1949 and 1978, but growth really took off after the beginning of reform in 1978. Moreover, the acceleration of economic growth coincided with the slowing of population growth, so per capita growth accelerated even more dramatically. According to official data, the average annual gross domestic product (GDP) growth accelerated from 6 percent in the pre-1978 period to 9.6 percent in the 1978–2006 period. At the same time, population growth decelerated from 1.9 percent per year before 1978 to only 1.1 percent after 1978. As a result, per capita GDP growth more than doubled, jumping from 4.1 percent to 8.5 percent annually. China's post-1978 growth experience has been extraordinary by any standard. The comparison of GDP between Chinese and other major economies in Asia and the rest of the world shows that China has maintained its GDP growth at the average of 8 percent since 2000, which is higher than Asia and much higher than the United Kingdom and the United States.

Pattern of Chinese Development

Economic growth has been intertwined with structural changes throughout China's economic development process. The command economy included policies restricting labor mobility and controlling prices, as well as neglecting agriculture and services. These policies all had ramifications for China's growth and structural changes that caused a divergence from the development-process benchmark. Despite these divergences, China has followed general patterns of development found throughout the world.

The one-child policy has shaped China in many important ways and has had important impacts on its economic development. Since the late 1970s, especially since its introduction of the reform and opening program, China has formulated a basic state policy to promote family planning in an all-around way in order to slow population growth and improve its quality in terms of health and education. The government encourages late marriage and late childbearing, and advocates the practice of "one couple, one child" and of "having a second child with proper spacing in accordance with the lay regulations." The Chinese government pays great attention to the issue of population and development and has placed it on the agenda as an important part of the overall plan of its national economic and social development. The government consistently emphasizes that population growth should be compatible with socioeconomic development and be concerted with resource utilization and environmental protection. After nearly 30 years of effort, China has successfully found its own way to have an integrated approach to the population issue with its own national characteristics.

Under the command economy there were no labor markets in China. Each worker was a lifetime member of one of the two vast systems of public employment, urban and rural. This system was slow to change, especially in the cities: employment in state-owned enterprises continued to grow well into the 1990s, nearly 20 years after the beginning of reform. But then, beginning in the mid-1990s, China laid off almost 50 million workers, 40 percent of the public-enterprise workforce. Today the entire system of government-controlled employment has dissolved, and active labor markets have developed nationwide, which create the foundation for a skilled and prosperous economy.

When the old system broke down, unemployment surged, and remains a serious chronic problem. The Chinese government recognized the importance of the issue of employment. It has explored and drawn on international experiences and adapted them for use in the domestic situation, formulating and implementing a number of proactive employment policies. For instance, new forms of employment mushroomed, such as jobs in foreign-invested firms and economic entities of diverse forms, part-time jobs, temporary jobs, seasonal jobs and work on an hourly basis, and jobs with flexible working hours, and became important avenues for the expansion of employment. In recent years, as the employment pressure has been continuously increasing, the Chinese government has adopted many measures to curb the sharp rise of urban unemployment. By the end of 2006, the registered unemployment rate in the urban areas was 4.3 percent, and the number of registered jobless urbanites was eight million.

China and Global Business

China has transformed into a global trade power. In 2005, China was the third-largest trading nation in the world (after the United States and Germany), and its trade is growing far more rapidly than that of any other large economy. China has now achieved a degree of openness that is exceptional for a large, continental economy. In 2005 China's total goods trade (exports plus imports) amounted to 64 percent of GDP, far more than other large, continental economies—such as the United States, Japan, India, and Brazil—which have trade/GDP ratios around 20 percent, the highest being Brazil's 25 percent. Trade liberalization has been an integral part of China's economic reform process since its beginning. The most recent phase of trade policy reform began with China's formal entry into the World Trade Organization (WTO), on December 11, 2001, which started the clock running on a series of liberalization commitments kicking in between 2001 and 2007. Besides marking a new phase of policy reform, WTO membership symbolizes China's coming of age as a participant in the global economic community.

Investment and trade are closely linked in China and the global economy. For more than a decade China has been one of the world's most important destinations for foreign direct investment (FDI). Investment began to pour into China after 1992, and annual inflows have been over $40 billion since 1996. Trending steadily upward, FDI inflows were at $63 billion in both 2004 and 2005. These inflows are by far the highest of any developing country and have remained remarkably stable and robust despite substantial fluctuations in the Asian and global economies. China has accounted for about one-third of total developing-country FDI inflows in recent years. There is no doubt that the global manufacturing networks created by FDI in China will continue to play a critical role in the world economy.

Future Challenges

For centuries the pressure of population on China's limited natural resources has led to severe environmental degradation. A hundred years ago most of China had already been stripped of forests. Modern economic growth has created another set of challenges, creating massive pollution and apparently unsustainable demands on natural resources. Air and water pollution are damaging to human health, worker productivity, and agricultural output. The growth of industry and the growth of automobile transport are causing an increase in pollutants.

Since 1980 the quality of China's surface water and ground water has deteriorated significantly under the pressure of rapid industrial development, brisk population and urban growth, and increased use of chemical fertilizers and pesticides. As a result, water pollution is now a serious problem for urban and rural drinking water. Moreover, critical environmental problems in China relate to the coordination of enormous demands on China's natural resources. These problems are more difficult to quantify because a large but unknown share of costs is deferred to the future.

While China has enjoyed a phenomenal GDP growth rate averaging 8 percent since 2000, it has come at a steep cost to the environment, especially affecting water quality for both urban and rural populations.

Environmental degradation has imposed serious costs on the Chinese economy and reduced the well-being of the Chinese population. Moreover, there is increasing public concern about environmental issues, and that concern has increasingly been publicly articulated. The government's responsiveness to these protests will be a bellwether of its willingness to let public opinion serve as an input into economic decision making. In its most recent planning exercise, the five-year plan for 2006–11, the Chinese government called for a reorientation of the economic growth model toward sustainable growth with a lighter environmental impact. This shift in viewpoint suggests that government policy has begun to become one positive element in the complex mix of factors that determine China's environmental trajectory. In combination with many other social, technological, and economic factors, that could turn China in the direction of gradual environmental improvement.

See Also: Asia; Asian Financial Crisis; Bank of China; China Life Insurance; China Mobile Communications; China National Petroleum; Communism; Feng Shui; Guanxi; Hong Kong; Socialism; State-Owned Enterprises; Sustainable Development; World Trade Organization.

Bibliography. Institute of Geography, Chinese Academy of Sciences, and China Population and Environment Society, eds., *The Atlas of Population, Environment and Sustainable Development in China* (Science Press, 2000); N. Lardy, "The First Five Year Plan, 1953–1957; The Great Leap Forward and After," in *The Cambridge History of China Vol. 14: The People's Republic, Part 1: The Emergence of Revolutionary China, 1949–1965,* R. MacFarquhar and J. K. Fairbank, eds. (Cambridge University Press, 1987); B. Naughton, *Growing Out of the Plan: Chinese Economic Reform, 1978–1993* (Cambridge University Press, 1995); X. Peng, "Is It Time to Change China's Population Policy?" *China: An International Journal* (v.2/1, 2005); D. Perkins, S. Radelet, D. Snodgrass, M. Gills, and M. Roemer, *Economic Development,* 5th ed. (W. W. Norton, 2001); P. Richardson, *Economic Change in China, c. 1800–1950* (Cambridge University Press, 1999); C. Riskin, *China's Political Economy: The Quest for Development Since 1949* (Oxford University Press, 1991); SEPA, *Analysis Report on the State of the Environment in China* (Ministry of Environmental Protection of the People's Republic of China, 2004); Statistical Yearbook of China, *Zhongguo Tongji Nianjian* [Statistical Yearbook of China] (Zhongguo Tongji, 2006); F. Wang, "Can China Afford to Continue Its One-Child Policy?" *Asia Pacific Issue* (v.77, 2005); World Bank, *China 2020: Development*

Challenges in the New Century (World Bank, 1997); World Bank, *China: Air, Land and Water* (World Bank, 2001); J. Wu, *Understanding and Interpreting Chinese Economic Reform* (Thomson, 2005).

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China Life Insurance

China Life Insurance Company Limited ("China Life") is China's largest life insurance company and the second-largest by market value globally (US$129 billion; RMB 1,032 billion). With a market share of approximately 40 percent with less than 4 percent of the population insured, China Life—and the China insurance market in general—faces substantial growth opportunities. Market liberalization and the consequent entry of the world's largest players represent a considerable challenge, with China Life's future success dependent upon its ability to adapt to the new and dynamic global environment.

China Life was established in Beijing on June 30, 2003, and was listed in New York and Hong Kong in December 2003. In January 2007 the company listed on the Shanghai Stock Exchange, drawing bids for 49 times the volume of stock on offer. The company operates primarily in China and employs approximately 76,000 people. The product mix includes life insurance, annuity products, and accident and health insurance for both individuals and groups.

In 2007 China Life achieved a profit result of US$4.85 billion (RMB 38.9 billion) on revenues of US$23.9 billion (RMB 191.4 billion), an annual increase of 94.8 percent and 29.9 percent, respectively. In 2007 insurance premiums rose by 12.7 percent to US$13.9 billion (RMB 111.4 billion), while net investment income increased 68 percent to US$5.5 billion (RMB 44.0 billion), largely due to rapidly appreciating stock market investments. The company's solvency margin—at 5.25 times the regulatory requirement in December 2007—reflects the company's current financial strength.

China Life maintains a strong leadership position in China with a market share in 2007 of 39.7 percent (2006, 45.3 percent), comprising 93 million individual policies. China Life is also China's largest institutional investor with assets of almost US$125 billion (RMB 1,000 billion) under management. In 2007 Chinese insurance companies were granted the right to invest up to 15 percent of their assets overseas.

In recent years, China Life has maintained its dominant position through scale (specifically, its technical infrastructure and marketing channels) and its strong reputation in a community whose culture has a strong aversion to issues surrounding mortality. China Life's distribution network in China includes more than 3,600 branches, 12,000 field offices, 90,000 bancassurance outlets (financial intermediaries), and 650,000 sales agents.

China Life's history will be sharply delineated by current industry liberalization as China's government seeks to regulate the participation of foreign insurance groups and protect the interests of domestic participants. China Life recognizes that, in order to become globally competitive, it needs to raise the level of its operational management and professionalism at all levels and in all areas. The company has indicated that it will continue to seek strategic foreign investors from whom it can learn advanced investment management systems and risk management, enhance the company's corporate governance, and develop highly competitive sales and marketing strategies and practices.

While the company's current strategy calls for strengthening and increasing its 90,000 bancassurance outlets, industry experts question the ongoing support of these financial intermediaries. In July 2008 four domestic banks applied to invest in China's insurance industry. China Life's ability to develop products tailored to their financial partners' specific needs is critical to maintaining the strength of this valuable marketing channel.

One of China Life's greatest strategic assets is its brand which, in spite of the poor industry penetration of the market (at just 4 percent) still enjoys 92 percent recognition. While this provides considerable leverage in a rapidly developing insurance market, differentiation of its product offerings will be crucial to maintaining a substantial market share into the future.

China Life's investment and risk management skills may also be tested with the volatile domestic stock market. While the company has realized significant profits from stock market investments in recent times, 2008 has seen sharp declines across the board. China Life's future depends on its ability to adapt to the challenges of its new, increasingly dynamic and competitive global environment.

Note: There is no business relationship between China Life Insurance Company in Mainland China and China Life Insurance Co. Ltd. in Taiwan.

See Also: China; Risk Management; Transition Economies.

Bibliography. Stephan Binder, Tab Bowers, and Winston Yung, "Selling Life Insurance to China," *The McKinsey Quarterly* (2004 Special Edition); Olivia Chung, "China's Insurers Look To Looser Shackles," *Asia Times Online*, www.atimes.com (cited March 2009); China Knowledge, "Foreign Strategic Investors for China Life Insurance AMC (HK)," www.chinaknowledge.com (cited September 2008); Research in China, "China Insurance Industry Report, 2007–2008" (August 2007); RNCOS Research Solutions, "China Insurance Sector Till 2010" (December 2007).

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China Mobile Communications

China Mobile Limited ("China Mobile") is China's leading mobile services provider, having developed the largest mobile phone network and subscriber base in the world. The combination of continued rapid growth in China's economy, rising consumer purchasing power, the development of the rural economy, and the acceleration of consumer demand for information services is driving remarkable growth in the mobile phone market. Despite rapid growth, however, market penetration in mainland China is still only around 40 percent (2007). China Mobile enjoys a market share of almost 70 percent (2007); however, changing regulations, major industry restructuring, new competitive pressures, and industry convergence will make this level of market domination difficult to maintain.

China Mobile (Hong Kong) Limited was incorporated in Hong Kong in September 1997 and listed in New York and Hong Kong in October 1997. The name change to China Mobile Limited was effected in 2006.

China Mobile's scope as a network provider includes a comprehensive range of voice, data, and value-added services. Value-added voice services include caller identity display, caller restrictions, call waiting, call forwarding, call holding, voice mail, and conference calling. Value-added data services include Short Message Services (SMS), Wireless Application Protocol (WAP), customized ring tones, Multimedia Messaging Services (MMS), Machine-to-Machine and Man-to-Machine applications, as well as many industry-specific applications.

In 2007 China Mobile's subscriber base reached 370 million, an annual net increase of 22.6 percent. Operating revenue increased 20.9 percent to US$44.6 billion (RMB 357 billion), comprising an increase in average subscriber monthly usage (45.3 percent), and strong growth in value-added business (32.2 percent)

China Mobile's network of 307,000 base stations reaches 97 percent of China's population and is the largest in the world.

and SMS usage (42.3 percent). The company's 2.12 million corporate customers also provide an important marketing base for the development of associated individual-user contracts.

China Mobile's competitive advantages are underpinned by the scale of its operations. Its 307,000 base stations provide 97 percent coverage of the population in mainland China. Its sales, marketing, and support systems comprise more than 72,000 sales outlets providing strong representation throughout China including the difficult-to-reach rural, inner, and western markets. China Mobile's GSM roaming services are provided through 350 operators in 231 countries and regions.

While China Mobile is strongly positioned to capture a major share of the continuing growth potential, several strategic challenges lie ahead. In May 2008 the Chinese government announced plans to create three major telecom groups in an effort to rebalance the industry between the highly dynamic and prosperous mobile operators and the recently sluggish fixed-line operators. China Mobile is expected to play a significant part in one of the three groups and is expected to participate in a wave of acquisitions and mergers. Changes to regulations on call tariffs have also required considerable adjustment and an increased focus on productivity and efficiency.

In April 2008 China Mobile began testing its third-generation mobile communication platform (3G) that will allow development of more sophisticated networks with higher data-transmission speeds and capabilities. This is critical to applications such as TV and movie services, music, internet services, and enhanced mobile payment systems. Approximately 60 percent of the company's capital expenditures were dedicated to construction of the GSM network in 2007 with another 55 percent of CAPEX to be allocated to network development in 2008. In June 2008, facing slower than expected adoption of 3G in early technical and marketing trials, China Mobile announced that it would extend the 3G network from the previously planned 10 eastern cities to all 31 provincial capitals.

New competitors are expected to emerge quickly both from within the industry and through cross-industry convergence. In order to maintain competitiveness, China Mobile will seek to leverage strategic alliances such as those currently in place with organizations such as News Corporation, Sun Microsystems, Inc., and Alcatel-Lucent. A highly publicized failed negotiation with Apple, Inc., in 2008 underscores the importance China Mobile places on cross-industry alliances. With rural markets set to provide a substantial part of future growth in the Chinese mobile phone market, the company is well positioned to optimize the geographic advantage of its technical and sales resources.

See Also: Asia; China; Transition Economies.

Bibliography. AFP, "China Plans Three Telecom Giants," www.afp.com (cited March 2009); China Business Services, "Bell (Finally) Rings For Telecoms Reform," www.2chinabusinessservices.com (cited March 2009); China CCM, "2006–2007 Annual Report on Mobile Phone Marketing Channel & Custom Model in China" (2006); Leopoldina Fortunati, Anna Manganelli, Pui-lam Law, and Shanhua Yang, "Beijing Calling ... Mobile Communication in Contemporary China," *Knowledge, Technology, & Policy* (v.21/1, 2008); Jia Lu and Ian Weber, "State, Power, and Mobile Communication: A Case Study of China," *New Media & Society* (v.9/6, 2007); "Telecoms in China," *The Economist* (May 29, 2008).

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China National Petroleum

The China National Petroleum Corporation (CNPC) is a state-owned fuel-producing corporation in the People's Republic of China (PRC). CNPC's core businesses include oil exploration and production, natural gas and pipelines, refining and marketing, and chemicals and marketing. The company's origin can be traced to its beginning as a government department of the PRC between 1949 and 1988. In a major initiative to separate government from business, CNPC was formally created in September 1988 as the largest state-owned oil and gas upstream corporation in China to replace the Ministry of Petroleum. In order to establish large-scale Chinese corporations to take on challenges of international competition, CNPC was restructured in July 1998 by the government, which made it China's largest integrated energy corporation. Since then, CNPC has been growing rapidly. It ranked 80th in 2002, 46th in 2005, and 24th in 2007 in the Fortune Global 500. In 2005 it overtook U.S. giant Chevron and France's Total to become the world's seventh-largest oil firm on the basis of six indices, including oil and gas reserves, oil and gas output, and sales volume.

CNPC's growth strategy begins with focusing on its core businesses. Similar to other state-owned organizations in China, CNPC used to run "small societies" of its own, having a work force of 1.56 million in the late 1990s. During the 1998 restructuring, CNPC spun-off two-thirds of its high-quality assets and one-third of its workforce in the core businesses of gasoline and natural gas production and marketing into a separate company, PetroChina, and then had it listed on the Hong Kong and New York stock exchanges in 2000. In this way PetroChina was forced to adopt modern enterprise structure and management systems, and was fast-tracked to international markets. In November 2007 PetroChina became the world's most valuable company, with a market capitalization that topped $1 trillion, the first and only company in the world to do so.

At the time of restructuring in 1998, apart from PetroChina, CNPC had 1.06 million employees and 380,000 retirees, and a large number of subsidiary companies. Without the support of the core businesses, these remaining sections had a loss of 12.8 billion yuan in the first year. For the survival and development of these noncore businesses, CNPC took the following measures: Optimizing resource allocation and organization structure; further restructuring to separate main and servicing businesses; reforming personnel and other management systems; and pushing for the market orientation of businesses. These measures have seen the noncore businesses of CNPC smoothly transformed into a healthy growth mode.

According to Zhou Jiping (2004), the vice president of CNPC, the "Chinese oil industry benefited significantly from the oil science and technology with our own characteristics." With the help of the "continental origin of oil theory," China found large oil fields one after another. The application of the theory of large-scale non-homogenous sandstone development, production by layers, oil-stabilizing by water-cut controlling, as well as tertiary oil recovery had helped the Daqing oilfield achieve an annual oil output of more than 50 million tons for more than 27 years, a miracle by world standards. Sophisticated technologies such as horizontal application, underbalanced drilling, slim hole, cased well, and multiple bottom and multiple branch drilling had also been actively applied. CNPC had close to 18,000 staff working in research and development (R&D) by the end of 2006, with an R&D expenditure of US$396.4 million.

With the rapid development of the Chinese economy and the sharp increase in energy demand, Chinese oil companies have been forced to go overseas since the late 1990s in search of a more diversified and secure energy supply. CPNC started its international operations in 1993 by signing a service contract to manage the Talara oilfield in Peru. In October 2005 CNPC completed acquisition of PetroKazakhstan with US$4.18 billion, despite the attempt by Lukoil to block the sale. It was the largest overseas acquisition by a Chinese company at the time. By 2006 CNPC owned oil and gas assets and interests in 26 countries outside China, forming five major operational regions including Africa, Central Asia, South America, the Middle East, and Asia Pacific. CNPC also provides oilfield services, engineering and construction in 49 countries and regions worldwide. Its engineering and technical services have been expanded to 38 countries, and the petroleum goods and equipment manufactured by CNPC have been exported to 61 countries.

However, CNPC also faces a number of problems and challenges, including a low profit margin (2.4 percent) compared to the industry standard, low technology content in operations, mature production facilities, internal welfare burden (a workforce four to five times larger than those of the super majors), small-scale international operations (lack of bargaining power with host institutions), and lack of presence in high-impact international explorations. It remains to be seen if CNPC can sustain its competitive advantages over the long term.

See Also: China; Kazakhstan; LUKOIL; Sinopec; State-Owned Enterprises.

Bibliography. China National Petroleum Corporation, www.cnpc.com.cn (cited March 2009); F. Carvalho and A. Goldstein, "The 'Making of' National Giants: Technology and Governments Shaping the International Expansion of Oil Companies from Brazil and China," UNU-MERIT Working Papers (n.2008-021, 2008); "Global Blueprint of Energetic CNPC," *China Oil & Gas* (v.14/1, 2007); S. Qiu, "CNPC: Creating a Super Enterprise Aircraft Through Reform," *China Post* (n.6, 2006); D. Roberts, "The Challenges Facing China's Oil Behemoth Abroad," BusinessWeek Online, www.businessweek.com (cited March 2009); S. Yang and X. Guo, "The Making of the SOE Super Aircraft—An Investigation of the Reform and Development of CNPC," *Qiu Shi* (n.18, 2003).

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Choice of Forum Clause

As global trade increases so does the number of contracts between parties in different countries. If, as may easily happen, a dispute arises out of a contract it is very important to both parties to know which court or body has the authority to decide that dispute. A choice of forum clause is a term in such a contract that specifies that authority. In the case of a lawsuit it stipulates the particular court or jurisdiction where it may be tried. Alternatively it may specify an arbitrator or conciliator to have the authority to decide a dispute. Such clauses have become particularly relevant with the growth of electronic commerce, much of which is cross-border.

If an international contract does not include a choice of forum clause, then a great deal of legal wrangling may be needed in order to determine a competent court or jurisdiction to settle a dispute. In such a situation neither party is likely to be comfortable as different forums may well make different decisions. However, it cannot be assumed that a choice of forum clause will always be respected. In many jurisdictions there is significant difference between business-to-business (B2B) and business-to-consumer (B2C) contracts. For example, within the European Union, in the event of a dispute over a B2C contract, consumers may in general take suppliers to court in their own country, irrespective of any prior agreement. This is an example of an absolute right that takes precedence over the terms of the contract. The assumption here is that a business is in a more powerful position than a consumer in the formation of a contract; hence, the consumer needs a greater level of protection.

While a choice of forum clause may specify a specific jurisdiction, it does not necessarily specify the corresponding law, although these will usually be the same. The jurisdiction chosen will determine the procedural law that will apply in a particular dispute (e.g., whether or not cross-examination is available to the parties), but not the way in which the contract will be interpreted; this is determined by the "governing" (or "applicable") law, which should be specified in a separate choice of law clause.

Usually a consumer does not have the opportunity to negotiate a choice of forum. However, in the case of B2B, it is normal for negotiation to take place when entering a contract. Issues likely to arise include "hometown advantage" (neither party will normally want to accept the other's home jurisdiction, so they will probably agree a "neutral" jurisdiction), language of the jurisdiction, remedies available in a jurisdiction, and levels of costs and rules relating to them. A particularly important issue in choosing a forum is its power to enforce a judgment; if damages are awarded can the forum enforce their payment?

In the case of B2B contracts it is reasonably common to specify an arbitrator as the forum for dispute resolution, with both parties agreeing that any decision is binding. Advantages of arbitration include faster and cheaper settlement of disputes, the possibility of proceedings being kept secret, and the appointment of technical experts (e.g., in shipping or medicine) as arbitrators. Clauses that specify arbitration are supported in the United States, where compulsory and binding arbitration is permitted by the Federal Arbitration Act.

Care must be taken when entering a contract, either as a consumer or a business, to ensure that any choice of forum clause is understood and is approved by a suitable legal expert; the precise wording is important. In the case of a dispute the clause can, quite literally, have far-reaching effects. Most jurisdictions do recognize the validity of these clauses so long as they were clearly entered into in good faith by both parties.

See Also: Arbitration; Contracts; European Union; International Law.

Bibliography. J. Hörnle, "Legal Controls on the Use of Arbitration Clause in B2C E-commerce Contracts," *Electronic Business Law* (2006).

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Citigroup

Citigroup is one of the most diversified financial services companies in the world. It was incorporated in 1998 through a merger between Citicorp and Travelers Group. It operates globally and has established competitive advantage in its global presence, broad distribution, valuable brands, unmatched scale, and efficiency and product breadth. The company operates through these operating divisions: global consumer, corporate and investment banking, global wealth management and alternate investments.

Citigroup gained its global presence by aggressively acquiring other organizations, especially in Asia and Latin America. At the same time, Citigroup invested in strategic alliances in order to enter China's emerging credit card market. Citigroup has an asset base of over $1.8 trillion. In 2007 the company was ranked first in Forbes 2,000 global companies and 8th in the Fortune 500. Citigroup has more than 200 million customer accounts. Achieving economies of scale provided Citigroup with competitive advantage and allows it to capitalize on opportunities across geographic markets.

Citigroup has invested in increasing its product portfolio and establishing a strong global brand name. Citigroup offers individual and institutional clients a diversified range of financial products and services. Customers range from small and medium-sized enterprises to fund and securities services as well as government services. This wide range of services enhances the company's cross-selling opportunities and increases its resistance to temporary downturns in demand for one product segment or business. CEO Vikram Pandit claims that the Citigroup brand is unparalleled in the world. Moreover, Citigroup has managed to achieve economies of scale and scope. It claims to have the largest pool of talent in the financial services business. Through continuous investment in talent and human capital, Citigroup has managed to expand its operations globally.

Although Citigroup has established a well-recognized global brand name, it has reported a decrease in profits since 2005. The net profit for fiscal year 2006 was $21,538 million, a decrease of 12.4 percent over 2005. Moreover, the company's net profit margins also declined during the same period. The net profit margin declined from 29.4 percent in 2005 to 24 percent in 2006. This decline in operating profits indicates ineffective cost management as well as problematic leadership in the management of operations. Furthermore, a decline of this value restricts availability of resources and prohibits pursuit of growth projects.

Moreover, Citigroup reported a decline in net interest margins. Citigroup's net interest margin in 2006 was 2.65 percent, down 41 basis points from 2005. This decrease in the margins of the group may show declining profitability of the lending business of the company. Net interest margin declined primarily due to a shift in customer liabilities from savings and other demand deposits to certificates of deposit and e-saving accounts. This decrease in net interest margin caused a decline in the group's net interest revenues during fiscal year 2006.

Citigroup has also been in the news for unethical business behavior. The company was linked to the Enron scandal. Its bankers had advised and assisted Enron along the way to its initial success, and made huge profits. They also advised Enron when it had already started on the slide to bankruptcy, making large sums by organizing the deals that deceived the investing public. Citigroup was also forced to shut down its private banking operations in Japan due to improper trading practices and lax anti–money laundering procedures. The Financial Services Authority said that the bank had brokered deals on such items as artworks without properly informing customers about the possible risks. This had an effect on the reputation of Citigroup in southeast Asia and Citigroup was required to close all its offices in Japan.

Citigroup has managed to overcome these associations with corruption by refocusing the corporation to become a socially responsible organization. This has allowed it to rebrand its name and image to create a competitive advantage in the markets in which it is operating. This strengthened Citigroup's presence globally as it was able to bring its global reach together with its local depth. The transformation of the organizational culture and its detachment from the corruption scandals aims at improving teamwork, encouraging respect, and reinforcing a supportive culture that drives performance in order to enable Citigroup to be the financial services industry's employer of choice.

Citigroup was weakened by but survived the 2008 financial markets tumult.

See Also: Corporate Change: Corporate Social Responsibility; Enron Corporation; Financial Markets; Mortgage Credit Crisis of 2008; Multinational Corporation.

Bibliography. Citigroup, www.citigroup.com (cited March 2009); Louise Cooper, "Scandal-hit Citigroup Rebuilds its Image," *BBC News*, March 14, 2005, news.bbc.co.uk (cited March 2009); Eric Dash, "Blue-Light Specials at Citigroup as its New Chief Plans a Revival," *New York Times* (May 9, 2008); Datamonitor, "Report on Citigroup's Company Profile," March 2008, www.datamonitor.com (cited March 2009); Carol Lomis, "Can Anyone Run Citigroup?" *Fortune* (v.157/9, 2008); Steve Maguire and Nelson Phillips, "'Citibankers' at Citigroup: A Study of the Loss of Institutional Trust after a Merger," *Journal of Management Studies* (v.45/2, 2008); "The Real Scandal at Citi," *Newsweek* (February 26, 2007); Christopher C. York, Andra Gumbus, and Stephen Lilly, "Reading the Tea Leaves—Did Citigroup Risk Their Reputation During 2004–2005?" *Business and Society Review* (v.113/2, 2008).

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City, The

The City commonly refers to the City of London (a small district within Greater London), and by way of metonymy, to the financial industry operating there, and the culture thereof—just as Wall Street is used to refer to more than simply the street and what is on it. The City is also home to London's legal industry, and use of the phrase may sometimes carry that association instead or in amplification—a City lawyer being one who works with the financial industry in some way, for instance. Though the City of London is often called the Square Mile, it is less common—though not quite rare—to also use that term for the financial industry.

Greater London consists of the 32 London boroughs (divided among Inner and Outer London) and the City of London. Unlike the boroughs, the City is governed by the City of London Corporation, which is granted with greater-than-usual powers and authority compared to other local governments. The full name of the Corporation, rarely used outside of official contexts, is the Mayor and Commonalty and Citizens of the City of London and the Court of Common Council. The City is divided into 25 wards, which are used as electoral divisions, the largest of which are Farringdon Without, Farringdon Within, Cripplegate, and Bishopsgate, each of which has 8–10 representatives on the Common Council (most wards have 2–5). Each ward also elects one representative to the Court of Aldermen, who serve for six years.

The Lord Mayor of the City of London and two Sheriffs, along with other city officers, are elected by the Common Hall and serve year-long terms. The Common Hall is made up of liverymen, the senior members of the Livery Companies (of which there are over 100) of the City, trade associations that have taken on political and ceremonial duties over the centuries. The Lord Mayor represents the City to foreign dignitaries, and while that is technically the function of many a local politician the world over, London's importance on the global stage brings the Lord Mayor out from the wings more often. The Corporation is heavily criticized by reformers for being outdated, a boys' club with official powers, a single-party microstate that refuses to conform to the practices of the more modern municipal governments surrounding it. This separate administration dates back to 886, when Alfred the Great's son-in-law was appointed Governor of London—but the City at the time was not surrounded by other small municipalities. Given the nature and value of the businesses in the City, it is also worth noting that unlike the boroughs of Greater London, the City maintains its own separate police force.

In the 21st century, the City has a residential population of less than 10,000, and unlike many cities this is significantly less than it has had in the past. Even in 1700, the City's population exceeded 200,000. As

Modern skyscrapers are changing the look of The City—at left is 30 St. Mary Axe, known as the Gherkin, which was developed by the Swiss Re company. Home to one of the largest stock exchanges in the world, The City is a rival to Wall Street.

the boroughs have been developed, though, and as commercial development has become more prominent in the City—since about the middle of the 19th century—the residential population has diminished. It is currently on a mild rise, bouncing back from an all-time low of about 4,200 people in the 1970s.

Important features of the financial industry that so dominates the City include the London Stock Exchange, one of the largest in the world, operating since 1801. The occasional target of takeover attempts, the LSE was most recently subject to takeover bids by NASDAQ from 2005 through 2007, until the latter company finally announced it was abandoning the attempt. Most of the shares NASDAQ accumulated during its takeover attempt—28 percent of the LSE—were sold to the Borse Dubai, in the United Arab Emirates. The Bank of England is also located in the City, as well as Lloyd's of London and offices for Bank of America, Barclays Bank, Citigroup, Credit Suisse, HSBC, and hundreds of other banks.

Outside the City, in the Tower Hamlets borough, but sometimes associated with the City in the international imagination, is the business district of Canary Wharf. Built in the 1980s on the site of the old West India Docks that had been bombed during World War II, Canary Wharf developed as a result of financial deregulation in the United Kingdom, which led to the spread and expansion of many banks and financial institutions, which found themselves stifled by the zoning regulations of the City of London—which sought to preserve its historic and widely-recognized look. Twenty years later, Canary Wharf is part upscale shopping district, part supplemental financial district, with tenants including major investment banks and law firms, as well as offices for the media outlets that cover the City.

See Also: Company Profiles: Western Europe; FT Index; FTSE; Stock Exchanges; United Kingdom; Wall Street.

Bibliography. Alexander Davidson, *How The City Really Works: The Definitive Guide to Money and Investing in London's Square Mile* (Kogan Page, 2008); John Grapper, "Are We No Longer the World's Financial Capital?" *New*

York (v.40/10, 2007); Richard Roberts, *The City: A Guide to London's Financial Centre* (Profile Books, 2008).

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Clearing House Automated Payments System

A clearing house for Britain's large-value time-sensitive interbank, business-to-business, and home purchase transactions in pound sterling, the Clearing House Automated Payments System (CHAPS) facilitates low-volume, high-value transactions. CHAPS uses a real-time gross settlement (RTGS) process similar to that of Fedwire whereby transactions are quickly cleared and settled across accounts in the Bank of England on the same day. These transactions are final and irrevocable at the time they are made. The system is overseen in the United Kingdom (UK) by the Association for Payment Clearing Services (APACS).

CHAPS is owned by a small number of direct members and used by a large number of direct and indirect members. Direct members include large banks and building societies. Indirect members are smaller banks and building societies with access to CHAPS through direct members. Since 1999 CHAPS had operated as two clearing houses, CHAPS Sterling and CHAPS Euro, clearing and settling transactions in sterling and euros, respectively. However, CHAPS Euro ceased operations in May 2008. Reasons cited for this closure included a change in the UK's stance on the euro and declining volume of euro transactions conducted through CHAPS as other options became available for conducting such transactions (e.g., Trans-European Automated Real Time Gross Settlement Express Transfer, or Target2, and Single Euro Payment Area, or SEPA, for clearing that uses Target2 for settlement).

CHAPS was created in 1984. Initially, CHAPS used a netting settlements process whereby clearing was made throughout the day and a final settlement was made at the end of the day. This exposed the system to settlement risk should a large bank fail during the day. In 1996 CHAPS switched to an RTGS system for nearly instant settlement. This significantly reduces risk in the system. Since CHAPS Sterling payments represent 20–25 percent of annual UK GDP *per day*, there is significant need to keep the system sound. Payments are not made through the system without the funds to back up the payment in the system, thus banks participating in CHAPS use collateral at least equal to the amount of their expected peak payment activities. K. James and M. Willison suspect that this is due to the higher opportunity cost of not being able to make a payment versus the cost of posting collateral and borrowing intraday from the Bank of England.

Typically, individuals wanting to conduct electronic bank transactions in pound sterling had two choices: CHAPS or Bankers Automated Clearing House (BACS). The choice between the two depended on the size, cost, and/or urgency of the transaction. Large urgent transactions were conducted using CHAPS, and smaller, less urgent, and recurring transactions were conducted using BACS. Consumers might use CHAPS to buy a house or car and use BACS to pay their bills online. CHAPS has same day real-time settlement and BACS has an average three-day settlement. However, 50 percent of CHAPS payments are less than £10,000. The recently released Faster Payments Service (FPS) will offer faster, cheaper payments for smaller-value (less than £10,000) transactions. This is expected to draw a significant volume of transactions away from CHAPS, raising its costs and possibly injecting instability into the system. For this reason, FPS will be managed by CHAPS.

See Also: Central Banks; Clearing House Interbank Payments System; Clearing Houses; Interbank Market.

Bibliography. APACS, "CHAPS Euro System to Close After Nine Years of Service," www.apacs.org.uk (cited March 2009); Bank of England, "Payment Systems Oversight Report 2006," February 2007, Issue No. 3, www.bankofengland.co.uk (cited March 2009); Bank of England, "Payment Systems Oversight Report 2007," February 2008, Issue No. 4, www.bankofengland.co.uk (cited March 2009); M. Hughes, "Faster Payments in the UK: What Do Corporates Need to Know?" *Bottomline Technologies*, www.bottomline.co.uk (cited March 2009); K. James and M. Willison, "Collateral Posting Decisions in CHAPS Sterling" (Market Infrastructure Division, Bank of England, November 2, 2004).

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Clearing House Interbank Payments System

A wire transfer system for large-value wholesale real-time interbank settlements, the Clearing House Interbank Payments System (CHIPS) is the largest private-sector global clearing house for cross-border dollar transactions, accounting for 95 percent of all international payments conducted in dollars. Wholesale payments are large interbank payments for purposes such as commercial transactions, bank loans, and securities transactions. CHIPS engages predominantly in large trade-related transactions and foreign exchange transactions denominated in dollars. CHIPS also accounts for 5 percent of U.S. domestic large-value business-to-business payments. CHIPS is owned by 46 member banks from 22 countries and is operated by the Clearing House, an association that is owned by 22 major U.S. member banks. CHIPS can be used by any banking organization with a regulated U.S. presence.

CHIPS was created in 1970 by the New York Clearing House, and according to former Federal Reserve chairman Alan Greenspan, it represented "the most significant qualitative change in clearing house arrangements." Transfers between banks occur in two parts: clearing and settlement. Clearing is when payment information is sent and received between participants. Settlement is when actual payment occurs. In 1970 CHIPS was the first real-time payments process whereby payments were electronically cleared the same day and then settled the next day. In October 1981 CHIPS added same day settlements. By 2001 settlements became final almost instantly. For banks, this reduces the risk they incur by having any significant amount of time between clearing and settlement.

Banks have two main options when processing interbank payments in dollars: Fedwire, operated by the Federal Reserve Bank, and CHIPS. CHIPS has some distinct advantages over Fedwire. One advantage is that CHIPs uses a patented multilateral netting settlements process. CHIPS keeps track of payments coming in and out of a particular bank's account and releases a single payment whenever the bank is in a positive position so that it will never be in an overdraft position. This is different from Fedwire, which processes transactions individually using a real-time gross settlement process that may leave banks occasionally in overdraft positions that must be settled by the end of the day. The Fed charges fees on those overdraft positions. Thus CHIPS reduces overdraft fees. CHIPS reduces the number of transactions between international and domestic banks during the day and processes more than $2 trillion per day.

While CHIPS and Fedwire are competitors, CHIPS could not operate without Fedwire. CHIPS uses Fedwire to conduct its transactions. Banks participating in CHIPS use a joint CHIPS account at the Federal Reserve to set aside funds for CHIPS transactions. They pre-fund the account to meet settlements throughout the day. Late in the day, there is a second chance to fund any settlements that could not be met with the initial balance. Those settlements are not released unless the bank is in a positive position. If the bank chooses not to be in a positive position, those payments are deleted and the bank can settle them using Fedwire directly. This is one disadvantage to using CHIPS over Fedwire. Payments made via Fedwire are final and irrevocable. Some payments made over CHIPS may not be final until the settlements are made final at the end of the day.

See Also: Clearing House Automated Payments System; Clearing Houses; Electronic Data Interchange; Interbank Market.

Bibliography. Clearing House Interbank Payments System, www.chips.org (cited March 2009); Alan Greenspan, "Clearing and Settlement: Past and Future," Federal Reserve Archival System for Economic Research, fraser .stlouisfed.org (cited March 2009); New York Federal Reserve, www.newyorkfed.org (cited March 2009); "Wholesale Payments Systems," Federal Financial Institutions Examination Council, www.ffiec.gov (cited March 2009).

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Clearing Houses

Clearing houses are institutions devoted to the exchange of information and the fulfillment of payment processing. A financial clearing house assures that two parties to a transaction do not default. Financial clearing houses include institutions devoted to the clearing of transactions involving the trading of financial securities and the conduct of specific forms of electronic payments.

Albert Bolles describes the clearing house concept as "one of the most useful agencies called into being by the wants of modern commerce … susceptible to almost infinite expansion." Indeed the clearing house concept has grown dramatically and increased the efficiency of the payments system. The first clearing house in the banking system can be traced back to the London Clearing House, founded in 1775. The first clearing house in the United States, the New York Clearing House, was established in 1853 based on the example set forth by the London Clearing House. The use of checks created a need for clearing houses in the banking system.

When an individual deposits a check in his or her bank that is drawn on another bank, a clearing house ensures that the funds to cover the check flow from the bank the check was drawn on to the bank it was deposited into. Before the clearing house, the depositor's bank would have had to collect payment via messenger to the other bank. Before modern electronic processing, check clearing was largely a time- and paper-laden process. This process is conducted by the Federal Reserve Bank in the United States today. With the aid of wire transfers, check truncation (Check 21), the automated clearing house (ACH), and the electronic data interchange (EDI), payments conducted with paper have been greatly reduced.

The ACH Network

The ACH network was one of the U.S. payments system's first automated paperless answers to the increasing volume of paper checks. (The first was the wire transfer system Clearing House Interbank Payments System.) It was originally designed to clear small-value, recurring paper-check payments such as payroll deposits and mortgage payments. This system performs similar functions to the United Kingdom's Bankers Automated Clearing Service (BACS). For an ACH transaction to occur both the originating and the receiving bank must be members of the ACH network. The first U.S. ACH began in 1972 in California. The network was developed by bankers, but it was run by the Federal Reserve System.

Later, many small ACH associations developed and worked with the Federal Reserve district banks to clear regional electronic payments. By 1974, the National Automated Clearing House Association was formed to oversee and help coordinate the growing ACH network. Currently, the only operators remaining in the ACH in the United States include the publicly owned Fed ACH operated by the Federal Reserve System and the privately owned Electronic Payments Network (EPN), a subsidiary of The Clearing House. In 2007 more than 13.97 billion transactions, worth more than $28.8 trillion, were sent via the ACH network.

The ACH network sends secure electronic funds transfers in the form of debit and credit transactions to handle payments electronically as opposed to using paper checks. Debit transactions are initiated by the payee (e.g., a consumer paying a utility bill, mortgage payment, or fitness facility fee). Credit transactions are initiated by the payer (e.g., the direct deposit of an employee's paycheck or the reimbursement of an employee's travel or health expenses). Business-to-business, or corporate, payments utilize the electronic data interchange (EDI) format with ACH to exchange information and make and receive payments with trading partners, pay tax withholdings to the government, or for intracompany cash management transfers. Governments use the ACH network for such payments as Social Security, tax refunds, and pensions.

Retailers are now getting in on the ACH system through the increasing use of e-check applications. E-checks are checks converted to ACH transactions at the point-of-purchase (when a voided check is returned to the consumer at the time of purchase), at drop and lockbox locations (called accounts receivable checks or ARC—a check converted to an electronic debit), over the internet, and over the phone. In 2007, 40 percent of all noncash payments in the United States went through the ACH network.

In financial markets outside banking, The Clearing Corporation (TCC) purports to be the world's oldest independent clearing house. TCC was created to independently and confidentially clear futures transactions for the Chicago Board of Trade. In that role, TCC became a buyer for every seller and a seller for every buyer. Clearing in the securities industry is more complicated than check clearing since it involves the transfer of ownership along with payment. Efficiency greatly increased with the adoption of computer technology in 1963.

The Depository Trust Company

Similar technology led to the development of the Depository Trust Company (DTC) in 1973. The DTC was created to clear securities trades for the New York Stock Exchange. Prior to the adoption of computer technology, securities trading involved a lot of paperwork from the beginning of the sale to the actual delivery of the physical securities certificate from seller to buyer. As trading volume in the securities industry escalated, the DTC was designated to be a single "house" for the physical securities and then trades of ownership of those securities were conducted electronically rather than physically. This greatly reduced the volume of paperwork and increased the efficiency of the securities exchange system.

Today, the DTC is part of the Depository Trust & Clearing Corporation, or DTCC. The DTCC operates through six subsidiaries and provides clearing services for equities, corporate and municipal bonds, government and mortgage-backed securities, money market instruments, over-the-counter derivatives, mutual funds, and insurance transactions. Similar securities clearing houses in other countries include Euroclear (Belgium), Clearstream (Luxembourg), the Canadian Depository for Securities (CDS Ltd), China Government Securities Depository Trust and Clearing Co, Ltd., and Japan Securities Clearing Corporation.

See Also: Clearing House Automated Payments System; Clearing House Interbank Payments System; Electronic Data Interchange; Interbank Market.

Bibliography. Albert Bolles, *Practical Banking* (Homans Publishing Co., 1884); Terri Bradford, "The Evolution of the ACH," Payments System Research Briefing, December 2007, www.kansascityfed.org (cited March 2009); Electronic Payments Network, *The Electronic Payments Network and the ACH: A History,* www.epaynetwork.com (cited March 2009); NACHA, "ACH Volume Increases 13.4 Percent in 2007," www.nacha.org (cited March 2009); NACHA, "NACHA—The Electronic Payments Association," *Understanding the ACH Network: An ACH Primer,* www.nacha.org (cited March 2009); The Clearing House, "New York Clearing House: A Historical Perspective," www.theclearinghouse.org (cited March 2009).

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CMA Index (Egypt)

The Capital Market Authority (CMA) is the regulatory body responsible for the Egyptian securities market. Like the Securities and Exchange Commission (SEC) in the United States, the CMA is principally concerned with the protection of investors and the health of primary and secondary securities markets. To this end, it is the licensing authority for new securities companies, reviews and approves prospectuses for new securities issues and memoranda for private placements, and ensures that Egyptian Accounting Standards—derived from international standards—are upheld.

Further, the CMA monitors the securities market for fraud and unfair trading practices, and conducts regular inspections of brokers and other middlemen. Surveillance is planned to be bolstered in the coming years, to build investor confidence and the health of the Egyptian securities market.

The Egyptian securities trade dates to the 19th century, a century bound by the invasion of Egypt by Napoleon at one end and the decades of Egypt's existence as a British colony on the other. The Suez Crisis led to a decades-long experiment in Arab socialism, but after the Camp David Accords in 1978, Egypt's relationship with the United States and the West steadily improved. Ten years after Camp David, the nation was readmitted to the Arab League, and shortly after implemented market reforms. The CMA had been established in 1979, to facilitate the reemergence of Egypt's capital markets; in 1992, the markets began to become fully active again, and have steadily grown since. The electronic trading system was implemented as early as 1995, and since 1999, corporate bond issues have been rated by various agencies. Every year, the CMA has been steadily modifying its structures and regulations, building a stronger market.

Critical to the CMA now is the 2008–12 five-year plan, aimed at attracting foreign investors. The overall strategic mission remains the same—to protect investors and develop the market—while focusing on efficiency and accountability in its regulatory practices. The specific strategic objectives that have been set for the 2008–12 period are as follows:

- The ongoing development of regulatory programs, including the development of necessary legislation and new regulations, and further development of market surveillance.
- The organization and provision of medium- and long-term financial instruments, beginning with an evaluation of the international debt market to inform the development of an Egyptian debt market. A unit at CMA will be established to license and monitor debt issues, and securitization opportunities will be further developed.
- Encouraging and strengthening investors' awareness of Egyptian investment opportunities. This includes the usual public relations, from thrice-annual investor workshops to programs for the media.
- The ongoing development of the CMA's internal work systems to cope with market developments, reorganizing the CMA's administration if necessary.
- The ongoing development of the capital market infrastructure, coordinating with the Ministry of Investment. The CMA will also study derivatives and determine whether they should be introduced to the Egyptian market.

See Also: Bonds; Company Profiles: Middle East; Debt (Securities); Economic Development; Egypt; Financial Market Regulation; Markets; National Regulatory Agencies; Suez.

Bibliography. Hassan Aly, Seyed Mehdian, and Mark J. Perry, "An Analysis of Day-of-the-Week Effects in the Egyptian Stock Market," *International Journal of Business* (v.9/3, 2004); Capital Market Authority, www.cma.gov.eg (cited March 2009); Country Briefs *Financial Times* Survey, "Egypt 2000/Finance and Investment Stock Market: Struggling to Spread Its Wings," specials.ft.com (cited March 2009).

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CNP Assurances

CNP Assurances is a French personal insurance company that offers both life and nonlife insurance products and services. It is headquartered in Paris, and in 2008 employed 3,200 people. The origins of CNP Assurances can be traced back to three state-owned insurance companies: the Caisse nationale d'assurance en cas d'accident (specialization: accident insurance) was established in 1868; the Caisse nationale d'assurance en cas de décès (death and disability insurance) was formed in 1848; and the Caisse de retraite pour la vieillesse (retirement pensions) was created in 1949.

The French government merged its death and disability and retirement insurance companies in 1949 to form the Caisse nationale d'assurance sur la vie. In 1959, this company was merged with the government's accident insurance company to create the Caisse Nationale de Prévoyance (CNP) and integrated into the Caisse des Dépôts et Consignations (CDC), a financial institution that performs public-interest missions on behalf of France's central, regional, and local governments.

In the early 1990s, the government decided to partially privatize CNP. In preparation for this change, the company was reorganized and renamed CNP Assurances. In an initial move, the state transferred 58 percent of its shares in the company to the CDC, the national postal service (La Poste), and the Caisses d'Epargne banking group. An initial public offering was conducted in 1998, which saw the state selling a further stake in CNP to the general public. The IPO enabled the CDC, La Poste, and Caisses d'Epargne to raise their stakes in the company to their current levels (CDC, 39.88 percent; La Poste and Caisses d'Epargne, 35.48 percent; general public; 23.44 percent: French state, 1.09 percent).

In the mid-1990s, the company began a period of international expansion. In 1996 it purchased a 26 percent stake in Polish life insurer Polisa-Zycie, raising this to 46 percent in 1997. In 2001 CNP moved into the Brazilian market, purchasing a 51 percent stake in the insurer Caixa Seguros. In 2002 CNP partnered with China Post to create the Sino-French Life Insurance Company and offer savings and insurance products in Beijing's post offices. In 2007 CNP Assurances acquired a 94 percent stake in the Spanish insurer Skandia Vida de Seguros y Reaseguros.

In 2008 CNP Assurances consists of three main business divisions. The savings division specializes in retirement savings products and accounts for 80 percent of total revenues. Its personal insurance division provides disability and invalidity coverage, health insurance, and loan insurance and generates 12 percent of total sales. With a market share of over 18 percent and more than 14 million policyholders, CNP is the leading personal insurance company in France.

CNP's pension division offers long-term savings products, designed to provide supplementary pension benefits in addition to the benefits paid under government-sponsored plans. It also manages the pension funds of French civil servants and local elected representatives. Together, the company's pension services make up approximately 8 percent of CNP's total sales.

CNP Assurances has achieved its leading position on the French market by using well-established partners to sell its products. The company has traditionally sold its products primarily through partnerships with state-run financial institutions, including the French Treasury and branches of La Poste, and Caisses d'Epargne. Combined, the 25,000 sales outlets provided by La Poste and the Caisses d'Epargne account for 75 percent of CNP's total sales.

CNP has also developed additional sales channels. In 2003, for example, the company entered into partnership with Mutualité Française, a major health insurance company, to strengthen its position in the mutual insurance market in France. In 2004 the company formed an alliance with the French retailing group Casino to market personal insurance products to the customers of Casino supermarkets in France. CNP has attempted to replicate this strategy abroad, seeking out well-established partners with strong distribution networks.

The company has also benefited from the recent French reforms to develop privately funded pensions alongside the conventional state-sponsored pension system. The further development of French investments in private retirement provision is expected to bring significant growth potential for the private and company pension provision business of CNP Assurances.

See Also: AXA; France; Globalization; Privatization; State-Owned Enterprises.

Bibliography. Gilles Benoist, "Bancassurance—The New Challenges," *The Geneva Papers on Risk and Insurance* (July, 2002); CNP Assurances, "CNP—France's Leading Personal Insurance Company," www.cnp.fr (cited March 2009); Datamonitor, "CNP Assurances SA" (Datamonitor, 2007); Bertrand Venard, "The French Insurance Market: Background and Trends," in *Handbook of International Insurance,* J. David Cummins and Bertrand Venard, eds. (Springer, 2007).

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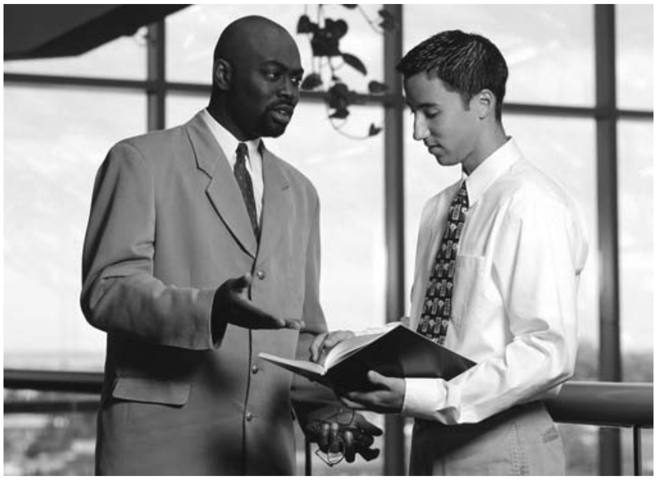
Coaching

Coaching in a sporting context has been used throughout history and has acquired a high status. It was the tool used to enable the athlete to run that bit faster, throw that bit farther: In essence, to win. In the business world, coaching is increasingly seen as one of the tools to enable an organization to achieve winning results. Coaching involves a one-to-one relationship between the coach and the learner, and aims to enhance the performance of the learner. Anyone from new frontline employees to experienced executives can benefit from coaching. Each has different starting points and needs but the outcome is likely to be similar: Overall improvement in performance and increased personal and job satisfaction.

Coaching involves a simple process that helps the learner identify and select the most appropriate course of action. By asking questions and giving support, feedback, and direction when necessary, the coach is able to encourage the learner to think through their own answers and make their own decisions. The following stages are typical: (1) initial fact finding—assessment of the learner's skills, attitudes, and motivation; (2) stage setting—a mutual agreement is established on ways of working together, on goals and desired outcomes for the coaching sessions; (3) defining the challenge/problem—the learner is the best person to define the challenge and to get to the root cause with the coach's help; (4) gaining agreement on facts—discussions are regularly summarized as an aid to understanding; (5) considering options—too often people use the first idea they think of, but the



While mentors are often managers, other approaches include using outside coaches or telephone or computer-based guidance.

coach will encourage the learner to explore a range of options before selecting the preferred solution; (6) action plan development—specific steps are outlined in order to achieve the preferred solution; and (7) evaluation—of how successful implementation was, of the learner's performance, and on what has been learned from the process.

For the learner, the main benefit of coaching is in gaining greater competence and confidence. This should result in better performance, which in turn may lead to greater independence, increased job satisfaction, greater reward, and a higher status. The coach can often be the learner's manager, and where this is the case the coach can benefit from improvements in team performance that result from competent staff. It can also lead to a reduction in management time spent problem solving and increased self-esteem for the coach as they see people blossom under their guidance. For the organization, coaching can result in greater all-around effectiveness, productivity, and quality through more competent staff. It can also lead to increased awareness of the talent within the organization and an enhanced reputation as an employer.

Effective coaching is about relationships. If the coach's and learner's styles or personalities clash, coaching may not be effective. Coach selection is therefore important. The coach needs to have a specific set of skills to be effective. The emphasis in coaching is on giving support and asking questions. If the wrong person acts as coach, or if solutions are dictated to the learner, then they may not be fully committed to implementing their own learning. Some believe a learner's manager is the best person to be the coach. Depending on the goals and required outcomes of coaching, this may be true, but care needs to be taken with the unequal power relationship that exists and the level of openness and honesty possible. For these reasons, coaches from outside the organization may be preferred. Coaches must also have sufficient skills and experience to have credibility in the learner's and organization's eyes. Another difficulty is the time and cost involved. Coaches most often work one-on-one with people and over a period of time. Telephone or computer-based coaching can sometimes be used to reduce the direct face-to-face contact needed.

Coaching in a business context can be used for a variety of reasons. In business coaching, organizational developments or supporting learners through a change of role or career can often be best achieved through coaching. Executive coaching is targeted to people at board level within the organization, or to people who have the potential to progress to this level. Performance coaching is used to enhance the learner's performance, and it has been shown to be highly successful in this context. Skills coaching focuses on the core skills employees need in their role. Coaches here need to be highly experienced and competent in performing the skills they teach. In personal or "life" coaching, coaches work in supportive roles to learners who wish to make some form of change in their lives. Business coaching is always conducted within the constraints placed on the learner by the organization, but personal coaching takes purely the learner's perspective.

See Also: Empowerment; Management Development; Mentoring; Training.

Bibliography. Ian McDermott and Wendy Jago, *The Coaching Bible—The Essential Handbook* (Piatkus Books, 2007); David Megginson and David Clutterbuck, *Techniques for Coaching and Mentoring* (Elsevier Butterworth-Heinemann, 2005).

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CoCom

CoCom stands for the "Coordinating Committee on Multilateral Export Controls." CoCom during the Cold War was essentially an economic arm of the alliance of North Atlantic countries. Set up in 1949, it served to prohibit businesses from selling arms and other sensitive products that might have dual civilian and military uses to Soviet-bloc countries. After the fall of communism and the consequent need to provide the newly democratic countries of Eastern Europe with needed technology for economic development, CoCom collapsed and was replaced in 1996 by the so-called Wassenaar's Agreement, named after the Dutch town in which the agreement was signed. Under the CoCom regime, companies were required through their governments to notify other members in advance before exporting a listed item. Under Wassenaar's, the proscriptions are voluntary and much more lenient.

With the rise of the threat of terrorism, particularly after September 11, 2001, governments realized that export restrictions were still critical to prevent so-called rogue states such as Iran, Iraq, North Korea, and Libya from acquiring advanced technology. So Wassenaar became the CoCom for a new century. Its adherents include Argentina, Australia, Austria, Belgium, Bulgaria, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Republic of Korea, Romania, the Russian Federation, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States. The inclusion of such formerly "inimical" countries as Russia and Ukraine might indicate that this unlikely coalition is actually directed against the economies of the developing world.

The problem for businesses under Wassenaar is determining which product can have unintended impacts. This is especially true for so-called dual-use technologies (DUTs). These are products designed for the commercial market but which can have potential military applications. Many weapons components have legitimate civilian uses. To export DUTs, exporters must apply to national licensing authorities for an export license.

The list of dual-use technologies is seemingly unending. It includes golf equipment (used in missile development), heart pacemakers (useful in nuclear weapons), and even shampoos (for chemical weapons programs). The Japanese government, worried over North Korean missiles, once prohibited for a time the popular Sony PlayStation II home gaming system because of a graphics card that purportedly could drive a cruise missile. Wassenaar turned states like Pakistan to look toward the black market and corporate espionage to advance their nuclear programs. China is a particularly perplexing example. China is a potential Wassenaar ally in the struggle to keep DUTs out of states like India, Pakistan, Iran, and North Korea. But at the same time, the United States distrusts China as a long-time violator and beneficiary of anti-proliferation efforts.

After the U.S. invasion of Iraq, this situation led to a third round of controls, called the Proliferation Security Initiative (PSI). These are designed specifically to prevent North Korea and Iran from acquiring the component parts necessary for weapons of mass destruction and missile development programs. PSI reflects the post-Iraq maturation of a new DUT strategy that emphasizes regulation of core components of weapons of mass destruction (WMDs). This includes uranium and its acquisition by a handful of the world's most dangerous countries. Whereas CoCom and Wassenaar tended to focus on interior controls that kept technologies in a limited number of allied states, PSI reflects an awareness that the multilateral regimes of the future will most likely have to rely on exterior controls that prevent prohibited technologies from passing in or out of relatively confined target regions.

High-tech businesses with defense implications will have to watch Wassenaar's two lists carefully. The Sensitive List includes battle tanks; armored combat vehicles; large calibre artillery systems; military aircraft/unmanned aerial vehicles; military and attack helicopters; warships; missiles or missile systems; small arms and light weapons. The Very Sensitive List includes organic matrix composites; towed acoustic hydrophones' "space-qualified" solid-state detectors; manned, untethered submersible vehicles; ramjet, scramjet, or combined cycle engines; as well as "software" and "technology specially designed for the "development" or "production" of such equipment.

See Also: Black Market; Commerce Control List; Industrial Espionage; Terrorism.

Bibliography. Richard Re, "Playstation2 Detonation: Controlling the Threat of Dual-Use Technologies," *Harvard International Review* (v.25/3, 2003); Wassenaar Arrangement, www.wassenaar.org (cited March 2009).

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Collateral

Collateral refers to assets given or pledged as security for payment of a loan. Houses, cars, and other types of property are examples of tangible assets used as collateral. A potential problem with collateral arises if one is unable to pay off a loan as scheduled: The collateral assets will be sold, and the money raised by selling the assets will be used to repay the loan. Typically, collateral consists of financial instruments—stocks, bonds, and negotiable paper. Physical goods, however, may be accepted as collateral also.

Collateral items are generally of significant value. But the range varies considerably, depending on the terms of the lending institution's contract with the borrower. A collateral contract is a contract where the consideration is the entry into another contract, and coexists side by side with a main contract. For example, a collateral contract is formed when one party pays another party a certain sum of money for entry into another contract. Still, a collateral contract may be entered into between one of the parties and a third party. In short, many different types of collateral arrangements can be made by companies, whether they are experiencing a financial crunch or making plans for expansion.

Usually, collateral only comes into play when a company needs to make a secured loan—a loan that uses tangible assets as collateral. Contrary to unsecured loans, where a borrower is able to get a loan solely on the strength of its credit reputation, secured loans require a borrowing company to put up a portion of its assets as additional assurance of repayment.

Many start-up businesses often use collateral-based loans. The advantage of such loans is that they have lower interest rates. Unsecured loans, by contrast, have higher interest rates. A problem with many small businesses is that most do not have enough collateral to get a secured loan from a lending institution. Consequently, such businesses often rely on equity financing instead. Notwithstanding the foregoing, borrowers have a broad array of options when using collateral.

A borrower may substitute other collateral for that held by a lender. Such a privilege is particularly useful for borrowers who buy and sell securities. For instance, merchandise collateral, such as negotiable warehouse receipts, bills of lading, and trust receipts are often used. Additionally, personal collateral—deeds, mortgages, leases—is frequently used. Finally, collateral may include bills of sale for crops, machinery, furniture, and even livestock.

When a borrower defaults on a loan, a creditor may sell collateral so it can be liquidated—turned into cash—and apply the money acquired to satisfy the debt. The creditor will charge the debtor with any deficiency remaining but will credit the debtor with any surplus. Accordingly, borrowers usually do not put their biggest asset on the line, unless payment can be made pursuant to the contract.

In today's increasingly complex world of multinational conglomerates, there are several forms of intellectual property that may be pledged as primary sources of collateral—trademarks, patents, derivative royalties. A cologne manufacturing company, for instance, may use its trademarks and future stream of royalties from its trademarks as collateral for millions of dollars in financing.

Because virtually all meaningful companies in almost every industry around the world have intangible and intellectual assets with substantial value, business leaders and entrepreneurs consistently analyze international events and concepts on a daily basis, seeking different ways to apply them to the intricate dynamics at play in the realm of international business. Although increasing globalization among business communities may create international financing options, using appropriate valuation methodologies, coupled with an effective management team, may help maximize the value of assets through sales, securitization, or other forms of monetization.

See Also: Bank for International Settlements; Bill of Lading; Business-to-Business; Contracts.

Bibliography. Fuhito Kojima, "Stability and Instability of the Unbeatable Strategy in Dynamic Processes," *International Journal of Economic Theory* (v.2/1, March 2006); 67

Fed. Reg. 76560, 76608 (2002) (to be codified at 12 C.F.R. § 223.14(e)).

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Collateralized Debt Obligations

Collateralized debt obligations (CDOs) are assets that are used as collateral and then pooled together in order to be the basis of new securities that provide cash flows. A company buys the debt instruments, collects the cash from the debts, and then sells securities that are in effect purchases of a portion of the cash flow.

CDOs are used in structured financing operations created through complex legal and corporate entities for the purpose of transferring risk. When pools of assets in the form of debts are securitized it means that a default of one of the debts in the pool will not result in a total loss, but only a minor one that can be overcome by other factors.

When CDO pools are created investors can buy a tranch (from the French word *tranche,* for slice) of the pool. The tranching allows the cash flow from the assets at the bottom of the pool to be allocated to different investor groups in different ways. One goal is to create securities that are rated from the pool of unrated securities. By being rated a market in the securities can be created. There are different levels of tranching, with the most secure usually the senior tranch, followed by mezzanine tranches, followed by the subordinate levels of tranches. Cash flows go to the senior level first, then to the mezzanine level, and then to the subordinate levels. The latter are the least secure and entail the most risk if defaults occur.

CDOs issued as unregulated securities are based upon a portfolio of fixed income assets. The assets are rated by rating agencies that assign the values after each asset is assessed. The senior tranches are typically rated as AAA, while mezzanine tranches are rated from AA to BB. Subordinate tranches are usually unrated.

Investors in CDOs hold a piece of paper that entails risks. Ultimately the risk is based upon the credit risk of the collateral in the pool. CDOs have been unregulated since their introduction in 1987. During the credit crisis that developed rapidly after 2006 they came to be identified as a major source of the crisis. The complex nature of CDOs and their collapse in liquidity were reasons offered for the credit crisis. However, part of the failure to appreciate the risks involved lay in the distribution of financial knowledge. As a result some buyers were not equipped to measure the changing credit ratings and cash flows to the CDOs. In addition the credit rating agencies upon which they relied were also insufficiently skilled at properly valuing the CDOs.

CDOs are typically valued on a mark-to-market basis. This method of valuing an asset marks the asset's value as what it would bring today. However, the future value (as in the case of a futures contract) may be unknown and therefore merely a guess until it is sold at a future time. Because of the complexity of CDOs some businesses have used them to hide debt under the cover of CDOs. In addition many rating agencies failed in 2006 and afterward to accurately assign values to them, causing a loss of confidence in the rating agencies and a retreat from lending.

Drexel Burnham Lambert, Inc., which is no longer in business, was the first company to offer CDOs for Imperial Savings Association. The latter became insolvent by 1990 and was taken over by the Resolution Trust Fund on June 22, 1990. However, by 2000 CDOs had returned and were greatly favored by investment banks, insurance companies, mutual funds, private banks, pension funds, and other financial institutions because they offered a higher rate of return, usually two or three percent higher than corporate bonds with the same credit rating. By 2007 they totaled $2 trillion in investments globally.

See Also: Collateralized Loan Obligations; Mark-to-Market Valuation; Mortgage Credit Crisis of 2008.

Bibliography. Christian Bluhm and Overbeck Ludger, *Structured Portfolio Analysis: Modeling Default Baskets and Collateralized Debt Obligations* (CPR, 2006); Douglas J. Lucas, Frank J. Fabozzi, and Laurie S. Goodman, *Collateralized Debt Obligations: Structures and Analysis* (John Wiley & Sons, 2006); Janet M. Tavakoli, *Structured Finance and Collateralized Debt Obligations: New Developments in Cash and Synthetic Securitization* (John Wiley & Sons, 2008).

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Collateralized Loan Obligations

A collateralized loan obligation (CLO) is a debt security, a promissory note, with a pool of commercial loans as its collateral. The backing of the promise of the borrower to repay the loan is guaranteed by debt instruments they own. Historically collateral was some type of asset, such as bank deposits in gold or silver, land, building, businesses, cattle, horses, or other forms of tangible assets. However, contemporary financing has come to accept debt owned by the borrower as an asset (collateral) for new debt. In the case of a CLO, which is a debt security, the debt backing the CLO(s) is a pool of commercial loans.

CLOs are like collateralized debt obligations (CDOs) and collateralized mortgage obligations (CMOs) because they are all debt securities. They differ in the kind of debt that is being used for collateral. Both CDOs and CMOs use a pool of mortgages as assets rather than a pool of commercial loans, which are registered on the CLO's originator's books as receivables.

Banks around the world have, until the credit crisis of 2008, found CLOs to be useful for several reasons. They allow them to avoid the capital requirements demanded by regulators to meet calls on their demand deposits. It also allows them to reduce their risks on their commercial lending because the CLO is a sale of a portion of their commercial loan portfolio.

Investors in CLOs can expect to receive a cash flow from the CLO. However, it is a common practice to securitize the payments into different levels of tranches. This somewhat resembles preferred stock, where the preferred stock is paid a dividend before the common stock. However, with the tranches of CLOs it is more like having several levels of preferred stock getting different levels of dividends and the common stock receiving no dividends but still having an investor appeal because of the speculative risk and rewards that can come from trading the CLOs.

The commercial loans that are used to collateralize CLOs are medium and large business loans. The loans are multimillion-dollar loans commonly called syndicated loans. A bilateral loan is between a bank and a borrower and a participation loan is between a borrower and a group of banks. A syndicated loan is one between a group of lenders and a group of borrowers. Once they are securitized they are sold to different investors with different tranches.

Loans made though CLOs are usually leveraged loans and involve very short-term loans. They are also leveraged borrowing, where the borrower is borrowing more than could be repaid, but is still accepted as creditworthy because it is more likely that the borrower will succeed than fail. The risk with leveraged loans is that the borrower is using the company as collateral and may be borrowing much more than the company is worth. Lenders receive a return on the loan that is representative of their risk in the case of a default.

Collateral loan obligations were created in order to finance projects with lower interest rates and an increased supply of lenders. The reasoning was that if the risk could be spread it would increase the number of willing business lenders and also reduce the cost of borrowing. The goal was for banks to lend money to businesses and then to use their commercial loans as collateral for the CLOs that were then sold to outside investors. If both financially conservative risk aversive and risk taking lenders could be attracted to the lending action then the supply of lenders could be increased. The outside lenders may be a variety of institutions needing a place for investment. In using the CLO the lending banks could earn fees and also receive some of the tranches. New types of CLOs are being developed for the market after the post-2008 credit crisis. These are being promised as safer investments.

See Also: Collateralized Debt Obligations; Mortgage Credit Crisis of 2008.

Bibliography. Frank J. Fabozzi and Vinod Kothari, *Introduction to Securitization* (John Wiley & Sons, 2008); Frank J. Fabozzi, ed., *Investing in Asset-Backed Securities* (John Wiley & Sons, 2001); Jason H. P. Kravitt, ed., *Securitization of Financial Assets* (Wolters Kluwer Law & Business, 1995).

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Colombia

One of the top performers in gross domestic product (GDP) growth in Latin America, Colombia is considered an important emerging market for many foreign direct investors. Economic growth, however, is still hampered by the country's decades-long internal armed conflict. As of 2008, Colombia, which became a republic in 1819, is Latin America's third most populous country after Brazil and Mexico, and the fifth-largest economy in the region according to its GDP measured at purchasing power parity (PPP). The country's economic performance has generally been one of the best in the region, especially under the government of President Alvaro Uribe, who introduced orthodox, market-friendly policies in 2000.

Colombia's decades-long armed conflict involves two leftist insurgencies (the Revolutionary Armed Forces of Colombia—FARC, and the National Liberation Army—ELN), and a right-wing paramilitary organization (United Self-Defense Forces of Colombia—AUC). By 2006, under the leadership of President Uribe, the rates for kidnapping and murder reached their lowest level in over 20 years, and demobilization of ELN and AUC soldiers led to a significant decrease in violence in the country. Despite such progress in violence reduction, the conflict continues to hamper the economy's prospects. According to the World Bank, Colombia's average per capita income would be 50 percent higher than current levels if the country had achieved peace 20 years ago.

In contrast to many other Latin American countries, Colombia benefits from a wealth of natural resources, a diversified economic structure, a relatively developed regulatory environment for business, and stronger institutions. The World Bank even considers Colombia the region's top reformer in 2008 regarding the implementation of new regulations that enhance business activity.

Petroleum, coal, and coffee represent over 40 percent of the country's major exports, while imports are mainly concentrated on intermediate, capital, and consumer goods. Thus, the economy is highly dependent on global commodity prices. In contrast to many other oil exporters, Colombia shows account deficits over the last few years because of higher import growth and increased levels of profit remittances from foreign companies operating in the country. Over 50 percent of exports go to the United States, Venezuela, and Ecuador, whereas suppliers are less concentrated regionally—40 percent of all imports originate from the United States, Mexico, and Brazil.

The economic liberalization of the early 1990s caused a relative deindustrialization, and sectors such as textiles and clothing, leather, and shoes suffered from structural changes, whereas sectors such as chemicals, automotive, food processing, beverages, and printing adjusted more easily to the changing market conditions. Nevertheless, textiles and clothing still contribute significantly to total industrial output and manufactured exports, especially by improved access to the U.S. market under the Andean Trade Promotion and Drug Eradication Act (ATPDEA).

As in most Latin American countries, industrial concentration is high. In the manufacturing sector, two conglomerates dominate the market: the Grupo Empresarial Antioqueño in the sectors of financial services, cement, and processed foods, and the Grupo Ardilla Lülle in the sectors of textiles, sugarcane, and soft drinks. However, such industrial concentration is increasingly challenged by elimination of restrictions on imports and foreign investment.

Foreign investors not only increase local competition, but also contribute significantly to the competitiveness of sectors such as food processing, chemicals, and heavy industry (e.g., automotive). Colombian companies, especially in the sectors of steel, tobacco, processed foods, and beer, increasingly became targets for foreign investors. Since 2003 foreign direct investment (FDI) increased significantly, mainly in the sectors of oil, manufacturing, retail, restaurants, and hotels, with the main investors originating from Spain, the United States, the United Kingdom, and Brazil.

According to the World Economic Forum, Colombia's global competitiveness is positively influenced by factors such as macroeconomic stability, health and primary education, and market size, and negatively impacted by its road and transport infrastructure and technological readiness (i.e., firm-level technology absorption and numbers of internet users and personal computers). Thus, GDP growth can be further positively impacted if Colombia successfully overcomes its infrastructure deficiencies and problems related to the internal armed conflict.

See Also: Emerging Markets; Latin America.

Bibliography. M. E. Porter, X. Sala-i-Martin, and K. Schwab, *The Global Competitiveness Report 2007–2008* (Palgrave Macmillan, 2007); The Economist Intelligence

Unit—ViewsWire, "Colombia," www.viewswire.com (cited March 2009); World Bank Group, "Doing Business in Colombia," www.doingbusiness.com (cited March 2009).

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Commerce Control List

The Commerce Control List (CCL) is a list maintained by the Bureau of Industry and Security (BIS), an agency of the U.S. Department of Commerce. Similar lists are maintained by other countries. The Bureau of Industry and Security was originally called the Bureau of Export Administration, and references to the BXA are still seen in older texts. The CCL is used to ensure compliance with multinational export restrictions, especially on dangerous goods like munitions or dual-use technologies like computers or propulsion systems.

The body of regulations affecting exports is called the Export Administration Regulations (EAR), for which the BIS is responsible for enforcing and of which the CCL is a subset. Goods are regulated not only according to type, but according to country. Foreign policy severely limits exports to Cuba, Syria, Sudan, and Iran, while nearly anything that is legal to export can be exported to England or Canada. Exports include not only items originating in the United States and sold to foreign customers, but items being returned to their country of origin, items shipped to other countries but not sold, and items passing through the United States from their point of origin to some other final destination.

Certain other agencies outside the Department of Commerce have input into the EAR, whether it is to interpret their own regulations in light of their effect on exports, or to offer technical services in order to assist the BIS in implementing the EAR. The National Security Agency, for instance, is the technical review authority for cryptography and similar technologies. The Department of Agriculture's Foreign Agricultural Service advises on the exports of food and farm goods. The State Department advises on munitions exports. The Food and Drug Administration is involved with the export of American pharmaceuticals, though usually the more important authority in such cases is the analogous agency in the country of destination.

Goods that can be exported are issued a permit, based on the item's Export Control Classification Number (ECCN). The ECCN is an alphanumeric designation identifying the level of export control. There are hundreds of ECCNs, and because the system is organized according to an item's potential for misuse more than its intended use, navigating the list is time-consuming even for those accustomed to it.

The CCL was revised around the turn of the century, following the Wassenaar Agreement. Established in the Dutch town of Wassenaar in 1996, the Wassenaar Agreement is the successor to the Cold War–era Coordinating Committee for Multilateral Export Controls, and is a multilateral export control regime governing export controls on certain technologies. Forty nations are compliant with the Wassenaar Agreement: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States. The agreement governs the export of 22 categories of munitions and 10 categories of "dual-use" technologies (those that have both peaceful and military applications): advanced materials, materials processing, electronics, computers, telecommunications, information security (such as cryptography), sensors, navigation and avionics, marine technology, and aerospace technology.

In addition to the 10 dual-use categories of the Wassenaar Agreement, the CCL (which combines telecommunications and information security into category five) includes "category zero," used for all nuclear technology.

See Also: CoCom; Compliance; Department of Commerce; Export.

Bibliography. UC-Irvine Office of Research, "Export Control Index: Commerce Control List," www.research.uci.edu/ora/exportcontrol (cited March 2009); Wassenaar Arrangement, www.wassenaar.org (cited March 2009).

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Commercialization of Space

NASA repaired this communication satellite in 1992. Its owner, the Intelsat organization, became a private company in 2001.

The commercial use of outer space centers around the commercial applications of satellite technology, along with a growing space tourism industry. The exploration of space began with communications satellites—Sputnik, the Soviet satellite launched in 1957, was equipped with radio transmitters, as was the American satellite that followed the next year—and they remain the primary focus of commercialized outer space. The first true communications satellite, Telstar, was launched in 1962 and was used to transmit telephone and data communications. The satellite was launched by a multinational group consisting of NASA, the British General Post Office, the French National Post, Telephone and Telecom Office, Bell Labs, and AT&T, which owned the satellite. It was built at Bell Labs, which earned a NASA contract for work on further satellites.

Telstar orbited the Earth on an elliptical orbit, requiring a ground antenna to track its movements and relay its signals. Today's satellites are geosynchronous (also called geostationary), meaning that their position relative to any spot on the Earth is constant: The satellite, once positioned, orbits at the same speed as the rotation of the Earth. This allows an antenna to be directed at it without needing to track it, which in turn allows for applications that are impractical with elliptical orbit satellites, including consumer satellite dishes (for satellite TV). The first geosynchronous satellite was Syncom 3, used for the first television transmission over the Pacific when the 1964 Summer Olympics were held in Tokyo.

As geosynchronous satellites became more common, and improved in their designs, they helped with the spread of cable television. Early nonbroadcast networks like HBO, the Weather Channel, and Pat Robertson's Christian Broadcasting Network used geosynch satellites to transmit their programming to local cable companies for distribution. Broadcast networks (ABC, NBC, CBS) likewise used them to distribute to local affiliates.

Less expensive than geosynchronous satellites are low-earth orbit (LEO) satellites. Because their position relative to the Earth changes so rapidly, LEO satellites are useful only when there are a lot of them working in concert, in what are called satellite constellations—so that at any given time, one or more of them is accessible from any given spot in the relevant area. This is a more recent approach to satellite technology, and usually used for satellite phones. The Iridium satellite constellation—originally intended to have 77 satellites, and named for the element with the atomic number 77—uses 66 satellites to transfer data to all points of the globe (including the poles and the oceans, where coverage by other means is impossible). Iridium's financial failure, though, discouraged further development of satellite phones and their associated constellations; one of the problems was that the system's benefits (global coverage) could not be seen by customers until the entire system was in place, a hugely expensive venture, which in turn meant a significant price for customers. Both the price and the phone were heftier than customers were used to, at a time when traditional cellular phones were lightening both loads. Less than a year after its 1998 launch, Iridium filed chapter 11. The shriveling of the satellite phone industry is well-illustrated by Teledesic, backed by Microsoft co-owner Paul Allen. Teledesic was supposed to have 840 satellites in orbit, scaled back to 277 satellites because of decreasing projected demand, and only launched one satellite before folding operations.

That said, a decade later Iridium remains in business, with a quarter of a million subscribers, the number of which is growing. Rather than replacing or competing with cell phones, satellite phones like Iridium's have developed a niche among those who need the service's coverage (the U.S. Defense Department is a major customer).

In the 21st century, communications satellites are used for commercial purposes such as telecommunications, television, digital radio (such as Sirius XM Radio), and direct broadcast (such as used by satellite television companies DirecTV, DISH Network, Bell TV, and Sky Digital). The communications satellite industry includes transponder leasers, a growing industry sector of satellite owners who lease access to their satellites; subscription satellite services, such as those used for satellite television and radio; ground equipment manufacturers, who make the telephones, transponders, receivers, and other equipment used for interacting with satellites; and satellite manufacturers themselves. Satellite manufacturing is growing slower in the United States than in the world at large, in part because of strict controls on the export of American-made satellite technology and in part because of the countries now catching up to a space race in which the United States has a decades-long head start.

Commercial uses of other satellites include the sale of satellite imagery from nonmilitary observation satellites and the operation of global navigation satellite systems, which in the United States allows for the world's only fully-functional Global Positioning System (GPS). GPS navigation devices are increasingly popular in the United States, and many automobile manufacturers offer them as an installed option. Similar systems are in the works in Russia, China, India, Japan, and the European Union.

Most of the space transport industry involves the transportation of satellites into orbit. In the United States, the Federal Aviation Administration (FAA)—which governs space as well as air aviation—has licensed four commercial spaceports, in California, Florida, Virginia, and Alaska. Most commercial launches use Boeing's Delta IV rocket system or the Atlas V system developed by Lockheed Martin and built by a joint Lockheed Martin/Boeing venture. Both are unmanned craft, and are single-use vehicles; development of reusable launch vehicles for commercial purposes has been sporadic, but investment to such ends has increased since the 1990s. Space tourism—manned commercial spaceflights—is a growing commercial interest, though most companies remain in the development stages.

See Also: Barriers to Entry; Private Spaceflight Industry.

Bibliography. Tim Arango, "From the Iron Curtain to the Final Frontier," *Fortune* (May 28, 2007); Jonathan Goodrich, *The Commercialization of Outer Space: Opportunities and Obstacles for American Business* (Quorum Books, 1989); Edward Hudgins, *Space: The Free-Market Frontier* (Cato Institute, 2003); F. Shahrokhi, J. S. Greenberg, and T. Al-Saud, *Space Commercialization: Satellite Technology* (American Institute of Aeronautics and Astronautics, 1990).

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Commitment

Commitment is the action of committing oneself to a particular course of conduct. In management research the notion is widely used in the sense of organizational commitment, describing an individual's psychological attachment to a group or an organization and desire to remain part of it. High organizational commitment is expected to raise productivity by raising individual and organizational performance.

A number of definitions of organizational commitment have been produced over time. In the historical development of the definition we find three main approaches. An early definition of commitment is based on Howard Becker's notion of side-bet theory. According to this theory committed employees are committed because they have hidden investments, "side-bets," they have made by remaining in an organization that would be lost by leaving the organization.

A second approach was advanced by Lyman W. Porter and his colleagues. Shifting the focus to the psychological attachment of the employee to the organization, commitment was defined as the relative strength of an individual's identification with and involvement in a particular organization. Commitment is here characterized by three criteria: acceptance of organizational goals and values, a willingness to exert considerable effort on behalf of the organization, and a desire to maintain membership in the organization.

A third approach sees commitment as a multidimensional phenomenon, as suggested by John P. Meyer and Natalie J. Allan's three-component model of commitment, distinguishing between affective, continuance, and normative commitment.

Affective commitment refers to the employee's positive emotional attachment to, identification with, and involvement in the organization. Affective commitment is based on affective or emotional attachment to the organization so that the individual identifies with and enjoys membership of the organization. According to this approach, the desire of the employee to remain part of the organization is based on a feeling that he or she "wants to."

Continuance commitment refers to the employee's decision to remain part of the organization because of the perceived costs associated with leaving the organization. The continuance dimension was proposed as a better representation of Becker's side-bet theory. Continuance commitment is based upon an evaluation of the economic costs, as well as the social costs, compared to the economic and social benefits of staying as a member of the organization. The employee decides to remain part of the organization because he or she "has to."

Normative commitment refers to the employee's commitment to an organization because of feelings of loyalty and an obligation to continued employment. The employee has a feeling of moral obligation to stay a member of the organization. These feelings may reflect an internalized norm that one should be loyal to your organization. The employee stays with the organization because he or she "ought to." These three forms of commitment are viewed as components of attitudinal commitment; that is, employees may simultaneously be committed in the affective, continuance, and normative sense in varying degrees. The many different aspects of organizational commitment have been an important topic of research as well as what determines the degree of commitment. Research has indicated that the degree of commitment may depend on personal characteristics, job characteristics, and work experience.

Five foci of commitment have been identified in research on commitment: to work regardless of organization or job; to a specific job; to a union; to a career or a profession; and to an employing organization. Recent research has inquired into the relationships between the foci of commitment and has found four patterns of commitment: to the supervisor or work group (the locally committed); to top management and the organization (the globally committed); to both local and global foci (the committed); and individuals committed to neither global nor local foci.

Commitment is normally measured by attitudinal dimensions, e.g., identification with the goals and values of the organization; desire to belong to the organization; and willingness to display effort on behalf of the organization. Several different scales have been developed to measure organizational commitment, such as the Organizational Commitment Questionnaire (OCQ) developed by Porter and his colleagues. Meyer and Allan developed three scales to measure the three components of commitment they have suggested: the Affective Commitment Scale (ACS), the Continuance Commitment Scale (CCS), and the Normative Commitment Scale (NCS).

High organizational commitment is expected to raise productivity as well as individual and organizational performance. However, the strong positive link between commitment and performance is difficult to demonstrate clearly in empirical studies, indicating that the relationship between individual commitment and organizational performance is rather complex. High organizational commitment may contribute more generally to achieving long-term organizational goals by maintaining the cohesiveness of organizational structures and to aid integration. One of the issues raised that may limit these effects is extent of the homogeneity of employees. A lack of homogeneity of the workforce may lead to competition, disputes, and lack of common values, while a homogeneous workforce may stifle creativity and innovation.

A number of studies have analyzed organizational commitment in a cross-cultural context. One of the results of this type of study is that organizational commitment for Japanese workers was found to be rather low compared to, for example, U.S. workers.

See Also: Attitudes and Attitude Change; Empowerment; Leadership; Motivation.

Bibliography. H. S. Becker, "Notes on the Concept of Commitment," *American Journal of Sociology* (1960); J. R. Lincoln and A. L. Kalleberg, *Culture, Control, and Commitment: A Study of Work Organization and Work Attitudes in the United States and Japan* (Cambridge University Press, 1990); J. P. Meyer and N. J. Allen, "A Three-Component Conceptualization of Organizational Commitment," *Human Resource Management Review* (1991); R. T. Mowday, L. W. Porter, and R, M. Steers, *Employee-Organization Linkages* (Academic Press, 1982); R. T. Mowday, R. M. Steers, and L. W. Porter, "The Measurement of Organizational Commitment," *Journal of Vocational Behavior* (1979); L. W. Porter, R. M. Steers, E. M. Mowday, and P. V. Boulian, "Organizational Commitment, Job Satisfaction and Turnover among Psychiatric Technicians," *Journal of Applied Psychology* (1974); S. Swailes, "Organizational Commitment: A Critique of the Construct and Measures," *International Journal of Management Reviews* (2002).

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Common Agricultural Policy

The European Union system of common agricultural policy (CAP) was introduced in 1962 following the creation of the European Economic Community (EEC, the "Common Market") in 1957 by Belgium, France, the German Federal Republic, Italy, Luxembourg, and the Netherlands. The CAP has remained through the development of the EEC into the European Union (EU) of 12 countries in 1992 and its expansion to 27 countries as of 2008. The initial objectives of the CAP were to increase agricultural production, ensure a fair standard of living for farmers and the agricultural community, guarantee availability of food supplies, provide food at reasonable prices, and stabilize food markets. These objectives were to be achieved primarily by subsidizing agricultural production and maintaining agricultural commodity price levels within the EEC. The CAP has developed in response to a range of factors including overproduction of a range of agricultural products, market pressures, environmental concerns, and expansion of the EEC into the EU.

The CAP is the oldest and most costly common policy of the EU, utilizing approximately 60 percent of the total EU budget in 1992, 40 percent in 2007, and a projected 32 percent in 2013. Initially, the CAP subsidized agricultural production and maintained agricultural commodity prices within the EU by providing a direct subsidy payment for cultivated land, guaranteeing a minimum price to producers and imposing tariffs and quotas on certain goods from outside the EU. These measurements resulted in increased, and subsequently surplus, production of the major farm products in the 1980s. In some cases, goods were stored or disposed of within the EU but, generally, surplus goods were exported to the world market with subsidies given to traders who sold agricultural products to foreign buyers for less than the price paid to EU farmers. Disposal of surpluses had a high budgeting cost. In 1984, the surplus of milk was contained by the introduction of production quotas and in 1988, a limit was set on EU expenditure to farmers.

In 1992, reforms of CAP were established to limit agricultural production of specific products (e.g., wheat and milk) that attracted subsidies in excess of market prices. The prices farmers received for their products were reduced but they were given direct payment compensation for these reductions. Also, "set aside" payments were introduced in which farmers were paid to withdraw land from production and limit stocking rates, the number of animals per unit area. These measures were linked to environment- and rural development–related objectives. For example, reduced production required reduced inputs of agrochemicals such as nitrogen fertilizer that had been shown to have adverse effects on the environment such as the eutrophication of nutrient-poor land habitats and waterways, a decrease in biodiversity inside and outside the agricultural systems, and emissions of greenhouse gases into the atmosphere.

In 1995, in response to the World Trade Organization agricultural agreement, use of export subsidies to exporters was reduced. Also in 1995, rural development aid was introduced with the objective of diversifying the rural economy and making farmers more competitive. In 1999 the "Agenda 2000" reforms set in place reductions in market support prices for several products including wheat and milk. These measures were partially offset by an increase in direct aid payments to farmers. The Agenda 2000 reforms also introduced several rural development/regeneration measures including support for younger farmers and further aid toward the diversification of farms and the implementation of more "environmentally friendly" farming systems.

A major reform of the CAP (Regulation EC No. 1782/2003) which decoupled direct payment from production of particular crops and agricultural commodities was introduced in 2003. A new "Single Farm Payment" was established that is dependent on farmers adhering to environmental, food safety, and animal health standards that were previously in place: This is termed "cross compliance." The bulk of subsidies will be paid independently of the volume of production of specific crops, and farmers' decisions on which crops to produce should be based on market needs. As of 2008, set-aside payments are suspended. The reforms will be phased in from 2005 to 2012. The overall EU and national budgets have been capped and the proportion of the total agricultural budget spent on rural development will increase to around 25 percent over this period.

See Also: Candidate Countries; Common Market; Euro; European Monetary Union; European Union; Maastricht Treaty; World Trade Organization.

Bibliography. EUROPA, "CAP Reform—a Long-term Perspective for Sustainable Agriculture," www.ec.europa.eu (cited March 2009).

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Common External Tariff

A common external tariff is an agreement among two or more countries to adopt identical tariff schedules for all goods being imported from other trading partners. Having a common external tariff is the central feature of a customs union, which is an agreement among countries to eliminate internal tariffs and establish a common external tariff. A common external tariff may also include the homogenization of nontariff trade barriers such as quotas and other trade preferences.

When countries participate in the process of regional economic integration, they most often begin by forming a free trade area that eliminates all internal tariffs on imports and exports between the partners. A free trade area, however, may provide incentives to nonmember trading partners to engage in the practice of reexportation (also known as entrepôt trade). A company from outside the free trade area may import products into the member country with the lowest external tariff, and then reexport to another member country tariff-free. This situation provides incentives for countries in a free trade area to manipulate external tariffs in order to gain trading advantages. In order to eliminate this activity, countries in a free trade union may form a customs union, in which a common external tariff is instituted.

The European Economic Community (now known as the European Union) established a common external tariff in July 1968. The elimination of most internal tariffs had been completed 11 years earlier with the signing of the Treaty of Rome by member countries Belgium, France, Italy, Luxembourg, the Netherlands, and the Federal Republic of Germany. Just a few weeks after the common external tariff was established in Europe, an agreement to allow the free movement of workers within member states was also adopted. The acceptance of the free movement of labor and capital within member countries is the next stage of regional economic integration and is referred to as a common market.

Mercosur, a trading bloc consisting of Argentina, Brazil, Paraguay, and Uruguay, is another example of regional economic integration that includes a common external tariff. These countries began their formal efforts toward fuller economic integration with the signing of the Treaty of Asunción in 1991. The common external tariff was adopted with the signing of the Treaty of Ouro Preto in 1994. Other examples of economic cooperation initiatives among countries that include a common external tariff are the Caribbean Community (Caricom), the Southern Africa Development Community (SADC), the East African Customs Union, the Andean Community (CAN), and the Gulf Cooperation Council. The European Union has expanded its common external tariff to include San Marino, Andorra, and Turkey, none of which are EU member states.

The North American Free Trade Agreement (NAFTA) eliminated internal trade barriers between Canada, Mexico, and the United States but stopped short of creating a common external tariff. Another prominent trading partnership, the Association of Southeast Asian Nations (ASEAN) Free Trade Area, has also not yet implemented a common external tariff. Countries are sometimes reluctant to adopt a common external tariff because of the loss of flexibility and control over national trade policy that it implies.

See Also: Common Market; Customs Union; European Union; Free Trade; Regional Integration; Regional Trade Agreements.

Bibliography. "A Free-Trade Tug-of-war," *Economist* (2004); K. Bagwell and R. W. Staiger, "Multilateral Tariff Cooperation During the Formation of Free Trade Areas," *International Economic Review* (1997); M. Ghosh and S. Rao, "A Canada–U.S. Customs Union: Potential Economic Impacts in NAFTA Countries," *Journal of Policy Modeling* (2005); B. T. Hanson, "What Happened to Fortress Europe?: External Trade Policy Liberalization in the European Union," *International Organization* (1998); D. E. Hojman, "The Andean Pact: Failure of a Model of Economic Integration?" *Journal of Common Market Studies* (1981); D. Hoy and J. Fisher, "Latin America and the European Common Market," *Geographical Review* (1966).

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Common Market

A common market is an advanced stage in economic integration, a process in which two or more countries, usually within a geographic region, agree to reduce barriers to economic transactions among themselves. It goes beyond a preferential trade agreement, in which the countries concerned offer each other lower tariffs than their normal rates, a free trade area, where member countries eliminate trade barriers among themselves, and a customs union, where they also establish common trade polices with respect to non-members. It does not go as far as an economic union, in which all or most economic policies are unified.

In a common market, apart from trade without tariffs or quotas and a common external trade policy, factors of production (labor and capital) can move freely among member countries. Like other forms of economic integration, the motivations are both political and economic. The major political benefit is seen as improved bargaining power with other countries; in some cases, it is also thought that binding the economies of member states closely reduces or eliminates the risk of future wars among them. Economic benefits of a common market go beyond those of free trade among members, which allows them to specialize in products in which they are most efficient. Since labor and capital can move freely, there can be dynamic gains as these factors move from areas where they are in surplus to those where they are scarce, resulting in higher incomes in the common market as a whole. Other benefits include economies of scale, more competition, and increased foreign direct investment because of the larger market.

The term *common market* was also widely used in the English-speaking world in the 1960s and 1970s to refer to the group of countries in western Europe (originally six, with several stages of expansion bringing the number to 27 in 2008) that had embarked on a process of close economic integration, though this group's official name has been the European Economic Community, the European Community, and now the European Union.

A true common market is not easily achieved. Since there are no restrictions on internal cross-border flows of labor and capital, a high degree of cooperation among members is required, particularly in policies about employment, taxation, investment, competition, social security, and immigration, and countries have to give up a considerable amount of sovereignty to supranational institutions. In the European Union, in accordance with the treaty establishing its predecessor, the European Economic Community, in 1957, all internal tariffs and quotas on goods were progressively abolished by 1968, and most formal barriers to the movement of labor and capital were removed by 1970, but in reality, freedom of movement was far from complete.

Differences in technical standards and health and safety regulations often meant products made in one country were not acceptable in another; delays at frontiers imposed considerable costs on trade; preferential treatment for national suppliers often excluded firms from partner countries from government contracts; educational qualifications in fields such as accountancy, architecture, and nursing were not mutually recognized, effectively limiting mobility of skilled labor; and national laws regarding financial services often made it difficult for banks or insurance companies established in one country to operate in another. It was only after the Single European Act of 1987, involving hundreds of directives and regulations aimed at removing these barriers, that the member countries began moving swiftly toward a single market in goods, services, labor, and capital. It is generally agreed that by 1992, the European Union had substantially become a common market.

Several other regional groups, past and present, have had the term *common market* as part of their name, but they have not reached the necessary level of integration. The Central American Common Market, comprising five small economies, was established in 1960, but did not go beyond reducing internal trade barriers before it suspended activity due to disputes among members. It was revived in 1990, with the objective of forming a customs union. The Andean Common Market, which was set up in 1969 and subsequently became moribund, was also revived in 1990 and is moving toward a customs union.

Mercosur ("Common Market of the South") aspires to be a common market, and has become the largest trading bloc in South America, but still has not achieved a full free trade area or customs union, and remains a preferential trade area with some coordination of tariffs on imports from non-members. The East African Common Market, inaugurated in 1967, attempted to coordinate development plans of the member countries, but did not allow free movement of labor and capital; due to disputes about the distribution of benefits, and political differences among leaders, it was officially abandoned in 1977. Subsequently, a large number of African countries have joined COMESA, the common market for eastern and southern Africa that was formed in 1994; as of 2008, it has reduced trade tariffs and quotas and hopes to set up a customs union in the near future. Only Caricom, the Caribbean Community and Common Market, established in 1973, has made substantial progress in eliminating internal trade barriers and some progress toward free movement of labor.

See Also: Caribbean Community; Central American Common Market; Common External Tariff; Customs Union; Economic Integration; Economic Union; European Union; Free Trade; Mercosur/Mercosul; Regional Integration; Regional Trade Agreements; Single Market.

Bibliography. B. Balassa, "Trade Creation and Trade Diversion in the European Common Market: An Appraisal of the Evidence," *Manchester School of Economic and Social Studies* (June 1974); International Monetary Fund, "Central and Eastern Europe: Assessing the Early Benefits of EU Membership," *IMF Survey* (November 20, 2006); Jaime Ros, "Free Trade Area or Common Capital Market? Notes on Mexico-US Economic Integration and Current NAFTA Negotiations," *Journal of Interamerican Studies and World Affairs* (v.34, 2001); D. Swann, *The Economics of the Common Market* (Penguin Books, 1990); J. Viner, *The Customs Union Issue* (Carnegie Endowment for International Peace, 1950).

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Communication Challenges

Effective communications are vital for success in today's business. Managers need to communicate with those they deal with—their customers, employees, vendors, and the public—in order to give directions, share ideas, motivate and elicit or disseminate needed information. Communicating takes up the majority of the time for managers and business people, and can be in the form of writing, talking, listening, or using the internet.

Communication can be defined as a process in which the sender is transferring meaning to the receiver. This involves coding of the message by the sender and decoding it by the receiver. A medium is involved in the conveyance of the message and can be words, behavior, or material artifacts. Naturally, in the process of communications breakdowns may occur and this is termed as noise. The barriers to effective communication include: semantics, where different words can have different meanings, such as fix and hot; jargon, when technical terms commonly used by various professions, such as military or engineers, are employed; acronyms and abbreviations mainly used by different groups such as the military; perception when one interprets things differently and distortion results; and emotion where one is unable to receive what is conveyed due to the pressures of the mental state.

When communication takes place across cultures, even greater challenges arise. As culture dictates how people view the world, it follows that culture also determines how people encode messages, the meaning they ascribe to the message, and how, when and why the message is transmitted, and finally how it is decoded and interpreted. Culture may be the actual foundation of communication. Hence cross-cultural variables directly affect the communication process and can pose a multitude of challenges. Here are some of the cultural variables that can affect the communication process:

There is a close relationship between language and culture. Language reflects and affects culture directly and indirectly. It is a reflection of the values of the particular community. Language is essentially meaning attached to words in a totally arbitrary way. The vocabulary of a language depicts what is considered important in that culture. There are seven words for bamboo in South India but only one for ice and there is no word for snow. In America there are several words pertaining to the self but only one in Japanese indicating the individualistic and collectivistic approaches of the two cultures.

Poor or limited knowledge of a language is a frequent cause of miscommunication and misinterpretation. When Pepsi Cola's slogan "Come Alive with Pepsi" was introduced in Germany, it was discovered that the literal German translation of "come alive" is "come out of the grave."

A sign in a Romanian hotel informing the English–speaking guests that the elevator was not working read "The lift is being fixed. For the next few days we regret that you will be unbearable." One way of overcoming this is to use back translation, where one person does the translation and another translates the translated version back ot the original language. Knowing a language well does not guarantee communication success. "Yes" when used by Asians usually means that they have heard you and understand what you are saying, while in the West it would be taken as agreement to your viewpoint or proposal.

Stereotyping occurs when a person assumes that all the people in that country or community have the same attributes, characteristics, or personality traits. Communication problems are bound to arise when we pre-judge individuals based on generalizations. Effective managers are aware of the dangers of cultural stereotyping and make it a point to deal with each person as an individual.

Ethnocentrism is the belief that one's own culture is superior to others and that others are incorrect or defective and that your way is best. There is a tendency to place one's own group or ethnicity in a position of centrality. As such, ethnocentrism negatively affects intercultural communication. This is due to the fact that one's cultural orientation acts as a filter for interpreting messages based on preconceived ideas about one's self and others. One uses one's own cultural standards to evaluate and communicate with others. One may talk down to others assuming that they lack knowledge. Ethnocentric speech may create 'communicative distance' and this would cause indifference, avoidance and disparagement. Managers must make it a point not to judge others based on their own values.

Paralanguage

Paralanguage refers not to what is said but more to how it is said. It is less the content and more the manner it is conveyed—the tone (soft or harsh), the inflection of voice (pitch), the rate of speech (quality), and the sounds that are included in the speech (such as laughing). Paralanguage conveys emotions. Negatives emotions such as impatience, fear and anger may contribute to communication breakdown. In some Asian cultures, silence during communication is acceptable and indicates one is taking in and trying to understand fully what is being conveyed, while in the West silence may cause discomfort and impatience. Arabs have a tendency to speak loudly feeling this shows enthusiasm and sincerity. Thais speak loudly only when they are angry. Filipinos speak softly, as for them this is an indication of respect. Managers need to learn to interpret subtle differences caused by paralanguage.

Context plays an important part in cross-cultural communication in that it is not what the content of the conveyance but the place where it took place. The context in which the communication took place affects the meaning and interpretation of the interaction. In high-context cultures (Asia, Africa, Middle East) feelings are not openly disclosed, and one needs to read between the lines to get to the bottom of what is said.

In these cultures, explicit communication takes place in close personal relationships. In low-context cultures (Western Europe, North America, Australia) feelings are readily displayed. Misinterpretation results when mangers fail to take into account the context in which the message was conveyed. There is need to understand the inherent subtle gestures and nuances when communicating with high-context cultures.

Non-verbal communication is physical behavior that supports oral communication. Included are: posture, gestures, facial expression, interpersonal distance, touch, eye contact, color, and time. Research in communication suggests that many more feelings and intentions are sent and received nonverbally than verbally. These subtle means of communication account for between 65 and 93 percent of interpreted communication.

Posture

The way people hold their bodies frequently communicates information about their feelings, status, and intentions. The way one stands, sits or walks can send positive or negative messages. A stance or posture can signal agreement or disagreement, convey self-confidence, and indicate interest. Posture, when standing or when seated varies with culture. In the West, women when seated cross their legs at the ankle, and men cross with ankle at the knee. Crossing the leg with ankle on the knee would be considered inappropriate by most people in the Middle East. Also, people in Asia and in the Muslim world consider showing the sole of your shoe or pointing your foot at someone unacceptable and insulting. In most cultures, standing when an older person or one of higher rank enters or leaves the room is considered a sign of respect.

Gesture

The use of fingers, hands and arms when communicating varies considerably from one culture to another and is used to add emphasis or clarity to an oral message. Most cultures have standard gestures for daily situations such as for greeting and departing. Americans typically use moderate gestures, while Italians, Greeks and Latin Americans use vigorous gestures when speaking. East Asians tend to keep their hands and arms close to their bodies when speaking. Communication problems arise when these have different meanings in different cultures. The "thumbs up" gesture means "everything is okay" in Western societies but is considered rude in parts of Africa. The "OK" sign with the thumb and forefinger joined in to form a circle is a positive sign in the United States but is in Brazil it is considered obscene. The beckoning gesture with either the fingers upturned or using just the forefinger is used for calling a waiter or to an employee to come hither. To the Filipinos and other Asians it is offensive as serves to beckon animals and prostitutes. Vietnamese and Mexicans also find it offensive.

Facial Expression

The face is very central to the process of communication. It is capable of expressing emotions, attitudes, and factual information instantly. People learn how to control facial expressions to mask emotions to suit their particular needs and in compliance with cultural norms. In the United States a smile means happiness. The Japanese may smile or giggle to cover anger, happiness or sadness. The Chinese people rarely show emotion and may smile or laugh softly when they are embarrassed or to conceal any discomfort. Koreans rarely smile as they consider people who smile a great deal as shallow. They consider it highly desirable to keep an expressionless face. Yet, Thailand is called the "Land of Smiles." The Pacific people are also known for their wide use of smiling and in certain parts of Africa laughter is used to express surprise, wonder and embarrassment and not amusement or happiness. Facial expressions need to be interpreted correctly in the context of the particular culture.

Interpersonal Distance

Communicating by using space is known as proxemics and refers to the physical distance between people when they are interacting and is highly influenced by culture. Researchers have identified four zones from which U.S. people interact. The 'intimate zone' is less that 18 inches and is reserved for very close friends; the personal zone from 18 inches to 4 feet is for working closely with another person; the social zone from 4 to 12 feet is for normal business situations; and the public distance of over 12 feet is the most formal zone. People in America tend to need more personal space that Asians, Arabs, Africans, and some Europeans.

Conversational distance also varies between cultures: for Latin Americans the distance is 15 inches or so, while in the Middle East, this can be as small as 9 to 10 inches. It is common in Asia for very little space to be left between individuals when standing in line.

Touch or haptics may be the most personal form of non-verbal communication. Touching takes place in a variety of ways and for a variety of purposes and includes shaking hands, patting the head or the back, holding hands, hugging, kissing, and linking arms. Each culture has a well defined understanding as to who can touch whom, on what parts of the body, and under what circumstances. High-touch cultures include Mediterranean countries, Arabs, Jews, Eastern Europeans, and South Asians, while the English, Germans, Northern Europeans, Americans, and East Asians are considered low-touch cultures. Touching while dancing is a clear indicator of differences in various cultures—some dance in close proximity in embrace, while others maintain some distance.

Some cultures place more emphasis on gaze or eye contact called oculesics, but all cultures use it when communicating. Direct eye contact is preferred in most Western cultures and is taken as a sign of sincerity, trustworthiness and respect. People who avoid eye contact may be considered insecure, untrustworthy, unfriendly, disrespectful or inattentive. In other cultures there is little direct eye contact and lowering of the eyes is considered a form of respect in China, Indonesia, parts of Africa and the Caribbean. Direct eye contact in East Asia may be construed as being offensive while in the Middle East prolonged and intense eye contact is commonly accepted behavior. In India and Egypt, eye contact is avoided between people from different social backgrounds. Managers need to be aware of the implications of too much or not enough eye contact that each culture and situation demands.

Color or chromatics is a communication tool as it can affect the mood, emotion, and impression. Some colors have positive or negative connotations. Color is often used in symbolism and may also represent an emotional state. Black in many cultures (such as the United States) represents sophistication but also sadness. White is pure and peaceful but in some societies associated with mourning.

In the West, white is worn by brides; in India yellow is preferred and in China it is red. Yellow, and at places purple, is considered the color of royalty. Purple is the color of death in some Latin countries. Red, in many cultures, is associated with romance and in China and Japan represents good fortune. Green is the color of religion in Islamic cultures. In many countries blue represents masculinity and pink femininity. Awareness of such representation is vital when relating to other cultures.

Time or chronemics is a cultural variable that affects business communication directly the most. The way people view time varies from culture to culture. Monochromic societies see time as linear, having a past, present and future. It is considered as something to be spent, saved, or wasted. Most Western countries are monochromic. Other cultures are polychromic in that they do not consider time as a commodity and place less value on it, feeling that there is abundance of time available to all.

See Also: Communication Styles; Culture Shock; Culture-Specific Values.

Bibliography. Helen Deresky, *International Management: Managing Across Borders and Cultures* (Pearson Hall, 2008); Gary P. Ferraro, *The Cultural Dimension of International Business* (Pearson Prentice Hall, 2006); James W. Neuliep, *Intercultural Communication: A Contextual Approach* (Sage, 2009).

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Communication Styles

Global businesspeople often encounter difficulties in cross-cultural communication. These difficulties arise when people from different national cultures have a different understanding of the same concept and different ways to express their thoughts on it. In this backdrop, business people need a better understanding of the factors affecting cross-cultural communication. Communication is effective when the person receiving the message attaches a meaning to the message that is similar to the way the sender intended it. Much of this intention is dependent on one's communication style, which refers to a person's particular pattern of communication.

Communication involves the sharing of information between two or more people, where the information has relevance to at least one of the parties. When this communication occurs between people from different national cultures, the intended meaning of what is being communicated can be distorted by different cultural values. Given the increase in international business, communication across diverse ethnic cultures is becoming increasingly common for many businesspeople.

There are four main communications styles, each style appropriate for different cultural and business settings depending on the objective of the communication. These styles are (1) tell: inform or explain the meaning, (2) sell: persuade or convince, (3) consult: involves high interaction with other parties, and (4) join: collaboration and sharing ideas among parties. The tell and sell communication styles are mainly found in individualistic cultures such as Canada and New Zealand, whereas the consult and join styles are more prevalent in collectivist cultures such as China and Japan.

Cultural Context

All cross-border communication exists in a cultural context. The terms *high context* and *low context* refer to the different rules surrounding the exchange of information and the extent to which the communication is direct or indirect. In high-context cultures such as Japan and Indonesia, communication is slow in getting to the point because consideration is given to people's feelings about what is being said. Therefore what is communicated is as important as how it is communicated. In this context communication is implicit and indirect. In contrast, in low-context cultures meaning is conveyed by rational argument. The explicit, direct use of words conveys the intended meaning.

A strong link exists between how cultures treat time and how cultures communicate. Monochromic or linear temporal-oriented cultures (e.g., the United States and the United Kingdom) tend to "get to the point" in their communications very quickly, with little time for introductions. Conversely, polychromic cultures found throughout Asia and the Middle East might find this linear approach too direct and rude. These cultures prefer a more circuitous approach to communications, because time has neither a beginning nor an end. Time then becomes an important variable in cross-cultural communications.

Other Considerations

Semantics is the study of meaning in language. In cross-cultural communications, semantics is important because many languages have words that do not translate exactly into words in another language. The challenge for global businesspeople is to find substitute words that convey similar meaning without losing the essence of the communication.

The use of a formal tone versus an informal tone is an important consideration in communications. Some cultures require a formal tone in communications whereas others require an informal, relaxed approach. Knowing the appropriate tone requires research into the foreign culture prior to the commencement of any dialogue.

There is a belief that what is not said is as important as what is said. International businesspeople must be aware of nonverbal communication cues such as facial expressions, eye contact, posture, pouting, frowning, and gestures, as these may be offensive in different cultures. Nonverbal communication is a substitute for words. Often there is a contradiction between the verbal and nonverbal communication, where the spoken words convey one meaning and the nonverbal communication (e.g., body posture, facial expression) conveys a different meaning. Usually, nonverbal communication is not consciously observed unless it causes the receiver some confusion or doubt. Thus, businesspeople should be conscious of both forms of communication and align them to communicate one unambiguous meaning.

Effective communication requires as much skill in listening as in speaking. Effective listening improves communication because it involves skills that include asking questions to clarify, empathizing with the speaker (and their point of view), looking at the speaker when they speak, and responding both verbally and nonverbally to the speaker's comments. Effective listening is also useful in conflict resolution. Listening with intent rather than simply hearing what aggrieved parties are trying to communicate is a focal point in conflict resolution.

As businesses look to world markets for growth and profit, the ability to effectively communicate in both a business and social setting with people from different cultural backgrounds will become increasingly important. Businesspeople skilled in intercultural business communications stand to benefit from conducting business across international borders more than those without such training. Communicating effectively across international borders provides both challenges and opportunities for the global business manager. The challenges relate to understanding different communication styles and expectations in different cultures. Given the ethnic diversity that exists even within many countries (e.g., India and China), these challenges require skill, training, and patience to conquer. The opportunities lie in the competitive advantage gained from the awareness of cultural differences and sensitivities that can be leveraged for commercial gain.

See Also: Achieved Status/Ascribed Status; Communication Challenges; Cultural Norms and Scripts; Culture-Specific Values; Diversity; Multicultural Work Groups and Teams; Specific/Diffuse.

Bibliography. William B. Gudykunst and Tsukasa Nishida, "Anxiety, Uncertainty, and Perceived Effectiveness of Communication Across Relationships and Culture," *International Journal of Intercultural Relations* (v.25, 2001); Prue Holmes, "Negotiating Differences in Learning and Inter-Cultural Communication," *Business Communications Quarterly* (v.67/3, 2004); Leon F. Kenman, "Tone and Style: Developing a Neglected Segment of Business Communication," *Business Communication Quarterly* (v.70/3, 2007); Nada Korac-Kakabadse, Alexander Kouzmin, Andrew Korac-Kakabadse, and Lawson Savery, "Low and High Context Communication Patterns: Towards Mapping Cross-Cultural Encounters," *Cross Cultural Management* (v.8/2, 2001); Mohan Limaye and David A Victor, "Cross-Cultural Business Communication Research: State of the Art and Hypotheses for the 1990s," *Journal of Business Communications* (v.28/3, 1991); Mary Munter, "Cross-Cultural Communication for Managers," *Business Horizons* (v.36/3, 1993); Kaylene C. Williams and Rosann L. Spiro, "Communication Style in the Salesperson-Customer Dyad," *Journal of Marketing Research* (v.22, 1985).

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Communism

The word *communism* is derived from the Latin *communis* meaning common or shared. Communism is a socioeconomic structure and political ideology that aims to replace profit-based economy through the abolishment of private property and the public ownership of the means of production, distribution, exchange, and subsistence. According to the communist view, everything that people produce is a social product; therefore, everyone who contributes to the production of a good is entitled to a share in it. Communism/socialism is opposed to capitalism, which is based on private property and the free market that determines how goods and services are distributed. Karl Marx, like most writers of the 19th century, used the terms *socialism* and *communism* interchangeably. Precisely how communism differs from socialism has been a matter of debate, although the dissimilarity rests mainly on the communists' observance of the revolutionary socialism of Marx. Andrew Roberts (2004) notes that the anthropologist Jan Kubik believed that some political regimes made *communist* and *socialism* ambiguous terms in order to gain legitimacy and confuse the public about who the enemy was.

An earlier definition of communism was introduced by the English humanist Sir Thomas More. More (1516) in his work *Utopia* describes an invented society in which money is eliminated and citizens share in common houses, meals, and other goods. Friedrich Engels (1847) defines communism as "the doctrine of the conditions of liberation of the proletariat." According to *The Communist Manifesto* (1848) by Marx and Engels, the main planks of communism are: (1) the abolition of private property, (2) heavy progressive income tax, (3) confiscation of rights of inheritance, (4) a central bank, (5) government ownership of communication and transportation, (6) government ownership of factories and agriculture, (7) government control over labor, (8) corporate farms and regional planning, and (9) government control of education.

According to Marx, the history of humanity is a series of class struggles from ancient slavery through feudalism, leading ultimately to freedom for all. In each period, a class has dominated the other social classes and has exploited the labor class. For Marx, material production requires material forces and social relations for production. In Marx's view, capitalism is ruled by the bourgeoisie class that owns the means of production and controls the working class or proletariat. Marx recognizes that capitalism has brought remarkable and unprecedented scientific advancement and technological improvements; however, the economic opportunities and political power, in Marx's view, are unfairly distributed. Besides this unequal distribution, Marx found that capitalism alienates workers in the sense that workers are separated from: (1) the product of their labor, (2) the process of production, (3) the sense of satisfaction derived from doing creative work, and (4) other human beings whom workers see as competitors for wages and jobs.

As stated in *The Communist Manifesto*, "the distinguishing feature of communism is not the abolition of property generally, but the abolition of bourgeois property." Marx and Engels summed up communism within a single phrase: Abolition of private property. Marx felt that communism would "supersede" capitalism once the capitalist system of production becomes an obstacle for the development of the forces of production.

In Marx's 1875 *Critique of the Gotha Programme,* Marx recognized two stages of communism that would be pursued after the overthrow of capitalism. The first stage would be a transitional system in which the economy and the government would be controlled by the working class. The second stage would be a fully realized communism, without government or class division. In this second stage, the distribution of goods and the production would be based on the principle "from each according to his ability, to each according to his needs."

According to some authors, there are distinctions to be made between communism and socialism. In general, socialism refers to an economy with considerable public ownership. Communism refers to a country or political system in which a communist party rules. According to J. Kornai (1992), four prototypes of socialist systems can be identified, which seem to refer to consecutive stages in history: (1) the revolutionary-transitional system from capitalism to socialism, (2) the classical socialist system, (3) reform socialism, and (4) the post-socialist system (transition from socialism to capitalism).

Communist States

In the early 20th century, the primary focus of the economy in Russia was agriculture. Most Russians were peasants who farmed land owned by wealthy nobles. Because of land tenancy and labor exploitation, there was discontent in the Russian countryside, and the Russian Social Democratic Party was seen as an opportunity to overthrow the tsarist regime and to replace it with a radically different sociopolitical system. In 1903 the Russian Social Democratic and Labor Party split into the Bolsheviks and the Mensheviks. After the victory of the Bolsheviks in the Russian Revolution in October 1917, Lenin's party became the model for communist parties around the world. Soviet Union countries from Lenin's time to Gorbachev's called themselves socialist countries, and denoting both a revolutionary dictatorship and an evolutionary democracy regime.

In 1985 reform-minded Mikhail Gorbachev became head of the Soviet Union. He allowed freer discourse (*glasnost*) and movement toward more economic diversity (*perestroika*). He made it clear that the Soviet Union would no longer forcefully dominate the communist nations of Eastern Europe, and by 1989, they had largely left communism. In 1991 Boris Yeltsin succeeded Gorbachev and announced the dissolution of the Soviet regime.

Although there are a number of communist parties active around the world, only in China, Cuba, the Democratic People's Republic of Korea, Laos, and Vietnam do they retain power over the state, and therefore these countries are denominated communist states. After the collapse of communism in the Soviet Union and Eastern Europe, communist parties around the world suffered drastically.

Marxism

Karl Marx (1818–83) has been the most influential theorist of communism. He studied law and completed a doctorate in philosophy, and he dedicated his life to radical political activity, theoretical studies in history and political economy, and journalism as a profession. Marx described communism as the "the riddle of history solved." He thought that the gap between private interest and community interest was a feature of a particular stage of human development, rather than an unavoidable characteristic of social existence.

The Marxist tradition is built around three theoretical clusters: (1) a theory of the development and destiny of capitalism, (2) a theory of the contradictions of capitalism, and (3) a normative theory of socialism and communism. Marx as a scholar thought he had discovered the laws of socioeconomic change leading a society toward a communist stage based on historical determinism. Marx described the materialist conception of history as the core of his studies. In his book *Capital*, he presented his economic theories, and he concluded that the capitalist economic system was an alienated form of human life. For Marx, under capitalism workers are forced to sell their labor to the capitalists, who use this labor to accumulate more capital, which further raises the power of the capitalists over workers. In this cycle, capitalists became wealthier, while wages are drained down to the subsistence level; consequently, if capital grows, the domination of capital over workers increases. Furthermore, capital increases its domination by increasing the division of labor. Under Marx's view, labor is a commodity that the worker must sell in order to live. Therefore, wages are determined like the price for any other commodity.

Conservative governments have guided social reforms to undercut revolutionary Marxist movements. Mussolini and Hitler were supported by conservatives who saw their nationalism as the answer to combat the Marxist threat.

Leninism

Vladimir Ilyich Lenin was the leader of the Bolshevik Party in Russia. It built on Marxism and provided the philosophical bases for Soviet communism. In his 1902 publication *What Is to Be Done?* Lenin argued that the revolution against capitalism can be achieved through the disciplined effort of full-time professional revolutionaries. These full-time revolutionaries were paid by the Bolshevik Party, using bureaucratic control as a method of enforcing ideological principles.

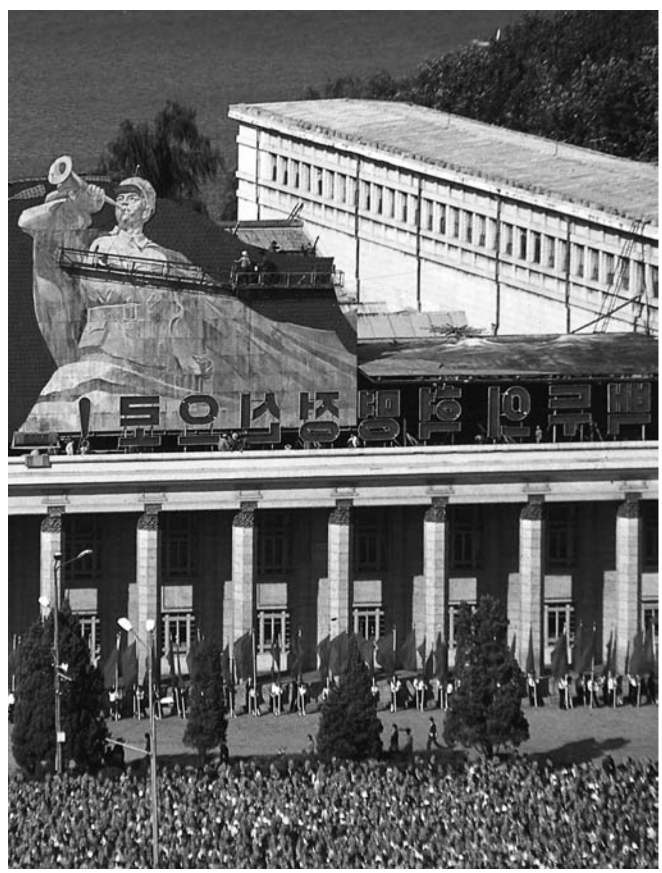
In Lenin's 1916 *Imperialism: The Highest Stage of Capitalism*, it is postulated that in the last stage of capitalism, capital is exported in order to pursue higher profit than the domestic market can offer. This is what Lenin named the monopoly finance stage. Lenin argued that

> at a certain stage of their development, the material productive forces of society come in conflict with the existing relations of production, or with the property relations within which they have been at work hitherto.

Maoism

Maoism or Chinese Marxism is a combination of German Marxism, Soviet Leninism, Confucianism, and China's own guerrilla movement. It is referred to as Maoism because Mao Zedong (1893–1976) was the cofounder and the leader of the Chinese Communist Party (CCP) in 1921, which defeated the Chinese Nationalist Party (Kuomintang, or KMT) in the Chinese civil war, establishing the People's Republic of China (PRC) in October 1949. Maoism's ideology was centered in the violent revolutionary potential of the peasantry. It differs from Marxist and Leninist approaches that focused on the potential power of the industrial proletariat.

Mao Zedong promoted a self-reliant, grain-first development repudiating material and market incentives for the people of China. The goals of Maoism included the salvation of China from its foreign enemies, and the reinforcement of the country through modernization. Two of his main socioeconomic pro-



A parade outside the Grand People's Study House in Pyongyang, North Korea, one of the few remaining communist states.

grams—the Great Leap Forward and the Cultural Revolution—focused on the problems of the rural poor.

Evolution of Communist Regimes

Communist systems have five common characteristics that distinguish them from other authoritarian regimes: (1) the monopoly of power of the Communist Party; (2) intra-party relations that were highly centralized and strictly disciplined; (3) state, rather than private, ownership of the means of production; (4) the establishment of communism as the ultimate, legitimizing goal; and (5) a sense of belonging to an international communist movement.

Bartłomiej Kamiński and Karol Sołtan (1989) proposed a political-economic framework to understand change within communism. They distinguish a three-stage typology of development. The first stage is pure communism or totalitarian communism. It is characterized by total control of the economy and society by a political center backed by an extensive and repressive political party apparatus. Therefore, this totalitarian communism is antilaw, antimarket, and antidemocratic. The second stage is late communism, which features the weakening of the main characteristics of totalitarian communism. The authorities in late communism are forced to bargain in order to impose their will. Symptoms of late communism include accepting some degree of autonomy for economic actors. The final stage is constitutional (or juridical) communism, in which the interests of the rulers are imposed. Key components of this tendency include the separation of powers, the institutionalization of bargaining, the institutionalization of freer information flows, and the introduction of clearly defined rules of the state in the economy.

See Also: Capitalism; China; Cuba; Eastern Europe; Russia; Socialism.

Bibliography. Edward Friedman, "Maoism and the Liberation of the Poor," *World Politics* (v.39/3, 1987); Sujian Go, *The Political Economy of Asian Transition from Communism* (Ashgate Publishing, 2006); Nigel Holden, Andrei Kutznetsov, and Jeryl Whitelock, "Russia's Struggle with the Language of Marketing in the Communist and Post-communist Eras," *Business History* (v.50/4, 2008); Bartłomiej Kamiński and Karol Sołtan, "The Evolution of Communism," *International Political Science Review* (v.10/4, 1989); János Kornai, *The Socialist System: The Political Economy of Communism* (Oxford University Press, 1992); Vladimir Ilyich Lenin, *Imperialism: The Highest Stage of Capitalism* (1916); Roderick Martin, "Post-socialist Segmented Capitalism: The Case of Hungary. Developing Business Systems Theory," *Human Relations* (v.61/1, 2008); Karl Marx and Friedrich Engels, *The Communist Manifesto* (1848); Andrew Roberts, "The State of Socialism: A Note on Terminology," *Slavic Review* (v.63/2, 2004); Anna Seleny, *The Political Economy of State-Society Relations in Hungary and Poland: From Communism to the European Union* (Cambridge University Press, 2006); Robert Service, *Comrades!: A History of World Communism* (Harvard University Press, 2007); Dmitry V. Shlapentokh, "Revolutionary as a Career. *Communist and Post-Communist Studies* (v.29/3, 1996); Brooke Skinner and Rosemary B. Bryant, "From Communism to Consumerism," *New Presence: The Prague Journal of Central European Affairs* (v.8/4, 2006); Gabriel Temkin, "Karl Marx and the Economics of Communism: Anniversary Recollections," *Communist and Post-Communist Studies* (v.31/4, 1998).

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Company Profiles: Africa

There have long been traders, both African and Arab, working throughout the African continent, but especially along rivers or along its east coast. From the late 15th century, but more particularly in the 16th century, there have been a number of European colonial companies that mainly operated under government charter. Some more recent companies are or have links with mining or agricultural companies that have been on the continent since colonial times; others are agency houses that sell goods and services on behalf of overseas companies. Also, some overseas companies have started operations in Africa since the 1960s, and there are an increasing number of African-owned companies, some government owned or controlled and others created or bought out after independence.

The Chartered Companies

The Portuguese Company of Guinea was involved in trade with West Africa and with the importation of spices to Portugal from 1482 until 1499. Some of the earliest European chartered companies were primarily involved in trade in the East Indies, and so trade with Africa became incidental to their main business. These included the Honorable East India Company (British), which was founded in 1600 and remained in existence until 1858 (being formally dissolved in 1873) and the Dutch Vereenigde Oost-Indische Compagnie (VOC), or Dutch East India Company, which was established in 1602 with an initial 21-year monopoly to carry out trade in Asia. Both companies were involved in establishing trading posts in Africa and had extensive extraterritorial powers, including their own armies and navies.

The Royal African Company, from England, was established in 1660 and was heavily involved in slavery, being responsible for the transportation of 90,000–100,000 slaves between 1672 and 1689. It lost its charter in 1698 and ceased to be involved in the slave trade in 1731, when it started trading in ivory and gold dust. Indeed much of the gold was used in England to make coins, with the result that the English gold coin became known as the guinea. It was succeeded by the African Company of Merchants.

For the Germans, the Kurfürstliche Brandenburgisch-Afrikanische Kompagnie (Brandenburg African Company) was founded in 1682 and occupied two parts of modern-day Ghana, being heavily involved in slavery for much of its existence. Over 100 years later, for the British, the Sierra Leone Company in 1792 founded the first African American colony, helping to settle former slaves from Nova Scotia, Canada. The American Colonization Society set up the Republic of Liberia for similar purposes in 1822. In 1886 the National African Company became the Royal Niger Company—also a British company under Royal Charter—and with its landholdings was, on January 1, 1900, transferred to the British government for a payment of £865,000, thus forming the basis of British landholdings in Nigeria. There were also exploration companies such as the African Association and the Geographical Society, technically under a company structure, which were involved in mapping Africa.

The Deutsch-Ostafrikanische Gesellschaft (German East Africa Company) was founded in 1885 to help establish a German claim to what is now Tanzania, and was heavily involved in plantations and trade prior to selling German East Africa to the German government in 1891. The Deutsch-Westafrikanische Gesellschaft/Compagnie (German West African Company) operated in West Africa but without a central authority.

The Portuguese had tried, for most of their involvement in Africa, to operate through their central government, but found it impossible to raise the capital and as a result established a number of companies, most of which operated in modern-day Mozambique. Of these, the most famous are the Companhia de Moçambique (Mozambique Company), founded in February 1891; the Companhia do Niassa (Niassa or Nyassa Company), which operated from 1891 until 1929; and the Companhia do Zambezia (Zambezi Company). The Mozambique, Niassa, and Zambezi companies remain best known through the colorful stamps they issued during their periods of operation. All three lost their status in 1929 when the Portuguese government took back control of their territories with an attempt to create a bigger home market for the Portuguese Empire.

Regional and Historical Differences

Because of the nature of the creation of colonial powers in Africa and other historical reasons, there have been significant differences between the companies that have operated in various parts of the continent. In north Africa, there had long been connections with the Ottoman Empire, and Turkish companies have had an important role, as have French, Spanish, Italian, and Greek companies. In Egypt, until the late 1950s, many of the companies in the country were controlled by Greeks, with also substantial numbers of Maltese involved in commerce. Under Gamal Abdel Nasser, Greek commercial influence in Egypt declined as he sought to promote Egyptian businesses. Greek companies, however, remained prominent in the Sudan and in Ethiopia, many being run by Greeks who had lived in these countries for many years rather than companies that had any connections with Greece itself. In Ethiopia, this ended with the overthrow of Haile Selassie in 1974, and in Sudan with the emergence of Gaafar al-Nimeiry, who became president in 1969. One of the main streets of traders in Djibouti is called Rue d'Athens, also showing the importance of Greek traders in the Horn of Africa.

In Morocco, Algeria, and Tunisia, French companies had been important in business life since the 19th century, and they continued to dominate the economies of north Africa in the first half of the 20th century. The main commercial telephone directory published in French Africa, the Didot-Bottin, was heavily dominated by north Africa, with French companies being important in the much smaller economies of the countries of former French West Africa (Benin, Burkina Faso, Guinea, Mali, Mauritania, Niger, Senegal, and Togo) and those of former French Central Africa (Central African Republic, Cameroon, Chad, Congo, and Gabon). Prior to independence, most of the companies operating in these areas were registered in Paris, and many of the public services such as telecommunications were under the direct control of the colonial authorities or the French central government.

After independence, some of the former colonies were involved in establishing joint ventures, and a few established their own companies, with newly available capital in some of these countries managing to run rival firms. In addition, some of the countries have subsequently sold off sections of their government corporations to the private sector, in the case of Chad introducing plans for the privatization of the Société des Télécommunications du Tchad, and Congo privatizing the Société des Télécommunications du Congo. In Gabon, the telecommunications sector has the government-owned company providing telephone lines in the country, another company 61 percent owned by the government for overseas telephone lines, and a number of private companies operating mobile-telephone networks.

A few countries, such as Benin and Guinea-Bissau, run numerous para-state companies that are either partly or wholly owned by the state, such as the Société des Ciments du Bénin, the Société Béninoise de Brasserie in Benin, and Ultramaina in Guinea-Bissau. In Benin there were 130 of these in 1980, but only 27 in 1999, with some of these subsequently sold to the private sector.

In British Africa, during the time of colonial rule, British companies dominated the economies, and after independence, a number of these were sold off to local interests, with much of the business in formerly British West Africa (Gambia, Ghana, Nigeria, and Sierra Leone) dominated by companies based in Nigeria. And South African–owned and –based companies tended to dominate—and in fact still dominate—many of the economies of the smaller countries in southern Africa. In east Africa, the economic importance of Kenya also ensured that companies based there often dominated the region, with Indian-owned companies being prominent in Uganda until the expulsion of the Indian community there by Idi Amin in 1972. Lebanese-owned companies remain prominent in trading in parts of British West Africa.

For the Portuguese, apart from their chartered companies that were taken over by the government in 1929, many of the plantations in Lusophone Africa (Angola, Cape Verde Islands, Guinea-Bissau, Mozambique, and Sao Tomé e Principe) were either owned by individuals or by the Portuguese government. As a result, after independence, and with socialist or communist governments taking over the former Portuguese colonies, state industrial enterprises were established. The Spanish government also tended to dominate former Spanish Africa (Spanish Morocco, Spanish Sahara, and Equatorial Guinea).

For transport, most road haulage companies were locally owned, but railways tended to be owned by the colonial government, and after independence, many were controlled by countries other than the ones in which the track was located, such as Rhodesia Railways running the railway line through Botswana until the 1970s. Shared ownership also exists with the Djibouti-Ethiopian Railway. Large numbers of independent countries also established their own airlines, with varying degrees of financial success.

Mining and Plantation Companies

Many European powers were involved in establishing plantation-style agriculture in their colonies in Africa, which led to many cash crops being grown either for consumption in the colonial country or for sale elsewhere. These involved food crops such as cocoa, coconuts, coffee, groundnuts, maize, palm oil, sugar cane, and also other plantation crops such as cotton, tobacco, and some rubber. To this end, there have been a large number of colonial companies involved in establishing and running these plantations. Some of these, such as those operated by the Portuguese, were run by individual wealthy landowners, whereas the British ones were often run through companies listed on the London Stock Market. The U.S. firm Firestone Tire and Rubber Company (now a subsidiary of Bridgestone) ran large rubber plantations in

Liberia from 1926 until it was sold to the Japanese-owned company Bridgestone in 1988.

In addition, there were many smaller operations that were run by individual farmers who owned some of the best farmland in Africa, including the Central Highlands of Kenya, which were parceled out by the British to predominantly British people in the 1920s. It was these farming interests in Kenya and the wealth generated from them that led to a war to prevent independence, leading to thousands of deaths in the Mau Mau insurgency that eventually led to Kenya becoming independent in December 1963. There was certainly a close link between farming and political interests, with the European settlers in Algeria, many of whom were farmers, supporting continued French colonial rule. In Rhodesia, Ian Smith (1919–2007) was a farmer, and Smith's defense minister Pieter van der Byl (1923–99) ran a large tobacco plantation.

The fate of many of these companies essentially depended on how independence was achieved in individual countries. In some of them such as Kenya and Uganda, the governments tried to encourage group farms, with Ghana and Guinea establishing state farms, while others—particularly the former French colonies—recognized the benefits of having private companies, most linked to a particular sector of the economy, such as the Compagnie de Gérance du Coton in Burundi, which controlled the local cotton industry; and the Cameroon Sugar Co., Inc., founded in 1975 for the Cameroon sugar industry.

Although it had been possible in colonial times for individuals to run farms and small plantations, the scale of mining ventures usually required far more capital. As a result, most mining operations were owned by public companies, or by private companies with a range of stock holders. There were obvious exceptions to this; Cecil Rhodes (1853–1902) managed to carve out a large "empire" in southern Africa through good fortune, shrewd deals, links with the governments of both Britain and South Africa (he was prime minister of the Cape Colony from 1890 until 1896), and also force. His company later came together as De Beers, founded in 1888, controlling the diamond business.

Other large diamond companies included Alfred Beit (1853–1906), who struck diamonds at Kimberley and then became an ally of Rhodes. Of the other major mining companies operating from South Africa, the most well known were Anglo American Corporation (founded 1917), Consolidated Goldfields (founded 1887), Gencor Ltd. (founded 1895), and Rand Mines Ltd. Mention should also be made of Billiton, a Dutch mining company with a South African background, which merged with the Australian firm BHP to become BHP Billiton. In other countries, there were many other companies such as the Companhia do Manganes de Angola and the Companhia Mineira do Lobito SARL; in the Central African Republic, the Société Centrafricaine du Diamant in Bangui; and in Ghana, the Ashanti Goldfields Corporation.

Agency Houses and Overseas Companies

Throughout colonial Africa, there were a range of agency houses that sold goods from a range of European firms in Africa, acting as agents and distributors. For the manufacturers this was better than establishing their own operations in African countries where there were always delays in shipping and delivery. In Sudan, the shipping and later trading firm Mitchell Cotts sold a wide range of British goods, especially air conditioning, as did a range of agency houses in other countries.

Although many insurance companies operated through agency houses, some other European insurance companies established their own branches in parts of Africa, particularly those that had large European populations such as South Africa, Egypt, Algeria, and Kenya. There were also a large number of European banking institutions that operated in Africa. The British bank Barclays (founded 1690), was always strong in South Africa, and controversially kept up banking ties with South Africa during the period of apartheid, leading to boycotts of the bank. Two centuries earlier, it had also been associated with financing of the slave trade, although that was far less controversial at the time. Also with long connections to South Africa was the Standard Chartered Bank (founded 1853), which opened a branch in Cape Town in 1862, and runs a subsidiary in West Africa: Standard Chartered Bank (Gambia) Ltd; the Standard Chartered Bank in Lesotho had been bought out by South African businessmen and run as Nedbank, Lesotho. Because of its involvement with India, Grindlays Bank (founded 1828) was favored by many Indian traders in East Africa, and the Bank of India and the Bank of Baroda both operate heavily in Kenya.

French banks such as the Banque Afrique Occidentale and the Crédit Lyonnais operated in French colonies, and retained much of their market share after independence. The Banque des Etats de l'Afrique Centrale operated in the countries of former French Central Africa (and also Equatorial Guinea), and there were also local subsidiaries such as the Bank of Africa-Burkina, and the Crédit Lyonnais Madagascar (which is actually owned by the Malagasy government). There are also other institutions such as the Ecobank-Burkina SA, operating in Ouagadougou, with Ecobank Ghana Ltd. operating in Accra, the Ghanian capital, and Ecobank Guinée in Conakry.

The British security printers De La Rue and Waterlows and the U.S. company, the American Banknote Company, were involved in printing money and postage stamps for many African countries, as well as other important printing contracts such as passports. Foreign and locally owned shipping companies provided mail services and also took passengers around Africa, with many of the colonial powers promoting companies registered in their own countries, such as the Companhia Portuguesa de Transportes Marítimos that still operates in the Cape Verde Islands, with P&O, the White Funnel Line, and other firms operating around the continent.

There were also many engineering companies that were involved in projects throughout Africa. The French company Richier was heavily involved in road construction and other civil engineering projects in French West Africa in the 1960s. As there was not sufficient demand for cars on the African continent, automakers in Europe and North America imported cars to Africa. British Africa was largely involved in importing cars from Britain, and French Africa from France, with car assembly plants in Nigeria and South Africa.

Locally Owned Companies

After independence, many people in Africa were eager to control the economies of their countries and prevent what was seen as the pervading influence of "neo-colonialism," which Kwame Nkrumah of Ghana, and also Julius Nyerere of Tanganyika/Tanzania, saw as a system by which the colonial powers essentially continued to control independent nations through a range of important companies. This saw Ghana and Tanganyika—from British Africa—introduce measures to reduce the importance of these companies. There were also many programs of nationalization, sometimes—as in the case of Namibia, and the Egyptian government taking over the Suez Canal in 1956—with compensation, but many times without any compensation—such as the Algerian government taking over former French businesses after independence in 1962, and the Zimbabwe farm invasions by Robert Mugabe's supporters, the "war veterans" from 1997. The most drastic example of taking over of companies was when Idi Amin in Uganda expelled ethnic Indians in 1972. Some of them were from families that had lived in Uganda for generations, and many of the businesses taken over by Idi Amin and his supporters quickly failed.

One of the major areas of control by foreign multinationals that concerned many governments in independent Africa was that of the oil companies. Shell operated through much of Africa, with the French company Total later making inroads, and Esso was involved in prospecting in Chad. However, after countries became independent, many of them established their own state oil companies such as Sonatrach in Algeria; the Société Congo Gulf Oil in Kinshasa, Congo; the TotalFinaElf Côte d'Ivoire in Abidjan; and the National Oil Corporation in Libya.

Some other governments have had different ways of promoting business in their countries. There have been a number of stock markets; the oldest and most powerful are the ones in South Africa: JSE Securities Exchange, established in 1887; and the AltX, the Bond Exchange of South Africa, and the South African Futures Exchange, all located in Johannesburg. There are also other stock markets in Algeria (1998), Côte d'Ivoire (1976), Botswana (1989), Cameroon (2002), the Cape Verde Islands, Egypt (the Cairo and Alexandria Stock Exchange established in 1888), Ghana (1990), Kenya (1954), Libya (2007), Malawi (1995), Mauritius (1988), Morocco (1929), Mozambique (1999), Namibia (1992), Nigeria (1960 in Lagos, 2001 in Abuja), Rwanda (2008), Sudan (1995), Swaziland (1990), Tanzania (1998), Tunisia (1969), Uganda (1997), Zambia (1994), and Zimbabwe (1993); and there are plans to establish one in Angola. These have helped with raising local capital, and also provided a forum for local investors.

Other countries have insisted on local citizens being directors, which has changed the management of many of the companies operating in Africa and created a large African managerial class. These have transformed the nature of many of the businesses on the African continent, and how they are run, although political problems have interrupted the economic progress in many countries.

See Also: Africa; African Development Bank; Algeria; Angola; Botswana; Cameroon; Côte d'Ivoire; Egypt; Ghana; Kenya; Libya; Morocco; Neocolonialism; Nigeria; South Africa; Sudan; Suez; Tanzania; Tunisia; Zimbabwe.

Bibliography. *Africa South of the Sahara 2008* (Europa Publications, 2008); J. Dickie and A. Rake, *Who's Who in Africa: The Political, Military and Business Leaders of Africa* (African Development, 1973); Raymond E. Dumett, "Sources for Mining Company History in Africa: The History and Records of the Ashanti Goldfields Corporation (Ghana), Ltd.," *Business History Review* (v.62/3, 1988); Ubong Effeh, *Why Sub-Saharan Africa is Mired in Poverty: The Consequences of Misrule* (Edwin Mellen Press, 2008); Adam Jones, *Brandenburg Sources for West African History 1680–1700* (Franz Steiner Verlag, 1985); Louise Fox and Melissa Sekkel Gaal, *Working Out of Poverty: Job Creation and the Quality of Growth in Africa* (World Bank, 2008); Kempe Ronald Hope, *Poverty, Livelihoods, and Governance in Africa: Fulfilling the Development Promise* (Palgrave MacMillan, 2008); Sandra James, Christy Oddy, and Monica Scott, *Major Companies of Africa South of the Sahara, 2009* (Gale-Cengage/Graham & Whiteside, 2008); George Klay Kieh, Jr., *Africa and the New Globalization* (Ashgate, 2008); *The Middle East and North Africa 2008* (Europa Publications, 2008); Godfrey Mwakikagile, *Investment Opportunities and Private Sector Growth in Africa* (New Africa Press, 2007); Geoffrey Wood, *Industrial Relations in Africa* (Palgrave Macmillan, 2007).

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Company Profiles: Australia and the Pacific

A widely used regional designation for Australia and the Pacific is Australasia, whose broadest scope contains the countries of Australia, New Zealand, Malaysia, the Philippines, Papua New Guinea (PNG), and the many island nations of the Pacific, such as Fiji, Samoa, and Tonga. A more narrow definition contains Australia and New Zealand, countries with close historical, economic and cultural links; and PNG, geographically close and strategically linked to Australia. All three countries are members of the British Commonwealth. The more narrow definition is the focus here.

The largest economy in the region is by far Australia, with a 2007 nominal GDP of roughly US$908 billion in 2007 (according to the International Monetary Fund). New Zealand followed with a GDP of about US$129 billion. PNG's GDP was roughly US$6 billion. This difference in GDP scale is reflected in the relative size of the three countries' corporate equity markets where shares of many of the larger companies trade. Total market capitalization of the Australian Stock Exchange (ASX) as of September 2008 was approximately US$1.2 trillion; of the New Zealand Stock Exchange (NSX), US$36.9 billion (as of July 2008). There are 1,937 domestic companies listed on the ASX while only 149 are listed on the NSX. The Port Moresby stock exchange (POMSoX) is the official stock exchange of PNG. Capitalization of companies listed on POMSoX was approximately US$7 billion in late 2006.

Australia

A company could be considered domestic from a regional point of view either because it is headquartered or domiciled in a local country and/or because its operations are primarily located in the region. From either perspective, Australian companies are the most prominent in the Australasian area. According to IBISWorld (whose database contains both public and private companies), of the top 500 companies in Australasia as defined here, 469 operated in Australia in 2008, with total revenue of approximately A$1.3 trillion. Thirty-one of the remaining companies operated in New Zealand, having total revenue of A$62 billion, while one was in PNG, with total revenue of A$1.4 billion. Many of these Australian corporations were either subsidiaries of foreign multinationals, including companies such as IBM, Coca-Cola Amatil, ING, Nestle, Citibank, Vodafone, Pfizer, and Sony, or large local companies.

Many public-traded and Australian-domiciled firms are not just prominent in the Australasian region but in worldwide markets as well. In 2008, eight of the Fortune Global 500 companies were located in Australia. None were in New Zealand or PNG. Even more Australian firms are represented on the Forbes Global 2000 list (with two from New Zealand and again none from PNG).

Australian financial services firms are especially important in terms of global size. In 2008 the four largest Australian companies on the Forbes Global 2000 list (where companies are ranked in terms of sales) were commercial banks: National Australia Bank, ranking 89, followed by Commonwealth Bank (99), ANZ Bank (117), and Westpac Banking Corporation (130). These constituted the so-called Big Four of Australian banking and had combined total sales that year of over US$110 billion and profits of US$17 billion. Other major Australian financial services firms on the list included QBE Insurance Group (365), Macquarie Group (an investment bank) (410), AMP Australia (435), and St. George Bank (447).

The Macquarie Group also has other listed satellites and affiliates and two of these made the list as well: Macquarie Airports, which takes equity stakes in and operates international airports, including Sydney Airport (1007) and Macquarie Office Trust (1796). Macquarie in particular has a global presence and is known for its financial business model, which involves raising capital on equities markets to invest in various infrastructure and other business enterprises. Its home-grown imitator, Babcock and Brown, was 1353 on the Forbes list. These companies, especially Babcock and Brown, have faced difficulties as a result of the subprime crisis, as sources of inexpensive liquidity to finance leveraged investments have dried up.

As a sector, mining and resources companies are perhaps as significant as financial companies in the overall Australian corporate profile. The Forbes 2000 list included Woodside Petroleum (845), Santos (another energy firm) (1496), Fortescu Metals Group (1633), and Newcrest Mining (1716). Bigger than all of these but jointly domiciled in the United Kingdom and Australia (with primary operations in the latter country) is BHP Billiton, with sales of $39.5 billion and a ranking of 83. These companies have generally been quite profitable but are facing potential challenges as worldwide commodities prices weaken.

Transportation and logistics is also a major corporate sector, mainly because of Australia's large physical size, which requires long-haul movements of goods and services. Major Australian transport firms included Qantas Airways (719), Toll Holdings (a logistics firm) (985), and Transurban (a major toll road operator and logistics provider) (1786). Outside of these three major sectors, other significant Australian global companies include Telstra, the country's major telecommunications provider (and formerly a government monopoly before being privatized) (215), Westfield Group (a property developer and listed real estate trust) (390), and Woolworths, a major grocery chain (395).

Within Australia, Sydney, in the state of New South Wales (NSW), remains a prime location for many of the largest companies, public or private. In 2008, 45 percent of the IBISWorld top 500 Australasian companies, by revenue, were headquartered in NSW (accounting for 225 companies). This regional dominance was especially striking in the finance sector where 56 of the 58 domestic and foreign authorized deposit-taking institutions were in Sydney. Australia is an especially attractive location for foreign financial services firms seeking to operate in Asia because of its English language, corporate legal system based in English law and time zone that spans the end of the U.S. trading day and beginning of the European trading day while being coincident with the bulk of active trading in most Asian markets. The state of Victoria, which contains Australia's second largest city, Melbourne, accounted for another 27 percent of the top 500 by revenue (133) companies.

One other measure of the size and scope of the Australian corporate sector is a listing of the location of regional headquarters of multinational corporations in the country. As of 2002 Invest Australia indicated that the country was home to 848 Asia Pacific regional headquarters (RHQs), defined as an office located in Australia, whose parent company is located in a country other than Australia and that provides business services on behalf of the parent company to associated companies and customers located in countries other than Australia. The majority of these RHQs were located in NSW. Approximately one-third were involved in the information and communications technology industry, with strong presences in manufacturing, finance and insurance, and research and development.

The Australian Bureau of Statistics (ABS) estimated in its 2001 report on the small business sector (defined as a business employing less than 20 people) that there were 1,233,200 private sector small businesses in Australia during 2000–01, which represented 97 percent of all private sector businesses. These small businesses employed almost 3.6 million people, 49 percent of all private sector employment that year. Overall the industries contributing the highest number of small businesses were the construction industry (21 percent of small businesses), property and business services industries (19 percent) and the retail trade industry (15 percent). Relatively few enterprises were engaged in agriculture but in this sector the majority of enterprises (including Australia's very important wine producing industry) were small.

New Zealand

As noted above, New Zealand's corporate sector is much smaller and less globally prominent with a significantly different sectoral composition. Of the top 10 companies on a list of the country's top 100 companies, the largest is a dairy products manufacturer (Fonterra Co-Operative Group Ltd.) while the sixth largest is a producer of lumber and home interiors (Carter Holt Harvey Ltd.). The second largest firm is a grocer (Progressive Building Limited) and public sector or formerly public sector entities have three places in the top 10 (New Zealand Defence Force, New Zealand Police and New Zealand Post Ltd.). In this last category there are numerous public, quasi-public, or privatized public bodies in the overall top 100 list including local governments, universities, and governmental departments. Only two New Zealand firms are on the Forbes 2000 list for 2008: Telecom of New Zealand (ranked 1095, with sales of US$3.81 billion and profits of US$2.34 billion) and Fletcher Building (ranked 1796 with sales of US$4.58 billion and profits of US$0.37 billion).

New Zealand's corporate sector is also heavily dominated by Australian firms, especially in financial services. Partly this is because New Zealand is much smaller in terms of GDP as noted above and in population (roughly 4 million people versus 21 million in Australia). There are also very close economic links between the two countries, including the Trans-Tasman Travel arrangements of 1973, which allow citizens of the two countries to travel between and live and work without restriction within each other's national borders, and the Australia New Zealand Closer Economic Relations Trade Agreement (ANZCERTA), effective since 1983, which essentially created a common market. As a result Australia is New Zealand's principal trading partner, providing 20 per cent of merchandise imports and taking 21 percent of merchandise exports. New Zealand is the third largest market for total Australian investment, direct and portfolio, and Australia is the largest foreign investor in that country. Australian companies dominate the financial services and transport sectors in New Zealand through foreign subsidiaries. Nearly all banks in New Zealand have parent companies domiciled in Australia and listed on the ASX.

Because of this close integration between the two economies, New Zealand's share market capitalization relative to its economy (42 percent of GDP) was much smaller than Australia's (151 percent of GDP) as of 2005, since it is often more efficient to list on the ASX or raise capital in the much larger Australian funds markets. The countries used to have similar relative levels of capitalization, at roughly 60 percent of GDP for each country in 1994. However, while both countries conducted significant privatizations of government enterprises and deregulation of financial markets, only Australia instituted mandatory retirement savings by employees and employers. The ASX is now the twelfth largest share market in the world and the fourth largest in the Asia Pacific by market capitalization.

By one measure, New Zealand public companies, in any case fewer in number, were more closely held than Australian companies in 1995. However, updated estimates and adjustments for the much smaller size of New Zealand firms (where it takes less capital to accumulate large stakes relative to the total) indicate that both countries' publicly traded firms have relatively broad ownership (with adjustment for size New Zealand's firms are more widely held) with both countries above OECD averages on that metric.

Papua New Guinea

PNG is similar to New Zealand with respect to the fact that it has close ties to Australia. A number of trade and defense treaties bind PNG and Australia, including the Papua New Guinea–Australia Trade and Commercial Relations Agreement (PATCRA II), the Agreement for the Promotion and Protection of Investment (APPI), and, most recently in 2004, the

Joint Agreement on Enhanced Cooperation. These treaties facilitate trade, employment and investment in PNG by Australians. In 2008, 8,000 Australian nationals lived and worked in the country. Australia is PNG's largest source of imports and destination for exports, with Australia purchasing 30 percent of the country's exports in 2006.

However in most other economic respects PNG is quite different from both Australia and New Zealand. The country was administered by Australia under a United Nations trusteeship after the end of World War II. Complete independence was declared from Australia in 1975 at the end of a process of increasing self-government.

Although larger in population terms than New Zealand (6.1 million people in 2008), the country's company sector is much less developed. PNG has a dual economy with a small formal incorporated sector whose employees are engaged primarily in mineral production, public sector services, a small manufacturing industry, and miscellaneous services such as finance, construction, transportation, and utilities. In that formal sector, the largest palm oil company, based in both PNG and the Solomon Islands, floated on the London Stock Exchange in 2007. The Solomon Islands is a major foreign destination of business activity for PNG companies, with 22 operating there in 2008 with investments of US$103 million. The firms operating in the Solomon Islands include names such as Bishop Brothers, Credit Corporation, Daltron, West New Britain Palm Oil Limited, Bank South Pacific, Lamana Hotel Developments, and KK Kingston.

However, the bulk of economic activity and employment in PNG still takes place primarily in the much larger informal sector, which relies heavily on subsistence agriculture. Partly because of that, PNG social indicators put the country well below those of most lower-middle-income countries as measured by the World Bank.

See Also: Australia; New Zealand; Pacific Rim.

Bibliography. Australian Bureau of Statistics (ABS), *Small Business in Australia 2001* (Report 1321.0); Australian Government Department of Foreign Affairs and Trade, *New Zealand Country Brief—January 2008* (2008); Australian Government Department of Foreign Affairs and Trade, *Papua New Guinea Country Brief—June 2008* (2008); Linda Cameron, *Investor Protection and the New Zealand Stock Market,* New Zealand Treasury Policy Perspectives Paper (07/02, October 2007); Forbes Magazine, *The Global 2000* (2008); Fortune Magazine, *The Fortune Global 500* (2008); IBISWorld, *Top 2000 Companies Database* (2008); International Monetary Fund, *World Economic Outlook Database, April 2008* (IMF, 2008); Kompass Company, *Business Profiles of New Zealand's Top 1000 Companies* (2008); Organisation for Economic Development and Cooperation, *Economic Survey of Australia 2006* (OECD, 2006); Pacific Islands Trade and Investment Commission, Sydney, *PNG Investments in Solomon Islands at US$103M* (September 6, 2008); Radio New Zealand International, *Biggest Palm Oil Company in PNG and Solomons to Float on London Stock Exchange* (December 16, 2007); World Federation of Exchanges, *Market Statistics* (July 2008).

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Company Profiles: Central America and the Caribbean

Many companies based in Central America and the Caribbean are rapidly becoming integrated into the global economy. The small size of local and regional markets has motivated several companies in this region to pursue business opportunities not only in the more developed countries of North America and western Europe but also in fast-growing emerging countries such as India. The rise of multinational enterprises from Central America and the Caribbean is a relatively new phenomenon and one that has not attracted a great deal of attention in the academic literature or business press.

Central American and Caribbean multinational enterprises (CACMNEs) are operative in a wide range of industries from food and beverage to leisure and tourism and financial services. Companies such as CL Financial (Trinidad), Grace Kennedy (Jamaica), Neal and Massy Holdings (Trinidad), and Goddard Enterprises (Barbados) are examples of companies with significant international and regional operations in a wide range of industries. Other companies such as Nicaragua-based Financiera Arrendadora

Centroamericana (Finarca) continue to focus on their domestic markets but have become targets of regional and multinational firms interested in their assets and markets, while firms such as the Lovable Group (Honduras) have used their domestic competitive advantages to secure major international customers. These firms too find themselves integrated into the global economy.

CL Financial

CL Financial is a Trinidad-based CACMNE that has aggressively pursued extra-regional market opportunities. CL Financial was established in 1993 as the holding company for Colonial Life Insurance Company (Trinidad) Ltd., which at the time was still a relatively small insurance company offering a limited range of products. However, by 2005 CL Financial had grown into a major conglomerate with business operations in insurance, financial services, real estate development, media, medical services, agriculture, manufacturing, methanol, distribution, and retail. The firm now operates in over 28 countries around the world and has assets in excess of $12 billion.

Through its wholly owned United Kingdom–based subsidiary, CI WorldBrands Ltd., CL Financial has become a major player in the global alcoholic beverage industry. In 2004 the company acquired Paragon Vintners Ltd., a London-based wine and spirits distributor, as well as Fassbind Distributors of Switzerland, a company also focused on the distribution of alcoholic beverages. In 2005 the firm acquired ChateauOnLine, a French wine merchant. Also included in the company's wine and spirits portfolio are Burn Stewart, a Scotch whisky producer with three single malt distilleries, 200 employees, and sales operations in Taiwan, South Africa, and the United States. CL Financial also owns Thomas Hine and Company Ltd., a French manufacturer of fine cognacs with a 250-year history. In 2007 the company completed the acquisition of Pernod Ricard's Lawrenceburg facility in Indiana. Pernod is a major producer, importer, and marketer of wine and spirits and is the third-largest company in the U.S. wine and spirits industry.

It is not, however, only in the area of alcoholic beverages that CL Financial has excelled. The company is also a major player in the methanol and biofuels industry. Through its subsidiary, Methanol Holdings (Trinidad) Ltd., CL Financial operates the largest methanol plant in the world with a capacity of 5,400 MT of methanol per day. The company has also, with a German partner, commissioned a methanol plant in Oman that began production in late 2007.

Grace Kennedy Ltd.

Another CACMNE of note is Jamaica-based Grace Kennedy Ltd. This conglomerate was established in the early 1920s as a small trading company. The firm has since grown considerably and now includes some 60 subsidiaries and associated companies and is operative across the Caribbean, North and Central America, the United States, Canada, and the United Kingdom. Grace Kennedy operates in two broad businesses—food and financial services. In the food area, the firm is active in processing, marketing, and distribution across the Caribbean as well as in the United Kingdom and Canada. For example, Grace Foods UK Ltd. is one of Europe's leading suppliers of ethnic foods while Grace Kennedy (Ontario) Ltd. is a major trading company operating in Canada. World Brand Services is a division of Grace Kennedy Ltd. focused on representing a range of international food and nonfood brands. M&M Mars, Lay's, Tostitos, Ziploc, and McCains are among the brands distributed by the company. Grace Kennedy (Belize) Ltd. is also a player in the food distribution business; it is the third-largest food importer in Belize and handles primarily "Grace" branded products.

As previously mentioned, Grace Kennedy is also active in the area of food manufacturing. Grace Food Processors is a manufacturer of Grace branded products including tomato ketchup, canned beans, and juices. Dairy Industries (Jamaica) Ltd., on the other hand, is a manufacturer and distributor of dairy products. This dairy operation is a 50/50 joint venture between Grace Kennedy and Fonterra of New Zealand, which is a leading exporter of dairy products. Grace-branded food products are marketed internationally through Grace Food International, which exports to over 25 countries in Europe, Asia, Latin America, and North America.

In addition to food manufacturing and marketing, Grace Kennedy also operates a portfolio of companies in financial services and nonfood marketing. EC Global Insurance, for example, is a provider of insurance services headquartered in St. Lucia, while FG Fund Management (Cayman) Ltd., is a mutual-fund company based in the Cayman Islands, and Grace Kennedy Remittance Services is based in Guyana and is involved in the wire transfer of funds. Grace Kennedy is also active in the building supplies industry in Jamaica through its ownership of Hardware and Lumber Ltd., which is involved in retailing and wholesaling building materials and home improvement supplies.

Neal and Massy Holdings Ltd.

Neal and Massy Holdings Ltd. (NMH) is one of the largest and most established conglomerates in the region. The company has been in business for over 80 years and has 6,000 employees and over 7,000 shareholders. The firm is operative in a range of industries. The Automotive & Industrial Equipment Business Unit is involved in vehicle sales and service as well as the rental of heavy industrial, construction, and agricultural equipment, and equipment for the petroleum industry. This unit represents a number of world-class brands including Goodyear, Caterpillar, Nissan, Subaru, Hyundai, and Volvo. Associated Industries Ltd. (Guyana) is part of this unit and retails automotive and industrial equipment across Guyana.

NMH also operates the Energy & Industrial Gases Business Unit, which provides a range of products and services to the energy sector, for example, electrical and instrumentation services, and through its associate company, NM Wood Group, has partnered with BP (Trinidad and Tobago) to provide maintenance on the company's onshore plants. The unit also holds a majority stake in Demerara Oxygen Company Ltd., which markets LPG and manufactures and markets oxygen, nitrogen, argon, and acetylene in the Guyana market. Also part of this unit is Industrial Gases Ltd., which is a joint venture between NMH and Air Liquide International of France. This company supplies a range of gas products in cylinders, bulk liquid tanks, and high pressure tubes.

NMH also operates in the financial and related services industry. The company is active in the areas of property development, real estate, construction, security, and financial services. For example, NMH holds a 24.5 percent stake in G4S Holdings (Trinidad) Ltd., which is part of one of the leading manned-security firms in the world, with 400,000 employees and a presence in the United States, Canada, United Kingdom, Germany, and France. Through Nealco Properties Ltd., the firm is also an active player in the property management, facilities maintenance, and interior architecture and design fields. The NMH group of companies also covers areas such as remittances (NM Remittance Services Ltd.) and leasing, corporate asset financing, and insurance (General Finance Corporation Ltd.).

In 2001 NMH founded Illuminat (Trinidad & Tobago) Ltd., an information technology and communications operation with a presence in Trinidad, Barbados, Jamaica, Cayman Islands, and the Bahamas. Illuminat has more than 400 employees and provides solutions to government, retail, energy, and hospitality clients across the Caribbean. NMH is also involved in the retail, distribution, and logistics business and owns H.D. Hopwood & Company Ltd., a Jamaica-based importer and distributor of consumer and pharmaceutical products as well as Huggins Shipping & Customs Brokerage Ltd., which provides freight forwarding and customs brokerage services. This latter firm has a long history of operation, having been established in 1896. In fiscal 2007 NMH reported total revenues of TT$5 billion.

Goddard Enterprises Ltd.

While CL Financial and Grace Kennedy have taken a decidedly global approach to their international expansion, other Central American and Caribbean firms have opted for a more regional expansion strategy. Goddard Enterprises Ltd. (GEL) is headquartered in Barbados. The firm started in 1921 as a small meat and grocery store in Bridgetown, the capital of Barbados. The company acquired a local bakery in 1939, and by 1943 had expanded into department store retailing and the hotel industry. GEL now operates 50 companies across 23 countries in the Caribbean and Central and South America.

GEL subsidiaries are active in a wide range of industries including airline catering, industrial and restaurant catering, meat processing, bakery operations, automobile retail and automotive parts, real estate, the manufacture of aerosols and liquid detergents, rum distilling, packaging, fish and shrimp processing, and financial services. Countries in which the firm operates include Antigua, Barbados, Bermuda, Cayman Islands, Colombia, Curacao, Grenada, Jamaica, St. Lucia, St. Maarten, and St. Thomas, Trinidad and Tobago, El Salvador, Ecuador, Guatemala, Paraguay, Uruguay, and Venezuela.

The company's airline catering business was established in 1954. In 1972 GEL entered into a joint venture with the Marriott Corporation, and by 1976 the firm had established its first regional catering operation with its expansion into the Antiguan market. GEL quickly expanded into other Caribbean and Latin American markets with catering units established in over 20 countries. The firm also established airport terminal catering operations and negotiated deals to service a number of major regional and international air carriers including KLM, FedEx, United Airlines, Air Jamaica, Air Canada, American Airlines, Delta Airlines, Virgin Atlantic, Cayman Airways, Mexicana, and British Airways. The firm also secured a number of major industrial clients such as British Petroleum PLC, Repsol S.A., BHP Billiton, Esso, Kellogg's, Bayer, and Altria.

Most of GEL's manufacturing and service operations are based in Barbados. For example, Hipac Ltd. is based in Barbados and produces a wide range of meat and seafood products, while the West Indies Rum Distillery, also based in Barbados, is a manufacturer of aged rums, vodka, and gin. Another subsidiary, Purity Bakery, produces baked goods for supermarkets, shops, hotels, and restaurants across Barbados. The company's sole overseas manufacturing operation is BEV Processors Inc., which is a shrimp and fish processor based in Guyana. GEL also manages a number of import and marketing businesses across the Caribbean. Hutchinsons & Brisbane, for example, is a marketing operation based in Antigua that represents a number of major international brands such as Uncle Ben's Rice, Brunswick Seafoods, Lysol, Harpic, Dettol, and Pedigree and Whiskas. GEL also holds a 70 percent stake in Fidelity Motors, which distributes Nissan vehicles in the Jamaican market.

Other Companies

Grace Kennedy, GEL, and CL Financial operate in a range of diverse and unrelated industries. Other CACMNEs are more focused. Digicel Group Ltd. is a privately owned company incorporated in Bermuda. In 2001 the company launched its operations in Jamaica, becoming the first company in that country to offer GSM mobile services. The firm is the largest mobile telecommunications company in the Caribbean with six million subscribers in 23 markets across the region. Digicel serves markets in the Caribbean and Central America, including Anguilla, Antigua & Barbuda, Aruba, Barbados, Bermuda, Bonaire, the Cayman Islands, Curacao, Dominica, El Salvador, French Guiana, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, St. Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Turks and Caicos, and Trinidad & Tobago. In addition, the company has licenses to operate in Honduras and Panama. The firm has 4,000 employees, operates 1,000 retail stores, and posted revenues of US$1 billion in fiscal 2007.

Nicaragua-based Finarca has become integrated into the global economy, not by expanding internationally but by attracting inbound foreign direct investment from regional and extra-regional firms. This company began operations in 1997 and was the first to introduce the leasing concept to the Nicaraguan market. The company is involved in leasing industrial and agricultural equipment to small and medium-sized companies. With assistance from the Inter-American Development Bank (IDB) Finarca has established a special leasing program for small and medium-sized businesses. As part of this initiative Finarca provides financing to small enterprises of between $3,000–$8,000 for up to four years. Norfund and the IFC injected equity into the company in 1999, and the company has also been successful in raising loan financing from Finnfund, the OVF, SIFEM, and Citibank. In 2003 Interfin, the largest private bank in Costa Rica, acquired a 25 percent stake in Finarca and subsequently increased its ownership to 51 percent in 2005. By 2007, however, Interfin had been acquired by Scotiabank Costa Rica in a $300-million deal that included its 51 percent share of Finarca. In 2008 Scotiabank acquired the remaining 49 percent of Finarca, effectively bringing the Nicaraguan leasing company under the control of the Canadian bank and part of its Latin American and Caribbean network of financial services operations.

The Lovable Group was founded in 1964 in Honduras and has grown to become one of the largest industrial companies in Central America. The firm employs 8,000 people and is active in a number of industries including textile and apparel, the operation of industrial parks, and energy cogeneration. The firm's textile and apparel operation counts among its clients Russell Corporation and Cross Creek, Jockey, Costco Wholesale, and JC Penney. On behalf of these and other clients, the Lovable Group exports products to a number of countries around the world including the United States, Canada, United Kingdom, Japan, Korea, and Taiwan. As part of the textile and apparel operation, Lovable owns and operates a number of companies including Genesis Apparel SA, a sewing operation with 1,000 employees; Pacer Screen Printing and Embroidery; Trueform; and Villatex SA, which produces products for Victoria's Secret and Tommy Hilfiger.

The Lovable Group also operates four industrial parks in Honduras. Zip Buena Vista SA is a 950,000-sq.-ft. facility, while Zip Tex is a 900,000-sq.-ft. operation. These complement two other facilities—Zip Choloma 1 and 11. All four parks provide basic infrastructure services as well as assistance with the recruitment of local workers. The Lovable Group also offers power through its cogeneration facility, established in 2004 to supply its industrial parks. Surplus energy is sold to the local National Energy Company. The Group also provides wastewater treatment as well as food and water laboratory analysis services to industrial clients.

See Also: Canada; Central America; Costa Rica; Inter-American Development Bank; Internationalization; Trinidad and Tobago.

Bibliography. Karen Retana, "Scotiabank Expands Its Nicaragua Presence," *La República* (April 11, 2008); CL Financial, www.clfinancial.com (cited March 2009); Digicel Group, www.digicelgroup.com (cited March 2009); Finarca, www.finarca.com (cited March 2009); Goddard Enterprises, www.goddardenterprisesltd.com (cited March 2009); Grace Kennedy, www.gracekennedy.com (cited March 2009); Lovable Group, www.lovablegroup.com (cited March 2009); Neal and Massy Holdings, www.neal-and-massy.com (cited March 2009).

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Company Profiles: Central Asia

From ancient times, central Asia had been part of the Silk Road for trade between China and Europe, and this led to the emergence of many small trading companies in the region. It also resulted in Chinese, Turkish, and European businesspeople establishing businesses in Central Asia. Owing to its position in the world, and the history of the region, many of the companies in central Asia have tended to be, in the main, Russian, British, Indian/Pakistani, or Iranian.

These women sorting raisins for export in 2006 were part of a USAID program to develop small factories in Afghanistan.

The Russian influence in central Asia started in the 16th century, with Russian traders using the region to reach China; later, Russia started annexing parts of central Asia to enlarge the Russian Empire. Under the tsars, many Russian private companies and government corporations operated in central Asia, not only the areas that they directly controlled but also in nearby countries. Under communism, the Soviet Union took over these companies, and also established other trading companies in the region that dominated trade. Most of these were centered on particular cities or towns such as the Chimkent Industrial Amalgamation and the Dzhambul Industrial Corporation, both in Kazakhstan.

Following the end of communism and independence for Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, these former government corporations were taken over by the new governments, some of which embarked on privatization measures. Others like Turkmenistan involved restructuring them and keeping them effectively under state control. Some private companies have also been established in all five countries, especially in the capital cities. However, the dominance of the Russian managerial class was evident throughout the 1990s, and some of the companies in these countries are still dominated by Russians. Some foreign businesses have entered former Soviet central Asia, such as Citibank operating in Almaty.

In Afghanistan, the threat to Soviet investment in the country in the 1970s caused the Soviet leadership to send in troops in 1978, and this kept the communists in power there until 1992. During that time, the economy was modeled on those of the states of Soviet central Asia, with state corporations dominating. Since the end of communism and the fall of Najibullah in April 1992, the economy of the country has become even worse. There are some small businesses operating in the country, and foreign infrastructure companies and security companies have been heavily involved since NATO troops moved into Afghanistan in 2002. However, with a precarious economic climate, few companies are involved in investing in the country. The problem has been that most of these countries, and indeed Pakistan, have large "informal" sectors of the economy with thriving black markets.

British companies were an important part of trade in the region, mainly through their involvement in India/Pakistan until 1947. This saw them fight three wars in Afghanistan, and be heavily involved in the "great game." However, for the most part, business was in the hands of local traders such as the "horse dealer from Lahore" in Rudyard Kipling's story *Kim* (1901). In Pakistan, with a capital free market economy, many British businesses have continued to operate there, usually through locally owned subsidiaries. The sheer size of the population of the country and its connections with Britain have made Pakistan a strong market for British products, and indeed, Britain a market for Pakistani products such as hand-woven carpets that can now be found all around the world. British banks, insurance companies, business advisories, and the like remain popular in Pakistan, and until the mid-1970s, were also popular among the elite in Afghanistan. Indian and Pakistani companies operate throughout the region, and many have seen great opportunities in central Asia, as, have some from Asian countries farther afield such as Thailand and Singapore.

In Iran, many foreign companies—European, North American, and Turkish—were involved in the country in the early 20th century. There was much interest in developing the oil in the region, which saw the signing of the Anglo-Iranian Oil Treaty in 1949. This in turn led to Mohammad Mosaddeq becoming prime minister of Iran in 1951, and he introduced legislation to nationalize the Iranian oil industry soon afterward. A Western economic blockade soon brought the country to the verge of bankruptcy and forced Mosaddeq from power. From 1952, British and U.S. companies managed to make major inroads into the Iranian economy, a situation that changed dramatically with the flight of Shah Mohammad Reza Pahlavi in January 1979. For many years the newly proclaimed Islamic Republic of Iran remained isolated from the West, being immersed in war with Iraq for the next 10 years. There has been a loosening of the economic restrictions in recent years, and this has, once again, led to Western companies working in Iran, and Iranian companies overseas, although there are still restrictions on business dealings between the United States and Iran.

See Also: Iran; Kazakhstan; Pakistan; Russia.

Bibliography. Hooshang Amirahmadi, *Revolution and Economic Transition: The Iranian Experience* (State University of New York Press, 1990); Anders Aslund, *How Capitalism Was Built: The Transformation of Central and Eastern Europe, Russia, and Central Asia* (Cambridge University Press, 2007); Violet Conolly, *Beyond the Urals: Economic Development in Soviet Asia* (Oxford University Press, 1967); Gregory Gleason, *Markets and Politics in Central Asia: Structural Reform and Political Change* (Routledge, 2003); Ali Mohammadi, ed., *Iran Encountering Globalization: Problems and Prospects* (RoutledgeCurzon, 2003); Richard W. T. Pomfret, *The Economies of Central Asia* (Princeton University Press, 1995); Richard W. T. Pomfret, *The Central Asia Economies after Independence* (Princeton University Press, 2006); Boris Rumer, ed., *Central Asia and the New Global Economy* (M. E. Sharpe, 2000); Max Spoor, ed., *Transition, Institutions and the Rural Sector* (Lexington Books, 2003).

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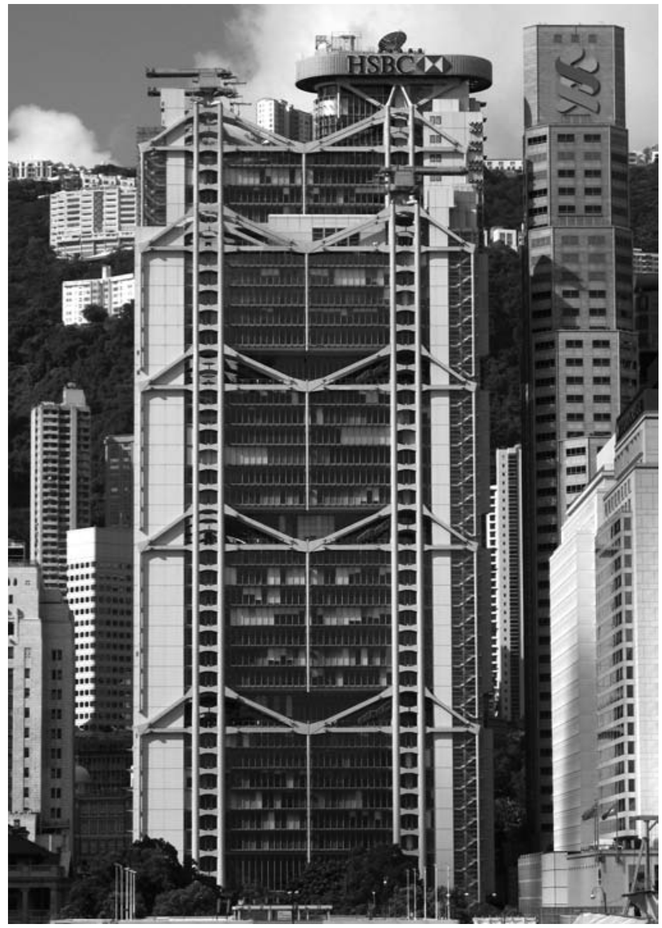
Company Profiles: East Asia

East Asia's roaring economies, led by China, are raising their competitive edge relative to the United States and Europe. The economies of East Asia grew by 9.8 percent in 2006 and those of the United States and Europe rose 2.2 and 1.3 percent, respectively. The entry of multinational corporations (MNCs) has brought the latest technology and advanced management systems to the region. While operating in East Asia, MNCs can use an ethnocentric strategy to transfer their headquarters' practices to their overseas subsidiaries, employ a polycentric strategy to totally adapt to local situations, or adopt a geocentric strategy to balance both global integration and local adaptation.

The economic development of East Asia can also be observed by the international expansion of Asian transnational corporations (TNCs). Globalization, market forces, and technology can push management systems toward uniformity and encourage benchmarking and copying the best practices. TNCs are pressured to adopt some new practices to gain legitimacy. However, embedded customs and idiosyncratic national regimes mediate and reshape the outcome of human resource management (HRM) change.

It is worth examining whether companies operating in East Asia have adopted global HRM practices or customized them to local situations. The discussion is from both sides: Whether MNCs have transferred more global standardized models and whether TNCs have preserved more traditional practices. Eight leading companies operating in East Asia are used to investigate this issue. These companies come from various industries and countries of origin, are well established in the region, and are operating across multiple Asian economies.



HSBC's network of 600 offices in 20 countries in the Asia Pacific region includes the famous HSBC building in Hong Kong.

Western MNCs: HSBC Holdings

Some management theories assume that a set of "best" management practices can be valid in all circumstances and help organizations perform better and obtain sustainable competitive advantage. To apply "best practices," which are mostly derived from the West, in other countries, such as those in Asia, it is important to understand the background. The following highlights several MNCs' company profiles, their history and involvement in Asia, as well as some of their key HRM practices in the region.

HSBC Holdings plc, number one in the Fortune Global 500 in 2007, is the world's largest company and bank. The Holdings was established in 1991 to become the parent company to the Hong Kong and Shanghai Banking Corporation. It has a significant presence in the major financial markets. Currently, HSBC operates a network of some 600 offices in 20 countries in the Asia Pacific region. Its long history in East Asia can be dated back to the 19th century. It has been the largest note-issuing bank in Hong Kong since the 1880s, handled the first public loan in China in 1874, and was the first bank established in Thailand in 1888.

HSBC's core values of integrity, collegiality, and diversity are reflected in its recruitment practices. A global talent management process was implemented to attract, motivate, and retain employees. Human resources (HR) professionals first visited all countries to describe key principles and nomination guidelines for talent assessment to ensure buy-in for the process. Multiple sources of data, including interviews, panel interviews, and 360-degree feedback were then used to review capability ratings for all talent nominations globally. Potential leaders and specialists were identified to fill future positions in next three to seven years.

HSBC adopts an ethnocentric approach in its rewards practices. Its grading structure, salary adjustment, and bonus scheme are inherited from its head offices. For example, to encourage employees to have a direct interest in the bank, an employee share savings plan was offered in most countries. Global bonus schemes linking employees to the achievement of long-term strategic objectives were introduced in East Asia with limited local adaptation.

Because of its large size and extensive network, HSBC can leverage its training resources across the region. The training programs are organized by regional training teams and launched by local offices. Typically, managers with one to two years' company service would attend fundamental management skills training and those with three to five years' company service would attend advanced courses. Young executives are required to complete a two-month induction course.

Western MNCs: Walt Disney Company

The Walt Disney Company is the third largest media and entertainment company in the world. Founded in 1923 as an animation studio, it now owns 11 theme parks. The first theme park opened in 1955 in Florida. In East Asia, the Hong Kong Disneyland theme park opened in September 2005; Tokyo Disney had opened more than 20 years earlier.

To avoid cultural friction similar to what happened at Disneyland Resort Paris, Disney has taken efforts to make their theme parks in Asia reflect the local culture. For example, in Tokyo Disneyland, "Samurai Land" replaced one of the four compass points of the American parks, creating a ride based on a classic Japanese children's story. In Hong Kong, feng shui advisers were consulted about the layout of the park and the hotels skipped the number four when numbering their floors because four is considered bad luck in Chinese culture.

While these adaptations were made on the surface, at a deeper level, imported Disney values retain their influence and are reflected in HR practices. The same interview questions and selection processes were used in Hong Kong, Tokyo, and the United States. Recruitment of professional and higher positions from the external market are rare; rather, internal promotions and deployments are used. The emphasis of recruitment is on "making" people that fit with Disney tradition.

Most of the managerial training programs stress familiarization with Disney culture. There is also the Disney Site Experience, in which managers are sent to other theme parks for job shadowing, learning the actual operations, and understanding the Disney culture. Disney University provides training courses to all employees (or "cast members") about quality, effectiveness, services, and safety. These courses are modified from, and matched with, its U.S. training modules.

Western MNCs: Cisco Systems

Cisco Systems, Inc., was founded in 1984 and is headquartered in San Jose, California. It designs and sells networking and communications technology and services. In 1990 the company went public and was listed on the NASDAQ exchange. Today, with more than 65,000 employees worldwide and annual sales of US$38 billion as of 2007, Cisco is one of the largest developers of routers (a device that forwards computer traffic between networks) and Internet Protocol (IP) packets. In Asia, it has subsidiaries in China, Hong Kong, South Korea, Malaysia, and some southeast Asian countries.

Cisco recognizes an inclusive and culturally diverse workforce as a business imperative. Its HR strategy aims at developing knowledgeable employees who can move quickly to areas of highest needs, thrive on change, and have strong capabilities in process. To acquire such knowledgeable employees, Cisco uses a "buy" strategy. From 1993 through 2000, it acquired 70 companies worldwide. These acquisitions provided not only technology, but also served as a source of talent needed to support its development in Asia. In terms of selection processes, Cisco uses lengthy processes originated from its U.S. model with multiple rounds of interviews. It is, indeed, company policy to have at least five rounds of interviews; the number of rounds can go as high as 16.

Cisco's rewards schemes in Asia follow its U.S. model. All employees receive stock options, based on company performance and individual performance. Performance-based incentive programs and commission schemes are heavily used.

Cisco University was established to centrally design training programs. For example, it adopted the "3E

Model" (experience, exposure, and education) development framework in early 2003. Similar training programs were subsequently introduced to China and Hong Kong. Several days' managerial training programs were arranged and online e-training was offered. Most of these training materials, however, were written in English with limited translations to local languages.

Western MNCs: KPMG

KPMG originates from an accounting firm founded in 1917. Through a series of mergers and acquisitions, KPMG is now a Big Four auditor employing over 123,000 people in a global network of member firms in 140 countries. In East Asia, KPMG has solid foundations in China, Hong Kong, Japan, South Korea, and Taiwan.

KPMG adopts a geocentric approach in its recruitment practice. It recruits professionals from all over the world who understand Asian culture, attracts overseas graduates to return to Asia to work, and sources international talent. Besides "buying" from labor markets, inexperienced graduates are recruited as trainees and undergo a series of training programs, overseas exchange, and in-house examinations to "make" or train them up.

There are seven hierarchical levels—from top partner to bottom associate. This grading structure is globally applied and there is no local customization. Even in East Asia where people are more concerned about status, the titling system and salary structure remain consistent with headquarters.

KPMG is well known for its training and knowledge management. In Korea, KPMG was named "Best Human Resources Developer 2007." Its training programs are designed to foster multidisciplinary capabilities and support global mobility. Each KPMG employee has their own development program that is complemented by global learning initiatives and linked to global performance management systems.

East Asian TNCs: Hutchison Whampoa Ltd.

As the Asian economies are gaining importance in the global arena, the competition, in both domestic and global markets, encourages Asian TNCs to explore investment opportunities overseas. This has significantly changed the ways in which Asian enterprises are managed and work is performed, creating a new institutional environment.

Hutchison Whampoa Limited (HWL), a Fortune Global 500 company, is a leading international corporation with a diverse array of holdings, including the world's largest port and telecommunications operations. Its business also includes retail, property development, infrastructure, and energy. HWL dates back to the 1800s in the Whampoa area (Pearl River of China) when it provided shipbuilding and ship-repairing services. While its operations now span the globe, it continues to remain based in Hong Kong. HWL's strategy is to focus on global expansion and internationalization while locally managing its services.

With a workforce spanning various East Asian economies, HWL emphasizes diversity in recruitment. Its resourcing practices include tapping domestic and regional labor markets to find the best person for each job regardless of race, color, or gender. Networking across affiliates and cross-function movements are frequently used. HWL also uses the vacant positions of various locations to move high-caliber staff around for retention.

HWL reviews its remuneration scheme annually to ensure that packages are externally competitive. Internally, it rewards employees according to their performance and productivity. Employees enjoy comprehensive medical and insurance benefits and a wide range of product and service discounts offered by various affiliated companies.

Online training and learning resource centers are established through a Web portal. Such e-learning enables more employees to access training in a convenient manner and facilitates organizational knowledge transfer and sharing to geographically dispersed employees across East Asia at relatively low cost.

East Asian TNCs: Bank of Communications

Founded in 1908, the Bank of Communications (BOCM) is one of the oldest banks and the earliest note-issuing banks of China. To operate in line with China's economic reforms, BOCM was restructured in 1986 and thereby became the first state-owned shareholding commercial bank. Its head office was in Shanghai. It has over 2,600 outlets in 148 major cities in China and overseas branches in Hong Kong, Macao, New York, Seoul, Singapore, and Tokyo. It was listed on both the Hong Kong and Shanghai stock exchanges. Foreign investors, like HSBC, were brought in as strategic partners to enhance its organizational structure.

Since then, several changes have been observed in its HRM practices.

BOCM launched a graduate recruitment program a few years ago. Its program contained features similar to those in large foreign banks. However, the program was not successful because it could not attract sufficient graduates from top-tier universities. Subsequently, BOCM reverted to its traditional recruitment methods of taking up government-assigned people.

After the reforms in the 1980s, BOCM commenced a bonus scheme that was mostly discretionary. High staff turnover rates in the banking industry plus fierce competition from foreign banks after China's accession to World Trade Organization means that attraction and retention of people are particularly important. In 2006 BOCM formally introduced an incentive system to improve the attractiveness of its remuneration package. That incentive system has some performance-based features similar to those used in MNCs.

BOCM has tried to upgrade employees' competencies and promote the bank as a knowledge-based learning organization. A series of training courses, such as banking operations and customer relations, are provided to new employees. However, training programs are still narrowly defined in scope and focus mostly on technical aspects and job-related skills.

East Asian TNCs: YKK

The world's largest zipper manufacturer, YKK was founded in Japan in 1934. It was named after its founder, Yoshida Kogyo Kabushikihaisha. Over the years, the letters "YKK" were stamped onto the zippers' pull tabs, and thus YKK became known as the company's trademark. YKK also makes other fastening products, architectural products, and industrial machinery. Its philosophy is to manufacture only high-quality zippers that would benefit the end use goods in which they are installed. Due to this guiding principle, it has evolved into a vertically integrated manufacturing system, that is, it not only produces the zippers, but also produces the machines that make the zippers, and even many of the raw materials (e.g., aluminium) that go into the zippers. Currently, YKK operates more than 123 affiliated companies in more than 70 countries. In East Asia, YKK has several plants in China and Taiwan.

When selecting candidates for its East Asian plants, YKK typically considers technical skills, education of candidates, and culture fit with the company. Young people are recruited to start at the bottom of the organizational hierarchy and climb up it slowly. It is also common to reappoint retired people to join its plants to provide consultant advice. Rewards practice in local plants follows a traditional Japanese model that is largely based on seniority and tenure. Job performance is not truly reflected in salary increases. Promotion is rotated and depends less on individual ability and job performance. Job rotation across the factory floor is common and employees are placed to work in different areas for several years to learn the practices. Quality and knowledge management are highly emphasized in the training courses.

East Asian TNCs: Haier Group

Founded in 1984, Haier Group is headquartered in Qingdao in China's Shandong Province, and is the world's leading white goods home appliance manufacturer. Its products are now sold in over 100 countries. It has 5,000 overseas retail outlets and over 10,000 service centers all over the world. Haier's strategy aims at positioning the company as a local brand in different world markets. Its management philosophy is a blend of international management principles and Chinese tradition. The globalization of best practice means what works best in one subsidiary, e.g., Haier America, is shared with another, e.g., Haier Europe, and then the successful management practices are further introduced to other subsidiaries.

The globalization practice also extends to its recruitment policy. Haier considers both domestic and overseas professions. Since its corporate culture features recognition and participation of all employees, Haier has created an open competitive job bidding system. Employees who have reached the qualified skill level through training are welcome to bid for job openings.

Promotion is based upon excellence. There is a competitive system to review performance and ability. The responsibility of a manager is to establish a "race track," that is, a personal development opportunity for every employee to develop and demonstrate their talents. Haier adopts an open and transparent incentive policy. A point system to check quality problems is set up and the workers receive a higher wage and bonus if they earn more points. Daily evaluation results are announced to all workers in the factory.

Every new employee goes to the Haier University to attend one month of corporate culture and management training before being put to work. In-house training and overseas exchange programs are offered to all employees (including managers, technical experts, and workers) who can register for the courses at will. In order for senior managers to understand the mechanism of the department, they are assigned to work at the bottom level of the department for several months.

Conclusion

In general, most of the eight MNCs operating in East Asia discussed here adopted an ethnocentric approach in rewards and training and extended global incentive schemes and training programs to East Asia. However, transferring global practices without any adaptation to local markets was not without pain. Past success or best practice in one situation did not automatically guarantee an effective transfer and adoption in another. In more recent years, a number of MNCs considered a geocentric recruitment approach to utilize the best people for key jobs throughout the organizations.

On the other hand, some traditional practices predominantly in East Asia (such as seniority-based pay, technical skill training, appointments by government) seem problematic as Asian TNCs expand overseas. Benchmarking best practices and competitive forces have been some key drivers of the reconfiguration of TNCs. However, there is no single management model that shapes the way companies are organized or their people are managed, regardless of whether Asian or Western.

Change in HR management practice involving gradual experimentation of best practices and blending with Asian characteristics will continue. As with most experimentation, the final outcomes may be difficult to predict. Greater appreciation of East Asian contexts as well as understanding the dynamic of HR management change in the region is desirable.

See Also: Asia; China; Ethnocentric Human Resource Policy; Globalization; Hong Kong; Japan; Local Adaptation; Polycentric Human Resource Policy.

Bibliography. Victoria Bentley and Chris Tapster, *Major Companies of Asia and Australasia: South East Asia-Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam*, 24th ed., v. 1 (Gale-Cengage/Graham & Whiteside Ltd,, 2007); J. Chatman, C. O'Reilly, and V. Chang, "Cisco Systems: Developing a Human Capital Strategy," *California Management Review* (v.47/2, 2005); L. X. Cunningham, C. Rowley, and Irene H. F. Poon, "'Globalisation of Asian Firms," in *The Handbook of Technology Management*, H. Bidgoli, ed. (Wiley, 2008); A. Gakovic and K. Yardley, "Global Talent Management at HSBC," *Organisation Development Journal* (v.25/2, 2007); Sandra James and Christy Oddy, *Major Companies of Asia and Australasia East Asia: People's Republic of China, Hong Kong, Japan, South Korea, North Korea, Mongolia, Taiwan*, 24th ed., v. 2 (Gale-Cengage/Graham & Whiteside, 2007); G. S. Lim, "Hutchison Whampoa: A Global 3G Giant in the Making?" *Asian Case Research Journal* (v.9/2, 2005); W. Lin, "Effective OEC Management Control at China Haier Group," *Thomas Strategic Finance* (v.86/11, 2005); C. Rowley and J. Benson, *The Management of Human Resources in the Asia Pacific Region: Convergence Reconsidered* (Frank Cass, 2004); C. Rowley and M. Warner, "The Management of HR in the Asia Pacific into the 21st Century," *Management Revue* (v.18/4, 2007); C. Rowley, J. Benson, and M. Warner, "Towards an Asian Model of HRM? A Comparative Analysis of China, Japan and South Korea," *International Journal of HRM* (v.15/4, 2004); J. Van Mannen, "Displacing Disney: Some Notes on the Flow of Culture," *Qualitative Sociology* (v.15/1, 1992); M. Warner, *The Future of Chinese Management* (Frank Cass, 2003); World Bank Report, "Regional Fact Sheet from the World Development Indicators 2008," www.worldbank.org (cited March 2009).

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Company Profiles: Eastern Europe

Because of their location and size, and also the history of the region, Germany and Russia have tended to dominate the countries of eastern Europe, and although there have, obviously, been traders since ancient times, the first evidence of named trading companies comes from the medieval period with the establishment of the Hanseatic League. This was a series of arrangements in ports in the Baltic Sea that helped the traders there to establish a system of trading and credits, and also helped a number of ports establish a trade monopoly. By this time many of the major cities in eastern Europe and all the ports of the Hanseatic League had a system whereby city guilds controlled trades within their region in order to—as they argued—keep up the quality and also prevent competition.

The Early Modern Period

In the early modern period, German trading companies came to dominate many of the ports of the Baltic Sea—indeed, significant German populations started moving to Danzig, Memel, Riga, and Talinn, and also to other cities such as Warsaw and Vilnius. Most of these traders were involved in buying and selling agricultural produce or small manufactured items. Farther south, German companies started to become involved in mining for coal in Silesia. The emergence of the Russian state under Ivan the Great (reigned 1462–1505) and then Ivan the Terrible (reigned 1547–84) also led to some German and Turkish trading companies being involved there.

In 1555 some English capitalists recognized the economic potential of Russia and founded the Muscovy Trading Company (or Muscovy Company), the first major English joint-stock company ever established. It had a monopoly on trade until 1698 and actually continued business operations until 1917, operating as a charity since then. Other countries also started to trade with the Russians, but the isolation of Moscow at the time largely prevented this. Indeed, in Russia, although there were small traders, because the society remained largely feudal until the early modern period, the major construction projects were undertaken by the government. This could be seen by the projects undertaken by Peter the Great, who attempted to modernize the country with the building of St. Petersburg as the new Russian capital. Catherine the Great continued the idea of government initiatives in major engineering projects.

A major problem with the establishment of business in eastern Europe in late medieval and early modern times was the issue of law and order—there often being little exercise of central control except in times of war, when conscription was enforced. There was one brief respite during the reign of the Romanian medieval ruler Vlad III "the Impaler" (1431–76), who imposed such harsh punishments on malefactors that he terrorized a previously lawless people, and traders soon found that they could operate from his country easily.

At the start of the 18th century, eastern Europe was dominated by Poland, a declining power; Russia; Prussia; Austria; and also Turkey, which dominated the Balkans. There was little industry in much of eastern Europe, but the coal mines and iron ore in Silesia were already attracting the attention of the Prussians who invaded in 1740, sparking the War of Austrian Succession. When the Swedish industrial agent and spy Reinhold Rücker Angerstein (1718–60) went to Bohemia, Carinthia, and Hungary in the early 1750s, he did not find much industrial development in these areas. During the Seven Years' War the Austrians tried to retake Silesia but failed. During the 1770s and 1780s, with Russia keen to develop its industrial potential, Catherine the Great encouraged German artisans to relocate to southern Russia. All these projects were still government funded.

Industrialization

Only gradually did private capital start to help with the development of businesses. These tended to be located in cities, with the emergence, in Russia, of companies in St. Petersburg, Moscow, Riga, Warsaw, Odessa, Kiev, and other places such as Minsk and Smolensk. In Riga and Warsaw, many of these businesses were run by Germans, who also dominated commerce in most of the Baltic Sea. By law, Russian companies needed Russian citizens as directors, but they were allowed some foreign directors provided they did not form a majority on any board of management. During the 19th century, as Russia suddenly embarked on a program of industrialization, joint stock companies were formed and raised money from investors from western Europe, particularly Britain and France. There was also a stock market in St. Petersburg and one in Moscow, both of which raised money for businesses in the Russian Empire. Stock markets were also located in several other Russian towns dealing with locally based companies.

At the same time that Russia was undergoing a program of industrialization, many of the countries in the Balkans were gaining their independence. At the start of the War of Independence from 1821 to 1829, Greece declared itself an independent country, albeit with the British still controlling the Ionian islands (Corfu, Zante, Santa Maura, Ithaca, and Kefalonia), where they operated a number of trading firms. There the companies were registered under British rules until 1862, when the islands were handed over to Greece. Unlike the rest of eastern Europe, Greece operated a capitalist economy throughout the 20th century and were particularly prominent in shipping with magnates such as Stavros Niarchos (1909–96), known as "The Golden Greek" for his manufacture of the first supertankers, and Aristotle Onassis (1906–75) becoming well known for their wealth and power.

Romania, as Wallachia and Moldavia, gained its independence in 1859 and became officially recognized in 1878. It sought to develop its industry by forming a number of companies, including several involved in plans to exploit the oil fields of Ploesti. The oil fields were privately owned until the end of World War II, and their success encouraged the establishment of other companies throughout Romania involved in coal and iron ore. In 1867 Serbia gained its independence from Turkey, and also started developing its business laws to allow the establishment of private companies. Serbia lacked the mineral resources of Romania, but some companies from Germany, Greece, and Russia did establish offices in Belgrade, Serbia's capital. Bulgaria, which became independent in 1878, faced similar problems, but managed to garner some investment from French and British businessmen. Albania, which became independent in 1912, largely on account of its geographical position attracted a number of Italian companies, especially in the port of Durrës.

World Wars I and II

World War I transformed the boundaries of many of the countries in eastern Europe. Yugoslavia was created, incorporating Serbia and (from the Austro-Hungarian Empire) Croatia, Slovenia, and Bosnia-Herzegovina. Also created during this time was Czechoslovakia, which had much heavy industry, especially in the western part of the country. Skoda had been established in 1895 as Laurin & Klement, and by 1924 it had become the biggest single industrial enterprise in the whole of Czechoslovakia, with Bata shoes having been established a year earlier. There was also a flourishing of Polish commerce.

The creation of Lithuania, Latvia, and Estonia as independent countries after the war led to the establishment and flourishing of many locally owned and also German-owned companies. Latvia in particular, through its enterprise, and also Estonia through the entrepreneurship of its people, were economic success stories for much of the inter-war period. However, for Russia, the takeover by the communists in November 1917 led to the nationalization of all foreign-owned businesses in the country, and the takeover of the vast majority of locally-owned businesses. Many of these were turned into state corporations, remaining as such until 1990.

In World War II, the Germans occupied much of eastern Europe and many businesses were taken over for the German war effort. In particular, the Germans were eager to control the area they called the Upper Silesia Industrial Region. The Skoda Works was renamed the Hermann Goering Works, and many other companies and factories were similarly renamed. The end of the war, however, saw a total transformation of the region as eastern Europe, with the exception of Greece, ended up in the hands of the Soviet Union and its allies.

Under communist and pro-communist governments, all major businesses were quickly nationalized, and gradually the governments in these countries took control of all business life. The most extreme control took place in Albania. Communist government control of eastern Europe lasted until 1989. By that time the economic lives of the countries in eastern Europe were controlled by state corporations that operated at differing levels of efficiency. Through membership of COMECON, with the exception of Romania, the countries were heavily reliant on Soviet oil.

The Fall of Communism

The end of communism in Europe from 1989 led to the establishment of many private companies throughout eastern Europe. Some of these were created by local people who were eager to take advantage of the capitalist society that was forming. Some other companies were formed by expatriates from eastern Europe who returned to help establish a business in their former homeland. Foreign companies also established offices in the capitals and major towns of eastern Europe.

The main problem was the fate of the former communist state corporations, many of which were privatized. Some concerns were sold outright to multinationals, but many more were bought by local Russians and citizens. The way in which some private individuals managed to get control of these large companies immediately attracted much attention as a small group from the Soviet bureaucracy became wealthy. However, by the mid-1980s, the Soviet Union under Mikhail Gorbachev was keen to gain a foothold in worldwide commerce and Gorbachev agreed to pay back the owners of pre-1917 Russian government bonds and holders of stock of companies that were nationalized without compensation by the communist government. Many of these bond and stock certificates were held by collectors rather than the original investors; so few people handed them back that those who did received a large payout.

In Russia, after the end of communism, the period of the 1990s witnessed the rise of very rich businessmen known as the "oligarchs." Some, like Boris Berezovsky, remain extremely crucial not because of the money they made but often because of their involvement in politics. Berezovsky had risen to power under Boris Yeltsin, and in January 1995, he managed to establish ORT, the largest national television channel in Russia, and also large oil concerns that he had bought during the Boris Yelstin presidency for much less than their market values. Berezovsky fled to England, where he has lived ever since. Although much has been made of oligarchs like Berezovsky, some of the men who made fortunes in the privatization process and the period that followed entered Russian politics and have become influential through their business connections. The chess player Kirsan Ilyumzhinov, now president of the Republic of Kalmykia, a part of the Russian Federation, is continuing to use his fortune to promote chess in southern Russia and overseas.

For Russia there were also problems over the state-owned operations in the former constituent parts of the Soviet Union. Most of these were handed over to the newly independent Belarus, Ukraine, Moldova, Lithuania, Latvia, and Estonia, which then embarked on privatization schemes of their own. In most of the other countries in eastern Europe, free enterprise and capitalism has been openly endorsed and the economy of the Czech Republic is little different from many of the countries of western Europe. By contrast, many Albanians were involved in putting their savings into "pyramid" savings schemes in 1996, and many people continue to view capitalism with suspicion.

Some of the stock exchanges that had operated in eastern Europe from before communism were reopened. The Bucharest Exchange had originally been opened on December 1, 1882, but was closed in 1945. It was reopened on April 21, 1995, as the Bursa de Valori București (Bucharest Stock Market). Similarly, the Belgrade Stock Exchange had been founded in 1894, and had remained in operation—except during World War I—as the main method of raising capital, although it was closed down in 1953 by Josip Broz Tito, the leader of the country at that time. It was reopened in 1989 as the Yugoslav Capital Market, and there were also stock markets in other parts of the former Yugoslavia: the Zagreb Stock Exchange, in Croatia; the Ljubljana Stock Exchange in Slovenia; the Macedonian Stock Exchange; the Montenegro Stock Exchange, and the NEX Stock Exchange, also in Montenegro. In spite of the war in many parts of the former Yugoslavia, a stock market was created in Bosnia's capital Sarajevo in 2001 (and commenced trading on April 12, 2002); and in Banja Luka, also from 2001.

In the former Baltic States, the Tallinn Stock Exchange (Estonia), the Riga Stock Exchange (Latvia), and the Vilnius Stock Exchange (Lithuania) are all owned and run by OMX, which also operates the Stockholm Stock Exchange. The Georgian Stock Exchange was opened in 1999 to help provide methods of raising capital to help businesses expand; the Armenian Stock Exchange started operations as early as 2001, although it was officially founded in 2007; and the Baku Stock Exchange in Azerbaijan was established in 2001.

See Also: Bulgaria; Communism; Czech Republic; Eastern Europe; Greece; Hanseatic League; Hungary; Latvia; Lithuania; Poland; Romania; Russia; Slovakia; Slovenia; Turkey; Ukraine.

Bibliography. Frank Bönker, *The Political Economy of Fiscal Reform in Central-Eastern Europe: Hungary, Poland, and the Czech Republic from 1989 to EU Accession* (Edward Elgar, 2006); Robert Deutsch, *The Agriculture Revolution in the Soviet Union and Eastern Europe* (Westview Press, 1986); *Eastern Europe and the Commonwealth of Inde-*

pendent States 1992 (Europa Publications, 1992); *Eastern Europe and the Commonwealth of Independent States 1999* (Europa Publications, 1999); Paul Robert Magocsi, *Historical Atlas of Central Europe: From the Early Fifth Century to the Present* (Thames & Hudson, 2002); Frank Schimmelfennig and Ulrich Sedelmeier, eds., *The Europeanization of Central and Eastern Europe* (Cornell University Press, 2005); David J. Smith and Chris Tapster, *Major Companies of Central and Eastern Europe and the Commonwealth of Independent States, 2008* (Gale-Cengage/Graham & Whiteside Ltd., 2007).

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Company Profiles: Middle East

Admiral Alfred Thayer Mahan, the American naval strategist, called the region the "Middle East," a name that has stuck though it has negative colonial connotations and is geographically inaccurate. There is no unanimity on which countries constitute the Middle East, with their number varying between 14 and 27 depending on the way the term is interpreted. Today the Middle East is experiencing tumultuous economic changes, with several sectors like real estate, retailing, and telecommunication experiencing explosive growth. This entry presents a broad range of company profiles (in alphabetical order by country) that are representative of the region's economic vibrancy.

Algeria, Bahrain, and Egypt

Sonatrach, Naftal, and Sonelgaz are generally considered Algeria's top three companies, followed by airline carrier Air Algerie. Sonatrach is a state-owned integrated oil and gas company having a capacity of 230 million tons, making it one of the largest corporations in Africa. Established in 1963, its principal activities are research, exploration, production, transport, processing, marketing, and distribution of oil products and derivatives of liquid and natural gas hydrocarbons. The company also operates in Libya, Mali, Niger, and Peru.

Gulf Finance House is a publicly listed company of Bahrain set up in 1999 in the international Islamic banking industry. It recently became the first Islamic bank to be listed on the London Stock Exchange. During its seven years of operations, Gulf Finance has successfully launched projects and investments worth US$12 billion. Its paid-up capital is US$239 million and authorized capital is US$300 million. Gulf Finance has provided Islamic investment banking services with an emphasis on regional development, capitalizing on an increasing willingness among Islamic investors to back regional opportunities.

Orascom Telecom Holding is considered Egypt's first multinational corporation, operating a large and diversified telecommunications services network in the Middle East, Africa, and Pakistan. It is a part of the Orascom group, which was established in 1976. It had a subscriber base of 74 million in March 2008 in six emerging markets. In 2006 its total revenue was US$44.01 billion, net income was US$7.19 billion, and total assets were US$86.75 billion.

Iran and Iraq

National Iranian Oil Company is a century-old oil conglomerate that boasts of being the inheritor of the first oil discovery in the Middle East, and the fourth largest state-owned oil company in the world. It consists of four companies dealing with oil, gas, petrochemicals, and refining and distribution, and a host of subsidiaries. Nationalized after the Iranian Revolution, the company is responsible for the exploitation of the second-largest natural gas reserves in the world and for helping retain Iran's position as the second-largest oil producer among OPEC countries. Its principal areas of activity include exploration, production, refining, marketing and sale of crude oil, natural gas, and other petroleum products. Its current production level is 4,200 million barrels of oil and 437 million cubic meters of gas per day.

Iraq National Oil Company was founded in 1961 by the government of Iraq. The Oil Ministry of Iraq has 15 operating companies under its control and oversees the nationalized oil industry through the Iraq National Oil Company. There are several autonomous companies under Iraq National Oil such as State Company for Oil Projects, Oil Exploration Company, Northern Oil Company and Southern Oil Company, State Organization for Oil Marketing, and the Iraqi Oil Tankers Company. The Iraqi Hydrocarbon Law of 2007 is controversial legislation under consideration that severely limits the control of Iraq National Oil to just 17 of the country's 80 oilfields, leaving the rest to the provincial governments to award exploration and production contracts to foreign companies.

Israel and Jordan

The biggest Israeli company is generic-drug maker Teva Pharmaceutical, which had a market value of $34 billion in 2008. Teva is among the largest generic pharmaceutical companies in the world. Its business activities are development, production, and marketing of generic and proprietary branded pharmaceuticals and active pharmaceutical ingredients. Headquartered in Israel, 80 percent of Teva's sales of US$9.4 billion in 2007 came from North America and Europe. Teva has production facilities in Israel, North America, Europe, and Latin America. With more than a century of experience in the global healthcare industry, Teva has a dominating presence internationally through its worldwide subsidiaries.

Arab Bank, set up in 1930 by the Palestinian-Jordanian Shoman family group, is one of the largest financial institutions in the Middle East with high credibility and ratings. With headquarters in Amman, it operates 400 branches in 29 countries across 5 continents. By the end of 2007, Arab Bank Group achieved a pre-tax profit of US$10 billion. Its total assets reached almost US$38.3 billion, while shareholders' equity base was US$6.9 billion. The bank is considered a catalyst for Arab economic development. Starting with an emphasis on trade and small scale construction finance, it shifted to large-scale project financing.

Kuwait, Lebanon, and Libya

Kuwait-based Zain (formerly MTC group) is a noteworthy mobile telecommunications provider operating in Middle East and African countries. It aimed to have 70 million subscribers through a strategy termed ACE (Acceleration, Consolidation, Expansion) to realize its 3X3X3 vision—to grow regionally, internationally, and globally, with each phase completed in 3 years. In 2007 Zain claimed 42.2 million active customers providing revenue of US$5.91 billion with net profit of US$1.13 billion.

Solidere is Lebanon's largest company by market value. It was created in 1994 as a unique public-private partnership with the mandate to rebuild the Beirut Central District after the devastation of the civil war of 1975–90. Besides the Hariri family, who are the principal shareholders, most of Solidere's investment comes from Arabian, European, and North American investment firms. Its principal activities are land development, real estate development, property ownership, property and services management and operations. Solidere's share capital is US$1.65 billion and assets are $8 billion, with 50 projects being developed by private investors. Through Solidere International, the company is set to expand business activities into the United Arab Emirates (UAE), Egypt, and Monaco.

Libyan Iron & Steel Company (Lisco) is one of the largest iron and steelmaking companies in Northern Africa. Established in 1979, it has an annual capacity of 13.24 million tons of liquid steel. Lisco's operations are primarily supplied by imported steel pellets

The Burj Dubai, a project of the UAE conglomerate Emaar Properties, is shown under construction in early 2008.

from Brazil, Canada, and Sweden. Natural gas is used to manufacture sponge iron and hot briquette iron. More than half of the production is exported to European countries including Italy and Spain and some Middle Eastern and southeast Asian countries.

Mauritania, Morocco, and Oman

Mauritania's Société Nationale Industrielle et Minière is the primary African supplier of iron ore to European steelmakers. It has a majority government ownership. Its production capacity is 12 million tons a year. Major investments of US$170 million were made in 2001–02. It has diversified into drainage, civil engineering, transport and maintenance, production and sale of granite and marble, mechanical construction, port handling, iron and steel, gypsum and plaster, and tourism services.

Attijariwafa Bank of Morocco, established in 1911 and headquartered in Casablanca, is the leading financial group in terms of total assets. The bank's principal activities are to provide personal and professional, corporate, investment, and international banking. It also offers real estate, insurance, and banking services through its subsidiaries. The bank operates in North Africa with over 500 branches across Morocco and 35 points of sale in France, Belgium, Spain, Italy, China, Tunisia, and Senegal. It claims to be serving more than 1.5 million customers. Attijariwafa Bank aims to become by 2010 the leading bank for Moroccans living abroad.

Oman Telecommunications Company (Omantel) is the largest communications service provider and public company in Oman. Established in 1980, Omantel provides fixed-line, mobile, internet, and data and other telecommunications services directly and through its subsidiaries. The company's 2007 revenues were US$952 million and profits were US$292 million from 1.87 million subscribers. Omantel completed its first international acquisition in 2008 with a 65 percent stake in Pakistan-based fixed and internet service provider Worldcall for US$200 million.

Qatar

Qatar Airways, the national carrier of Qatar, is widely recognized as one of the fastest-growing airlines in the world with average 35 percent growth year-on-year for the past 10 years. It flies a modern fleet of 60 aircraft to 81 destinations worldwide and has placed large orders for 200 aircraft worth US$30 billion with Airbus and Boeing. It carries nearly 10 million passengers annually. It operates a hub-and-spoke arrangement from Doha International Airport. It acted as the official airline of the 2006 Asian Games, held in Doha.

In a region dominated by state-owned and state-censored mass media, Al Jazeera is a refreshing change. Started in 1996 as an Arabic channel financed by the Qatar government, it began telecasting in English in 2006 and plans to offer programs in other languages. Al Jazeera English is the world's first global English-language news channel to be headquartered in the Middle East. It has four broadcasting centers in Doha, Kuala Lumpur, London, and Washington and supporting bureaus worldwide. The unique selling proposition of the channel is to offer a different perspective from that of the dominating Western media like the BBC and CNN. In doing so, it attempts to become an English-language channel of reference for Middle Eastern events, balancing the largely one-way information flow from the developed world.

Saudi Arabia

Saudi Aramco, a state-owned crude oil producer, has grown from an exploration and production company prior to the 1990s to become an integrated global petroleum enterprise. It owns and operates an extensive network of refining and distribution facilities, and is responsible for the gas processing and transportation installations that fuel Saudi Arabia's industrial sector. It owns a number of international subsidiaries and joint ventures and a large fleet of supertankers, delivering crude oil and refined products to customers worldwide.

Saudi Basic Industries (SABIC) is probably the most globalized of the Middle Eastern corporations. It operates in more than 40 countries and is a leading manufacturer of chemicals, fertilizers, plastics, and metals. SABIC had a net income of US$7.2 billion on sales revenue of US$33.6 billion with total assets of US$68.27 billion in 2007. It has 17 manufacturing affiliates in Saudi Arabia, two manufacturing plants in Europe, and sales offices in Africa, Singapore, and the United States.

Kingdom Holding Company, listed as first among the Gulf's most admired companies by ArabianBusiness.com, is owned by Prince Alwaleed Bin Talal. It holds the distinction of being the largest company in Saudi Arabia. A diversified investment company, its interests include banking, real estate, telecommunications, broadcasting and media, entertainment, hospitality, computers and electronics, agriculture, restaurants, upscale fashion, retailing, supermarkets, tourism, travel, and automotive manufacturing. Kingdom Holding has made rapid strides in its internationalization drive, making investments in several foreign companies. Its assets are valued at US$25 billion and total operating revenue of US$1.23 billion as of December 2006.

Sudan, Syria, and Tunisia

The two biggest companies in Sudan in terms of total revenue are in the telecommunications sector. The top-ranking company is Sudanese Mobile Telephone Company. The second is Sudatel Telecommunications Group, a public company set up in 1994 providing telecommunications and internet service, dial-up access, leased lines, and DSL broadband services. The company is also responsible for the construction and maintenance of Sudan's telecom infrastructure. It has made rapid strides into regional markets. In 2006 it extended its voice and data services in Mauritania. In 2007 it won a telecommunications license to provide mobile services in Senegal and purchased a 70 percent stake in Intercellular, one of Nigeria's leading privately owned telecom operators.

The largest companies in Syria are in the telecommunications sector where each of the top two companies, Syrian Telecommunications Establishment and SyriaTel Mobile Telecom, generated revenues of over US$600 million in 2007. But more exciting are the four new holding companies set up in 2006. Of these, Cham Holding has the largest capital base of US$350 million contributed by over 70 Syrian investors. It has ambitious projects and plans in the pipeline. It is also investing US$1.3 billion in developing several projects in the tourism, housing, banking, energy, industry, health, and transport sectors. These ambitious plans are spurred by changes in statutory regulations facilitating real estate investment activities that jumped up to US$50 billion in 2006.

Petroleum and mining, particularly of phosphates and iron ore, are Tunisia's top two industries and top export commodities. Phosphate-rock production is entirely controlled by the government-owned Compagnie des Phophates de Gafsa (CPG) established in 1896. CPG is the largest company in Tunisia, both in terms of employees and capital investment. It operates several phosphate mines in Gafsa governorate. Annual production of merchant phosphate in 2007 reached 8 million tons, placing Tunisia fifth in the world for phosphate production.

UAE

Dubai-based UAE company Emaar Properties represents one of the growing real estate development companies in a region of the world experiencing fast growth in construction activities. The builder of the world's tallest towers, the Burj Dubai, Emaar is a publicly-listed conglomerate with 60 companies operating in 36 markets aimed at the twin objectives of geographical expansion and business segmentation. In 2007, Emaar had total revenue of US$47.82 billion with net profits of US$17.80 billion and total assets of US$149.17 billion.

UAE-based Emirates group is a popular Middle Eastern holding company that owns the Emirates Airlines and Dnata, which is a ground handling and travel service. The Emirates Group has been consistently profitable. It had a net profit of US$1.45 billion with a turnover of US$11.2 billion in 2007. Increasing fuel costs had a negative impact on the company's financial performance. Emirates Airlines is a fast-growing airline operating services to 90 destinations.

West Bank and Gaza Strip

Palestine Development and Investment Company (PADICO) is a Nablus-based holding company registered in Liberia in 1993. Since 1994, when political control passed from Israel to the Palestinian Authority, PADICO has become the biggest and most influential company in the West Bank and the Gaza Strip. It is a holding company which has 11 subsidiaries in the industrial, real estate, tourism, and capital market sectors. Besides being the largest company traded on the Palestine Securities Exchange, PADICO also owns the Palestinian phone monopoly Paltel. PADICO had a market value of $600 million in mid-2007, about a quarter of the value of all the shares traded on the exchange.

Yemen

Hayel Saeed Anam (HSA) Group of companies is representative of old, established family business groups in the Middle East. HSA of Yemen was established in 1938 and is the largest company in terms of the number of employees—more than 16,000. A diversified conglomerate, its activities include industrial, trading, and services in as many as 25 business areas. The company acts as the agent and partner for nearly 35 international brands. All these activities take place in Yemen as well as several other countries including Egypt, Indonesia, Malaysia, and Saudi Arabia.

See Also: Algeria; Bahrain; Egypt; Emerging Markets; Iran; Israel; Jordan; Kuwait; Lebanon; Libya; Middle East; Morocco; Oman; Qatar; Saudi Arabia; United Arab Emirates; Yemen.

Bibliography. ArabianBusiness.com, "Revealed: Gulf's Most Admired Companies," www.arabianbusiness.com (cited March 2009); DinarStandard, "The 2007 DS100: Top 100 Companies of the Muslim World," dinarstandard.com (cited March 2009); Zawya.com, www.zawya.com (cited March 2009).

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Company Profiles: North America

Prior to the arrival of the Europeans from the 1490s, little is known about businesses operating in North America, although it is clear that there must have been some system of barter trade between different tribes. The origins of the businesses and firms that operate in North America lie, as with so many other parts of the world, in chartered companies that established settlements on the east coast of North America.

Although some of the early explorers of North America such as John and Sebastian Cabot were financed by wealthy businessmen, and also to a minor extent by King Henry VII and King Henry VIII, most trade with North America was conducted by individual ship captains and their crews. The first major company to be established with the aim of settling in the Americas was put together by English adventurer Sir Walter Raleigh (c.1552–1618) who was keen to settle Roanoke Island off the coast of North Carolina from 1585 until 1587. This failed, and it was not really until 1606 that two chartered companies, known as the Virginia Companies, were established and given Royal Charters: the Virginia Company of London and the Virginia Company of Plymouth, which had identical charters for different areas of the east coast of North America. The Plymouth Company, as the latter became known, failed after a few years, although it was revived in 1620 as the Plymouth Council for New England. The former, the London Company, which had been established by Royal Charter on April 10, 1606, also failed, but did have one early success when it took over the Somers Isles (modern-day Bermuda) that were settled from 1609.

The establishment of these companies encouraged other European countries, particularly the Netherlands, which saw the founding of the Geoctroyeerde Westindische Compagnie (Dutch West India Company); established by charter in 1621, it was involved heavily in the West Indies but also in the supply of slaves to North America. Eight years later, the Providence Island Company was established in 1629 by some English Puritans who were keen to establish a settlement on Providence Island, off the Mosquito Coast of Nicaragua in Central America. In the same year, the Massachusetts Bay Company was also founded; it was involved in the establishment of the Massachusetts Bay Colony, now the Commonwealth of Massachusetts.

In terms of longevity, the most important chartered company of this period is the Hudson's Bay Company (Compagnie de la Baie d'Hudson), which was founded on May 2, 1670, and is still operating, making it one of the oldest companies in the world still in existence and the oldest commercial corporation in North America. It was started by two French traders, Pierre Esprit Radisson and Médard des Groseilliers, to establish a monopoly over the fur trade in Canada and was, for a time, one of the largest land owners in the world. It currently has 70,000 employees and still owns stores throughout Canada.

French traders had also established the Mississippi Company, which was not successful; a controlling interest in it was bought by Scottish businessman John Law in 1717, establishing a 25-year monopoly. His exaggerated stories of the Louisiana area led to frenzied speculation in the company's shares that rose from 500 livres each in 1719 to a peak of 15,000 livres, falling back to 500 livres in 1721. In many ways it operated in a manner similar to the South Sea Company in England, which also sought to use its shares to take over the debts of, in the case of the Mississippi Company, France.

Industrialization

Gradually during the 18th century, the joint stock company started to become more and more common in North America, with a number of companies able to take advantage of the inventions of the Industrial Revolution in England and Scotland. However, after the American War of Independence, there were restrictions on what could be taken to the United States. This meant that when U.S. industrialist Samuel Slater (1768–1835) decided to leave England for the United States, he had to memorize the information about machinery for cotton because it was illegal to take charts and plans with him. On his arrival in the United States, Slater set up a cotton plant and was later acknowledged as the "founder of the American cotton industry," or even the "founder of the American Industrial Revolution." Soon afterward Francis Cabot Lowell (1775–1817) and Paul Moody (1779–1831) transformed the textile industry in Massachusetts.

The large numbers of migrants who headed to the United States during the 19th century (and indeed since then) brought with them a great amount of entrepreneurial skill that led to the American "can do" attitude shown in the building of the Transcontinental Railroad completed in 1869, and, from 1974 to 1977, the Trans-Alaska Pipeline System. The great inventions of Thomas Alva Edison (1847–1931), and his patenting of so many of them such as the gramophone and the electric light bulb, encouraged many other inventors.

The American Civil War led to major advancements in the use of steel, and the design of weaponry, although it also led to the destruction of many parts of the Southern states. Prohibition in the 1920s and the Great Depression in the 1930s caused major damage to the U.S. economy, but the prosperity from the 1940s and especially in the 1950s led to a number of important U.S. business techniques outlined by people such as Vance Packard in *The Hidden Persuaders* (1957) writing about the mass persuasion of the public, and in his *The Waste Makers* (1961) about the problems of wastefulness and obsolescence in industry. The Hawthorne experiments from the late 1920s saw studies of the Western Electric factory at Hawthorne, and William H. Whyte, Jr., in *The Organization Man* (1956) described the life of Americans who spent much of their life working for an "organization."

Primary producers dominated the U.S. economy, with large farms in many parts of the country, but also small farms that varied from those in the South that were often able to keep families for generations, and the new soldier-settler blocks in Kansas where the Dust Bowl destroyed the livelihoods of hundreds of thousands of people. In Canada, the large wheat farms and also the breeding of cattle has been important for the global economy. There are also a number of important tobacco companies such as British American Tobacco (founded in 1902) and Philip Morris (renamed Altria Group in 2003).

For processed food, there are many U.S. companies including General Foods (founded from a merger in 1929, now owned by Altria), Heinz (founded in 1869 by Henry J. Heinz), Kellogg Company (founded in 1906 by William K. Kellogg), Kraft Foods (founded in 1903 by James L. Kraft, now owned by Altria), Mars Confectionary (a firm still privately owned by the Mars family), and Nabisco (founded in 1898 as the National Biscuit Company). Frozen foods were produced by Birds Eye, developed by patents of Clarence Birdseye (1886–1956), and founded as General Foods; and by the McCain Foods Limited (founded in 1957). There is increasingly more wine grown in California, and U.S. soft-drink manufacturers include Coca-Cola Company (founded in 1892) and PepsiCo (founded in 1898). For fast food venues, KFC (formerly Kentucky Fried Chicken), McDonald's (founded in 1940), Pizza Hut (founded in 1958), Domino's Pizzas (founded in 1960), and Starbucks (founded in 1971).

Of the many companies connected with heavy industry, some such as Pittsburgh Steel (now the Wheeling-Pittsburgh Steel Corporation) became well known, as did the Bethlehem Steel Corporation that operated from 1857 until 2003, also in Pennsylvania, and the steel mills of Andrew Carnegie's United States Steel Corporation (founded in 1901). Mention should also be made of the Minnesota Mining and Manufacturing Company (founded in 1902), which has diversified to produce stationary and many other products.

Oil Changes Everything

The discovery of oil in Texas led to the United States and U.S. companies dominating the petroleum business around the world. The fortunes of John D. Rockefeller (1839–1937), John Paul Getty (1892–1976), and Howard Hughes (1905–76) came from oil, as did that of the Texan Glenn McCarthy (1907–88), who was nicknamed "King of the Wildcatters." ExxonMobil (founded in 1882 as Standard Oil Company and Trust); Chevron (founded in 1926); and Texaco (founded 1902 as the Texas Company) still have a dominant role in the petroleum industry worldwide, and U.S. engineering expertise was crucial to its development in the Middle East.

The largest automakers in the world operated from the United States: Ford Motor Company (founded in 1903), Chrysler (founded in 1913), General Motors (founded in 1931), and also Dodge (founded in 1900; now run by DaimlerChrysler) for trucks and Caterpillar (founded by Benjamin Holt as the Holt Manufacturing Company in 1892) for agricultural and road-building equipment. Detroit, the headquarters of Ford, had, from the early 1900s until the 1960s, one of the largest concentrations of heavy industry in the world. In the field of aerospace and aircraft manufacture, Bell Aircraft Corporation (founded by Larry Bell in 1935), Boeing (founded in 1916 as the Aero Products Company), McDonnell Douglas (founded in 1967 from a merger between the McDonnell Aircraft Corporation and the Douglas Aircraft Company), and Sikorsky (founded by Igor Sikorsky in 1923) provide aircraft and helicopters—both civilian and military—for use in the United States and around the world. U.S.-based airlines Pan American World Airways (founded in 1927; ceased operations in 1991), Trans World Airlines (founded in 1930 from a merger of Transcontinental Air Transport and Western Air Express), and United Airlines (founded in 1929 as the United Aircraft Transport Corporation) have all been important in world aviation.

There have also been many construction and engineering companies that have had a major role in the United States, and are also well known overseas. Bechtel (founded in 1898), now the largest engineering company in the United States, and Halliburton (reorganized in 1920) have been heavily associated with the Ronald Reagan and the George W. Bush presidencies, respectively. Amtrak (formerly the National Railroad Passenger Corporation, established in 1970), the U.S. railroad company, controls nearly all intercity passenger trains in the United States; and from the 1920s to the 1970s, Greyhound buses (founded in 1913) were used by tens of thousands of U.S. travelers on a regular basis.

The large defense expenditure by the United States has resulted in the creation of what President Dwight D. Eisenhower called the Military Industrial Complex, and Father Charles Coughlin in the 1930s denounced the large profits made from World War I. Many of the early designs of guns owe much to U.S. inventors, with Samuel Colt (1814–1862), Dr. Richard Gatling (1818–1903), and Hiram Maxim (1840–1916), being household names. Smith & Wesson has produced handguns since 1852; and Raytheon, founded in 1922 at Cambridge, Massachusetts, is one of the major producers of guided missiles and related technology.

In terms of electrical appliances and white goods, General Electric (founded in 1892) and Westinghouse Electric Corporation (founded in 1886) have been important. Indeed the proliferation of household electrical items in the United States ahead of many other countries in the world owed much to the energy generation from American Light and Traction (founded 1900; merged with DTE in 2001) and Texas Utilities (formed in 1945); and also from schemes such as the Tennessee Valley Authority. Westinghouse was also involved in the design of nuclear power stations. There was increased worry about nuclear power after the accident at Three Mile Island in 1979. Mention also need be made of the energy company Enron that spectacularly went bankrupt in 2001. Kodak (founded in 1888) emerged as one of the largest manufacturers of photographic equipment in the world.

Retail, Media, and Services

With such a large market in the United States, chains of retail stores are very important, with Wal-Mart (founded in 1962) being the most famous. There are also Macy's (founded in 1858), Piggly Wiggly (founded in 1916), and Woolworth's (founded in 1878); and in terms of fashion and more expensive items, in New York, there are Tiffany's (founded in 1837) and Bloomingdale's (founded in 1860), and in Chicago, Marshall Field (founded in 1865).

Although the U.S. postal system is still government-controlled, there are many private courier

Apple, one of the iconic American companies of the Information Age, opened this landmark 24-hour store in New York in 2006.

companies such as UPS (founded in 1907 in Seattle, Washington). Western Union (founded in 1851) was responsible for laying out many of the telegraph lines in the United States, but lost out to Bell—named after Alexander Graham Bell (1847–1922)—which established the first major telephone network in the United States, following George Coy (1836–1915) establishing a telephone exchange in New Haven, Connecticut. Overseas, ITT, whose founders Hernan and Sosthenes Behn were from the Danish West Indies (now the U.S. Virgin Islands), operated since 1920 as a major conglomerate until it was broken up in 1995.

There are many U.S. publishers whose books are sold around the world, including Bantam Books (founded 1945); Doubleday (founded 1897, now a part of Random House); Little, Brown (founded 1837); Random House (founded 1925); and St. Martin's Press (founded 1952 by Macmillan). There is also Reader's Digest, and international newspapers the *International Herald Tribune* and *USA Today.* Australian newspaper owner Rupert Murdoch (b.1931) took up U.S. citizenship in 1985, moving the headquarters of News International to Delaware in 2004. Canadian Conrad Black (b.1944) during the 1980s and 1990s owned many of the world's major newspapers through Hollinger International.

The U.S. higher education sector sees tens of thousands of foreign students coming to study in the United States; the University of California, Columbia, Harvard, Johns Hopkins, MIT, Princeton, Stanford, University of Texas, and Yale, as well as many other universities, attract applications from all over the world. In Canada, the University of British Columbia, McGill University, Montreal University, and other institutions also attract many foreign students. Law schools and medical schools in both countries have also been in the forefront of training lawyers and doctors—the latter resulting in many of the medical companies operating from the United States or with bases or subsidiaries there.

In the entertainment industry, Hollywood has dominated the motion picture industry since the 1920s, the Walt Disney Company (founded in 1923) employing 137,000. U.S. jazz and pop musicians still dominate, with popular singers such as Frank Sinatra, Sammy Davis, Jr., Michael Jackson, and others being responsible for sales of millions of recordings each year. U.S. television documentaries are also sold around the world, and through CNN and CNBC, it has been possible for people around the world to keep up with U.S. and world news. U.S. televangelists have also utilized this technology to reach viewers around the world. Of the major world hotel chains, many have their headquarters in the United States, including Hilton, Intercontinental, Marriott, and Sheraton.

In terms of sports, many of the major players and athletes in the world are from the United States—some of them having their own companies to handle commercial sponsorships and the like. The Summer Olympics have been held in the United States on four occasions, and in Montreal, Canada, in 1976. The Winter Olympics has been held in the United States on four occasions, in Canada once, and are scheduled to be held at Vancouver in 2010. This has meant that there are many manufacturers of sports equipment throughout the United States, the most well known internationally being Nike (founded in 1972).

For financial services, the U.S. Stock Exchange on Wall Street is the largest stock market in the world. NASDAQ (National Association of Securities Dealers Automated Quotations), founded in 1971, allow automated trading and was important in the "tech boom" in the 1990s and early 2000s, and the Chicago Mercantile Exchange has developed large numbers of new financial instruments. There are many large U.S. banking institutions: Chase Manhattan (founded in 1799), Citibank (founded in 1812), CS First Boston (founded in 1932 as First Boston; bought by Credit Suisse in 1988), and Wachovia (founded in 1781) being probably the most well known. U.S. merchant bankers Andrew Mellon and J.P. Morgan in the 1920s and 1930s both presided over important companies.

The Information Age

Companies have defined and ridden the waves of the Information Age. IBM, DEC, and Dell became prominent through providing quality and powerful computers. Apple rose with its focus on user friendly interfaces for its microcomputers. Microsoft became prominent as the provider of the software that ran most personal computers.

The World Wide Web came to prominence in the mid-1990s and soon, companies providing software that helped access it were prominent including Netscape Communications. Companies providing email services such as American Online (AOL) and Yahoo thrived. Improved search engines provided by Microsoft, Google, and Mozilla (Firefox) were important. Social networking sites run by companies such as News Corporation (MySpace), Facebook (valued at more $15 billion in 2008), LinkedIn, and Google (YouTube) appear to provide the means for establishing the collaborations that will be key to business in coming years. Virtual worlds such as Linden Labs' *Second Life* provide three-dimensional augmented reality interfaces that will allow virtual gatherings, enabling rapid and less costly meetings that may be used by the preponderance of large firms by 2012.

Sustainability has come to be increasingly important and it is clear that companies that develop new technologies, products, and services that are more "green" than those of their competitors are likely to be the leaders of coming years. American firms recognized at the 2008 Davos World Economic Forum as among the most sustainable in the world included Alcoa, Eastman Kodak Company, Hewlett-Packard Company, Intel Corp., Nike Inc., and Walt Disney Company.

See Also: Boeing; Canada; Ford Motor; General Motors; Microsoft; Time Warner; United Parcel Service; United States.

Bibliography. William Aspray and Paul E. Ceruzzi, eds., *The Internet and American Business* (MIT Press, 2008); Mansel G. Blackford, *A History of Small Business in America* (University of North Carolina Press, 2003); *Europa Yearbook 2008* (Europa Publications, 2007); Louis Galambos with Barbara Barrow Spence, *The Public Image of Big Business in America, 1880–1940: A Quantitative Study in Social Change* (Johns Hopkins University Press, 1975); Kenneth E. Hendrickson and Glenn Sanford, eds., *The Encyclopedia of the Industrial Revolution 1750–2007* (Facts on File, 2009); William H. Whyte, *The Organization Man* (Doubleday & Anchor, 1956).

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Company Profiles: South America

The storms of history have brought more wreckage than treasure to South American shores. Though pre-Columbian civilizations like the Chavin, the Muisca, the Nazca, the Huari, and the Inca were sophisticated and often technologically superior to their North American neighbors, the continent has been at a disadvantage since European colonization. Native populations were decimated by the infectious diseases introduced by the Spanish and Portuguese colonists and the African slaves they brought with them, and cultures were destroyed as the Spanish went about a religious conversion campaign that far exceeded those attempted by other European settlers. When the wars of independence were fought, they had a racial element missing from that of the United States, where Englishmen sought self-rule apart from other Englishmen; in South America, many of the colonists seeking independence were mestizos, descended from both the natives and the Spanish.

Most of South America gained independence in the 19th century. Guyana did not become independent from the United Kingdom until 1966; Suriname, from the Netherlands, in 1975; and French Guiana remains a French holding. Through the second half of the 20th century, South America was one of the parts of the world where the Cold War was fought. Argentina, Brazil, Chile, and Uruguay had their governments replaced by American-sponsored military dictatorships that detained, tortured, and killed thousands of political prisoners in the name of national security. Colombia continues to exist in a state of unrest, and both it and Bolivia contend with their deeply ambivalent relationships with the coca plant and the illegal overseas cocaine trade, responsible for so much of the trade balance and yet an obstacle in their relations with the rest of the world. For decades, across much of South America, the governments' reputation has been one of corruption, greed, fiscal mismanagement, and diplomatic disaster. Since the end of the Cold War, debt has been a severe problem. Few of these countries have government agencies equipped to deal with their crises, necessitating emergency measure after emergency measure.

The continent suffers from a long and persistent history of high inflation, high interest rates, and difficulty attracting foreign investment money. The economic gap between the rich and the poor is greater than in most parts of the world, the average standard of living lower than that of Europe or North America. Despite the pronounced shift to the left in South American politics, free market policies are still strong and look to remain so, integrated into the new South American liberalism. With the Cold War in the past and the continent no longer used as a battlefield between a North American power and a Eurasian one, there is considerable movement towards continental integration of economies and other spheres. The old customs unions of Mercosur and the Andean Community are being merged into the new UNASUR.

Regional Trade Agreements

Mercosur, the Mercado Común del Sur (Southern Common Market), was a trade agreement signed in 1991 by Argentina, Brazil, Paraguay, and Uruguay, to promote free trade and movement between those countries. It was itself an expansion of the PICE (Programa de Integración y Cooperación. Económica Argentina-Brazil) between Brazil and Argentina, and has since been joined by Bolivia, Chile, Colombia, Ecuador, and Peru as associate members; Venezuela awaits ratification of its member status, applied for in 2006. Unlike the EU agreements, Mercosur provides for no common currency; but with nearly $3 trillion in combined gross domestic product, the Mercosur nations represent the fifth-largest economy in the world.

The Andean Community (Comunidad Andina, CAN) is a similar trade bloc, originally signed into existence as the Andean Pact until 1969 and reorganized in 1996. Member nations are Bolivia, Colombia, Ecuador, and Peru. From 1999 to 2004, Mercosur and the Andean Community negotiated a merger to create a South American Free Trade Area. Venezuela left the CAN and petitioned for membership in Mercosur, with the stated intention of rejoining the CAN, though statements made by the Venezuelan government since then have been unclear, with some of them implying that the CAN is expected to die off to make way for a new integrated trade bloc.

In any case, UNASUR (Union de Naciones Suramericanas, the Union of South American Nations) is the product of those negotiations. Current and former members, full and associate, of both Mercosur and CAN are expected to be integrated into a single customs union modeled after the European Union, joined by Guyana and Suriname. Intent was declared by representatives of twelve governments at the end of 2004, and work has continued since then. Work has been slow, but the success of the European Union after decades of partial measures encourages both participants and onlookers. In addition to trade agreements and the free movement of people among countries, UNASUR is expected to oversee significant infrastructure improvements, such as the construction of the Interoceanic Highway that will run from the Atlantic to the Pacific, better integrating the Pacific nations of Chile and Peru with the highway systems of the rest of the continent. The South American Energy Ring is planned to connect Argentina, Brazil, Chile, Paraguay, and Uruguay with natural gas.

All nations of South America will be part of UNASUR except for French Guiana—a French department, and part of the European Union—and the Falkland Islands, South Sandwich Islands, and South Georgia, contested territories claimed by both the United Kingdom and Argentina. If successful, the UNASUR integration should have considerable positive impact on the free market policies of the continent, providing further business opportunities for the companies in operation.

Argentina

The state-owned Banco de la Nación Argentina is the largest bank in that country, with 616 domestic branches and 15 internationally. Founded in 1891, it employs 16,000 people. A scandal recently damaged the bank's reputation, when it was discovered that in the 1990s, the bank's directors had been bribed in connection with a large IBM contract. The bank was subsequently ranked last of all Latin American banks in an independent survey of banking ethics conducted by Latin Finance magazine.

The Argentinian winery Al Este Bodega y Viñedos was founded in 1999, in the Medanos community of Buenos Aires, where local soil and weather conditions are significantly similar to those of Bordeaux, inspiring a tradition of wine-making that originated with European immigrants in the 1900s. Al Este was founded in 1999 as the first premium winery in the Buenos Aires province, with assistance by Italian winemakers and French and American oak barrels for aging.

Argentinian-based Aluar is one of the largest aluminum smelters in South America, producing over 400,000 tons a year. The company was founded in 1970 and has 2000 employees, and revenues of about $2 million a year.

The most famous of Argentina's recovered factories—businesses taken over by the workers during the Argentinian financial crisis at the start of the 21st century—is Brukman, a textile factory in Balvanera. Half of the employees were fired during the crisis, the remaining workers' salaries cut so severely that few of them could not afford bus fare to get to work. Fifty workers—a third of the remaining workforce—assembled in the factory and demanded a travel allowance in addition to their salaries. The owners agreed to go get the money in order to begin paying out such an allowance, left, and never returned—abandoning the factory. The protesting workers had remained in the factory overnight waiting for their money, and resumed operations on their own. The owners have since attempted evictions, but have been unsuccessful—though the factory has been stormed on their behalf by infantry troops and local police, with dozens wounded. The factory, as a workers' collective, continues to operate, and has raised salaries and paid off old debts.

Colombia

Founded by the merger of two smaller airlines in 1940, Avianca is the largest airline and designated flag carrier of Colombia. It's headquartered in Bogota, and is jointly owned by the National Federation of Colombian Coffee Growers and the Synergy Group multinational conglomerate. Its six subsidiary airlines operate throughout South America (Helicol, SAM Colombia, Tampa Cargo, OceanAIR, VIP, Aerogal) and in Nigeria (Capital Airlines), making it one of the largest airlines in the Americas. International destination cities include Cancun and Mexico City, Fort Lauderdale, Los Angeles, Miami, New York, Washington, D.C., Madrid, and Barcelona. Further European destination cities have been canceled following the adoption of codeshare agreements with Air France and Iberia Airlines; there are also agreements with Air Canada, Delta, Grupo TACA, and SATENA. VIP Lounges are operated throughout the Colombian and Ecuadoran airports.

Brazil

Petrobras (Petroleo Brasileiro) is a semi-public energy company in Rio de Janeiro, Brazil, and the most profitable company in that country. Founded in 1953, it has a monopoly on Brazilian oil until 1997, and continues to produce 2 million barrels of oil a day—its primary oil field, the Campos Basin, produces 80 percent of the country's oil. Between 2007 and the summer of 2008, the company announced the discovery of three megafields in the pre-salt layer of Brazil. The stock actually suffered somewhat upon the discovery of the third megafield, because of investor suspicion: citing the need for trade secrecy, the company has divulged little information about the megafields, and there is concern that they may be overreporting their potential. Still, the company has a longstanding reputation for transparency and fair-dealing, and in the last three years has been commended by Transparency International, the consultancy firm Management and Excellence, and its placement on the Dow Jones Sustainability Index.

The Brazilian videogame company Tectoys was founded in 1987, capitalizing on the lack of competition in the electronic toy market. After producing their own toys for a time, they contracted with Sega Enterprises to become the exclusive distributor of Sega products in Brazil, and thus rode the wave of success that accompanied the video game boom with the Sega Master System, Mega Drive, Saturn, and Dreamcast. Not until 1993 did Nintendo have a Brazilian distributor, which gave Sega (and thus Tectoys) the lion's share of the video game market, an advantage it did not enjoy in many countries. There were even Sega games produced specifically for the Brazilian market—a rarity outside of the United States and Europe. When Sega withdrew from the hardware market, Tectoys was prepared with a diversified product range that included DVD players, mp3 players, and portable karaoke machines, and in 2005 opened Tectoy Mobile, a publisher of cell phone games. Much to the surprise of many, though, they continue to manufacture Sega consoles and games, because demand never completely disappeared; while the video game market in other countries was driven by competition between two to four manufacturers, the almost complete dominance of the Brazilian market by Sega may have superseded the cutting-edge fetishism that in other markets makes older games less marketable.

The economic disparity in South America is well summed-up by Daslu, a Brazilian boutique in Sao Paulo. Opened in a classical-style mansion in 1958, Daslu consists of 30 stores selling 60 designer labels of clothing and accessories, including Louis Vuitton and Jimmy Choo. Recently relocated, the "boutique" now takes up four stories, and is as well known as a place to people-watch—it is a shopping destination for both domestic and international celebrities—as a place to shop. Its relocation placed it immediately next to a shantytown inhabited by some of the city's poorest people, a contrast even more unfortunate in light of the criminal investigation into Daslu's possible tax evasion.

Avibras is a Brazilian defense company, founded in 1961 and headquartered in São José dos Campos. With about 600 employees, it develops and manufactures air-to-ground and surface-to-surface weapon systems, guided missiles, artillery, armored vehicles, aircraft defense systems, and most famously, the Astros II MLRS, the most advanced multiple rocket launcher. Its Tectran division focuses on civilian transportation and telecommunication equipment.

Venezuela

One of Venezuela's largest television networks, Venevision controls a significant portion of the country's entertainment industry. The company was founded in 1961 when businessman Diego Cisneros purchased the assets of the bankrupt Television Venezolana, and expanded to encompass multiple VHF and UHF channels around the country. Much of its content in the 1960s and 1970s was purchased from American television network ABC. Since the 1990s, it has broadcast 24 hours a day, 7 days a week, and many of its more popular programs are exported to Spanish-language rebroadcasters in other countries, such as Univision in the United States.

Industrias Pampero, a Venezuelan distillery, makes some of the world's finest rums, and is principally responsible for Venezuela's success in rum exports. Most of the distillery's production is done at the nineteenth-century estate in Ocumare, Hacienda la Guadalupe. The Ron Pampero brand is known for its cowboy on horseback logo—Pampero means "from the Pampas," i.e. a plainsman, a cowboy, a ranger.

Chocolates El Rey, a Venezuelan chocolatier, was established in 1929 and especially since the 1990s has become one of the world's leaders in super-premium chocolate. It is one of the few non-European brands to be mentioned in the same breath as Callebaut and Valrhona, and capitalizes on the many types of cacao native to Venezuela (whereas European companies have to contract with African or South American cacao producers). One of the premium cacao beans, the trintario, is a hybrid of the chocolatey criollo beans and the disease-resistant forastero cultivar.

Uruguay, Ecuador, and Chile

Based in Montevideo (Uruguay), Infocorp is a software company and a local partner with Microsoft. It is best known for financial and business software. Another software company in Uruguay is ARTech Consultores, famous for developing the GeneXus program that has since been sold in dozens of countries. Used mainly for developing applications for Windows and the internet, GeneXus is a software development tool that generates code in Cobol, Visual FoxPro, Ruby, C#, Java, and Visual Basic, with support for standard database management systems like MySQL and Oracle.

Marathon Sports is an international athletic equipment company based in Ecuador, and primarily serving customers in Ecuador, Bolivia, and Colombia. Originally a chain of sporting goods stores, since 1994 it has been producing uniforms for sports teams, and has accumulated a number of exclusive contracts.

Parque Arauco is a real estate holding company based in Chile, and responsible for operating a number of shopping malls in Chile and Argentina. Focusing on the property management of nonresidential properties, the company was founded by Jewish immigrants to Peru who relocated to Chile in the 1940s, originally to work in the textile industry. One of the nine children in the large family, Jose Said, opened Parque Arauco in 1979, and has been principally responsible for it since. By operating in both Chile and Argentina, it was not nearly as badly affected by Argentina's recession as other Argentinian developers were, and it has benefited significantly from its recovery.

Minera Escondida is a Chilean mining company that operates two open pit copper mines in the Atacama Desert in the northern reaches of the country, constituting the largest copper mine in the world. Nearly a tenth of the world's copper production is owed to Escondida, which began operations in 1990 and has reserves of some 34 million tons of copper remaining. Escondida is a significant part of the Chilean economy, accounting for 15 percent of its exports and employing over 6,000 people directly. In 2007 alone, the mining company paid $2.2 billion in taxes to the Chilean government.

Multinationals

The Argentinian multinational Organización Techint is the largest steel manufacturer in South America, and owns stock in over 100 companies in 35 countries, focusing on steel, oil and gas, engineering, and service companies (notably including cable installation, having been responsible for the 1990s upgrade of the Argentinian telecommunications system). Divisions include health care research group Humanitas, oil explorer Tecpetrol, gas transmitter Tecgas, Techint Engineering Construction, steel supplier Ternium, and tube supplier Tenaris.

Responsible for a fifth of Argentina's dairy production, SanCor is responsible for a disproportionate 90 percent of its dairy exports. Founded as a dairy cooperative in 1938 in the "milk basin" around the Cordoba and Santa Fe provinces, the company manufactures a variety of fresh and shelf-stable dairy products available around the world.

See Also: Argentina; Brazil; BRICs; Chile; Ecuador; Inter-American Development Bank; Latin America; Mercosur/Mercosul; Uruguay; Venezuela.

Bibliography. Werner Baer and Donald Coes, eds., *United States Policies and the Latin American Economies* (Praeger, 1990); Leslie Bethell, *Latin America: Economy and Society Since 1930* (Cambridge University Press, 1998); Patrice Franko, *The Puzzle of Latin American Economic Development* (Rowman & Littlefield, 2007); Jeffry A. Frieden, Manuel Pastor Jr., and Michael Tomz, *Modern Political Economy and Latin America: Theory and Policy* (Westview Press, 2000); Robert Patricio Korzeniewicz and William C. Smith, eds., *Latin America in the World Economy* (Praeger Paperback, 1996); Nicola Phillips, *The Southern Cone Model: The Political Economy of Regional Capitalist Development in Latin America* (Routledge, 2004).

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Company Profiles: South Asia

A term not always immediately familiar to American ears, south Asia consists of the sub-Himalayan countries in a southern region of Asia: Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, Sri Lanka—all of which are members of the South Asian Association for Regional Cooperation (SAARC)—as well as the British Indian Ocean Territory. Some discussions and usages include Afghanistan and Tibet; Myanmar, though more properly part of southeast Asia, was part of the British Raj region until 1937 and so is appropriately included in some historical discussions; Iran is included in "southern Asia" by the United Nations. Geographically, the term "Indian subcontinent" may be more familiar, though some parts of some countries of south Asia lie outside the Indian Plate.

SAARC was established in 1985 to strengthen cooperation, social progress, cultural development, and economic growth throughout the region, with a special emphasis on collective self-reliance, no doubt in light of much of the region's history as part of the British empire. The full members as of 2009 are Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka; observer members include Australia, the People's Republic of China, the European Union, Iran, Japan, Mauritius, Myanmar, South Korea, and the United States. China, Iran, and Myanmar have all expressed interest in full membership; Russia currently seeks observer status. The granting of observer status to Western nations is a recent phenomenon, dating from 2005. SAARC has created the framework for a South Asian Free Trade Area, eliminating all customs duties on trade within the region, and it is hoped to go into full effect in 2016. Despite SAARC, south Asia is the least integrated region in the world. Only 2 percent of the region's combined gross domestic product (GDP) results from trade within the region, compared for instance to the 20 percent in east Asia.

Sri Lanka

The oldest radio station in Asia is Radio Ceylon, which began broadcasting in 1923, a mere three years after the first European broadcasts; the station is owned by the Sri Lankan government. Briton Edward Harper had popularized amateur radio in Ceylon when he became the chief engineer of the Telegraph Office in 1921, and broadcast music from the Central Telegraphic Office—using a gramophone and a transmitter built from parts scavenged from a captured German submarine.

After radio operations were taken over by the Allies during World War II, the station was handed over to the government and embarked on a serious endeavor of broadcasting. Its senior officers in the postwar era transferred from the BBC, but local on-air talent and off-air professionals were soon developed. Radio Ceylon was instrumental in popularizing Ceylonese music throughout south Asia, as well as broadcasting religious programming—Buddhist, Hindu, Muslim, and Christian—for its listeners. Advertising in Hindi brought enormous amounts of advertising revenue from India, and many Indian announcers went on to become Bollywood stars. The station was also the nexus of the popular trend, from the 1950s onward, of Indian pop stars recording songs in English. One of the station's interesting claims to fame: when Edmund Hillary reached the summit of Mount Everest, Radio Ceylon was the first thing he heard on his transistor radio, and he and his team continued to tune in for the news.

Bangladesh

The Grameen ("villager") family of organizations began with Grameen Bank in Bangladesh. A community development bank founded in 1983 (by Vanderbilt-educated Bangladeshi scholar Muhammad Yunus), Grameen Bank offers small loans—branded as *grameencredit*—to the poor, without requiring collateral. Borrowers recite the "Sixteen Decisions," vows they are expected to follow, notable enough in their difference from western loan applications to be worth reprinting in full:

1. We shall follow and advance the four principles of Grameen Bank: Discipline, Unity, Courage and Hard work—in all walks of our lives.
2. Prosperity we shall bring to our families.
3. We shall not live in dilapidated houses. We shall repair our houses and work towards constructing new houses at the earliest.
4. We shall grow vegetables all the year round. We shall eat plenty of them and sell the surplus.
5. During the plantation seasons, we shall plant as many seedlings as possible.
6. We shall plan to keep our families small. We shall minimize our expenditures. We shall look after our health.
7. We shall educate our children and ensure that they can earn to pay for their education.
8. We shall always keep our children and the environment clean.
9. We shall build and use pit-latrines.
10. We shall drink water from tubewells. If it is not available, we shall boil water or use alum.
11. We shall not take any dowry at our sons' weddings, neither shall we give any dowry at our daughter's wedding. We shall keep our centre free from the curse of dowry. We shall not practice child marriage.
12. We shall not inflict any injustice on anyone, neither shall we allow anyone to do so.
13. We shall collectively undertake bigger investments for higher incomes.
14. We shall always be ready to help each other. If anyone is in difficulty, we shall all help him or her.
15. If we come to know of any breach of discipline in any centre, we shall all go there and help restore discipline.
16. We shall take part in all social activities collectively.

There is no written contract or binding legal arrangement between borrower and lender, but borrowers may only apply in groups of five or more, and while the loans are granted to the group members individually and no member is obligated to make payments on behalf of any other member, no one who has been a member of a group with a defaulting member is eligible for another loan. In other words, instead of depending on legal reprisals or the seizure of collateral, Grameen Bank depends on peer pressure, and manages a 98 percent payback rate (including late payments).

It has been a remarkably effective system, employed in 43 other countries, by Grameen and other institutions. Interestingly, the vast majority of borrowers are women—over 95 percent. The reasons for this are not at all clear, though some argue that women have the most to gain from the system. The bank has been criticized for charging high interest rates, but points out the risks it takes as well as the lack of any alternative for its borrowers. As this argument is similar to that put forth by issuers of secured and high-risk credit cards, the counter-argument is similar as well: when you are poor and given access to debt, it is very easy to become trapped in it perpetually, and to return to it again and again.

Early in Grameen Bank's history, it began to diversify by acquiring fishing ponds and irrigation pumps. In 1989, the non-banking holdings became their own organizations: the Grameen Fisheries Foundation and the Grameen Krishi Foundation (irrigation). More ventures followed. In the 21st century, they include the non-profit Grameen Trust that supports small loan programs all over the world; the Grameen Fund, for small business loans; Grameenphone and Grameen Telecom, providing mobile phones and cellular service for the Bangladeshi poor; Grameen Communications, building Cyber Kiosks to provide internet access in rural areas; and Grameen Danone Foods, a joint venture with the French Groupe Danone, selling highly fortified yogurt to provide rural children with nutrients otherwise missing from their diets.

Aarong is a retail chain in Bangladesh, operated by the Bangladesh Rural Advancement Committee, one of the largest nongovernmental development organizations in the world. First opened in 1978, Aarong has eight outlets in Bangladesh—five of them in the capital city of Dhaka—as well as a franchise in London. Many of the products sold in the outlets are also exported to Europe and North America, and include cloth and silk products, candles, pottery, and wooden goods, produced by 65,000 workers, most of them women, working in 2000 villages.

A major pharmaceutical company in Bangladesh, Amico Laboratories was founded in 1976. Operating out of the industrial district of Dhaka, Amico develops, manufactures, and markets healthcare products sold all over the country.

Nearly half of the residential housing development business in Bangladesh is controlled by Eastern Housing Limited, a real estate developer founded in 1965 by Jahurul Islam to address the housing shortage in Dhaka. It capitalized on the need for low-cost housing in Bangladesh when the country was still East Pakistan, and still focuses on Dhaka projects more than those outside the city. What began as a focus on low-cost houses and mortgages, though, has expanded to include shopping malls, apartment buildings, and commercial plazas. Long a profitable business, it paid its stockholders a 15 percent divided in 2007.

Incepta Pharmaceuticals is a Dhaka pharmaceutical company that began by manufacturing ranitidine (a stomach acid inhibitor) and quickly expanded into other medicines. Incepta's name is derived from its slogan, "Innovative Concept Into Practice," and its stock in trade has been offering a variety of intake methods: not just tablets, capsules, and liquids, but nasal sprays, sustained-release and buffered tablets, quick-dissolving compressed powders, powder inhalers, and flavored liquids.

Sheba Prokashoni is a major publisher based in Dhaka, and focuses principally on Bengali translations of established Western sellers (especially the classics) and novels for young adults and twentysomethings. Most of its books are published as mass-market paperbacks with stylish covers, and it is well known throughout Bangladesh for the *Masud Rana* books, a series of international cloak and dagger adventures published steadily since 1966—a total of 389 books, most of them ghostwritten on behalf of series creator Qazi Anwar Hussain. Other popular series include the Western imprint, which translates (or loosely adapts) classic westerns like those of Louis L'amour and was responsible for introducing the genre to Bangladesh; the *Teen Goenda* series, about a Bangladeshi-American teen detective and his adventures with his two sidekick friends (a white American and a black Muslim American), loosely based on the *Three Investigators* series (by Robert Arthur Jr.) but often borrowing from *The Hardy Boys*; a horror imprint that translated William Peter Blatty's *The Exorcist* and published a three-volume novelization of the Gregory Peck film *The Omen*; and the Kishore Classic series that translates and usually abridges the classic works of Western literature, with a special focus on "boys' stories" (Mark Twain, Sir Walter Scott, Alexandre Dumas, and so on).

Bhutan

Druk Air is the national airline of Bhutan, operating throughout South Asia, with additional flights to Bangkok. Founded in 1981, it remains the only airline with service to Bhutan, and so is an integral part of the nation's trade and modest tourism industry. Recent hikes in the price of jet fuel have constricted the airline's flight schedule, but this is considered a temporary condition; in the 2008–13 period, money is being put aside by the Bhutanese government to further develop the main airport and mull over a feasibility study on a prospective international airport in the southern region of the country.

India

The Tata Group is a Mumbai (India)-based multinational conglomerate founded in 1868 by Jamshetji Tata and run by the Tata family ever since (five generations now). The largest private corporation in India, the Tata Group includes 98 different companies, operating in 85 countries. The companies are divided among seven sectors: engineering (Tata Motors is India's largest commercial vehicle manufacturer), energy (Tata Power is one of the largest power companies in the world), Chemicals, Services (primarily hotels and financial services), Consumer Products (including Tata Tea Limited, which owns the Tetley brand of tea, and Titan Industries), and Information Systems (Tata Consultancy Services is Asia's largest software company). Use of the Tata prefix in company branding is common, but not universal, as is use of the stylized T that serves as the group's logo. Major acquisitions in the 21st century have included Millennium Steel, Eight O'Clock Coffee, the Ritz-Carlton hotel in Boston, Jaguar, Daewoo, and the Corus Group, a $12 billion acquisition of the world's fifth-largest steel producer.

The second-largest conglomerate in India is Reliance Industries Limited, founded in 1966 as the Reliance Commercial Corporation. Primarily an oil and petroleum products company, Reliance was ranked at 206 on the 2008 Fortune Global 500, and the only Indian company to make Forbes' 2008 list of the world's 100 most-respected companies. With three million shares of stock, Reliance is one of the world's most-invested-in companies, and the company claims that a quarter of Indian investors own shares in Reliance. In recent years, the company has diversified from petroleum and oil exploration, adding textiles, the Vimal clothing brand, and the Reliance Fresh supermarket chain to its portfolio.

Another Indian conglomerate is the massive Aditya Birla Group, with over 100,000 employees in 25 countries across southeast Asia, Europe, and North America; though the company of course has a considerable presence in India, half of its revenues come from its overseas operations Primarily a manufacturer, Aditya Birla has subsidiaries that work with fiber, cement, non-ferrous metals, and chemicals, but also operates Idea Cellular (originally a joint venture of the Tata Group and AT&T) and several retail and financial services companies.

Sahara India Pariwar, founded in 1978, is an Indian conglomerate focusing primarily on finance and services company. The Sahara brand is one of the leaders in India in the life insurance, home loan, and real estate sectors, and the diverse equity funds offered by Sahara Mutual Fund are highly ranked by Reuter-owned fund tracker Lipper. Its media subsidiaries control the Filmy movie channel, Samay news channel, 36 city news channels, and Sahara One, one of the country's most popular general entertainment channels, with programming rebroadcast around the world.

India's largest telecommunications company is Bharat Sanchar Nigam Limited, with a 24 percent market share as of 2008. Headquartered in New Delhi, it is India's oldest phone company, founded in the 19th century, and has pioneered both rural telephony and widespread upgrades of broadband connectivity.

Genpact is one of India's leading business process outsourcing (BPO) companies, employing 34,000 people with services available every hour of the day, every day of the year. Its operations are spread out around the world, including its American subsidiary with mortgage services in Irvine, California, and Salt Lake City, and finance services in Wilkes Barre, Nashville, and Parsippany, New Jersey.

Evalueserve, founded at the end of 2000, is an Indian Knowledge Process Outsourcing (KPO) firm, operating out of centers in India, China, Chile, and Romania, with about 2500 employees combined. More than 2100 of those employees work in the New Delhi call center, with a hundred or so in each of the other locations. Evalueserve focuses mainly on investment, market, and business research, with services also available in legal research and data analysis.

Other Companies

Spice Nepal Private Limited is the first company to offer GSM mobile phone services in Nepal, having broken the telephony monopoly of Nepal Telecom. Originally operating only in the capital at the time of its 2004 establishment, SNPL has expanded to every zone of the country and has introduced the full range of standard cellular service features, many of them previously unavailable in the country.

Southern Networks is a Pakistani television network, begun in 1995 as a small system of pay cable channels and pay-per-view services and expanding with the addition of digital broadcasts. It presently offers 50 digital channels and a dozen over-the-air analogue channels, in Pakistani, Hindu, and English.

Micro Cars is a Sri Lankan car company founded in 1995, though thanks to legal issues, the business didn't get healthily underway until 2003, with the introduction of the Micro Privilege, a small car with a 1000cc 4-cylinder engine. The Privilege was the first locally made car in Sri Lanka, and was designed to be more affordable and practical than foreign cars. Vans and hatchbacks have followed, all of them made of flexible composite materials. Currently the company is engaged in producing its first SUVs, in a collaboration with Korean automobile manufacturer SsangYong.

See Also: Bangladesh; India; Indian Oil; Microfinance; Microfinance Institutions; Mittal Steel; Pakistan; Sri Lanka; Tata Group.

Bibliography. Sugata Bose and Ayesha Jalal, *Modern South Asia: History, Culture, Political Economy* (Taylor and Francis, 2007); Ben Crow, *Markets, Class, and Social Change: Trading Networks and Poverty in Rural South Asia* (Palgrave Macmillan, 2001); Meghnad Desai, *Development and Nationhood: Essays in the Political Economy of South Asia* (Oxford University Press, 2006); Barbara Harriss-White, *India Working: Essays on Society and Economy* (Cambridge University Press, 2002).

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Company Profiles: Western Europe

Trading companies had operated in Europe since ancient times, and there is evidence of some of these from Roman times. Perhaps the largest "inter-country" private business operation of the mid third century B.C.E. was the Carthaginian colony on the east coast of Spain, where they extracted silver that was later used to finance the armies of Hannibal in the Second Punic War (218–201 B.C.E.). Prior to that, Phoenicians had been involved in trade in Cornwall in the west of England, where they bought tin. There is a vast amount of archaeological evidence showing extensive trade around the Roman Empire, with quantities of luxury goods and military materiel clearly made in one part of the empire being used in another part. In Rome itself, Marcus Licinius Crassus (115–53 B.C.E.) established a large business in real estate, silver mines, and trading in slaves.

In medieval times, businesses flourished in western Europe, usually within the framework of trade guilds that jealously guarded access to particular trades that kept up the level of quality, the official reason, but also maintained higher wages for members of the guilds. Most cities had a range of powerful guilds, which helped businessmen such as Richard Whittington (1354–1423) of the Mercers Company in London become very wealthy. Indeed, it was the Wool Guild in Florence that was able to finance the building of the dome for Florence Cathedral following the design of Filippo Brunelleschi (1377–1446).

By this time, the wool industry was well developed in England (after the Black Death of the 1340s)—it is still recognized in the "Wool Sack" in the British House of Lords—and in Flanders. Many of the guilds continue to the present day with the Worshipful Company of Mercers establishing schools in England, as have the Worshipful Company of Haberdashers and the Worshipful Company of Merchant Taylors, all from London. Mention should also be made of some of the vineyards, especially in southern France and in the Champagne region, which started producing wine at this time, a few of which continue to the present day. Most, however, date from the 18th and 19th centuries with Moët et Chandon dating from 1743, Veuve Clicquot from 1772, and Champagne Krug from 1843.

As the city and town guilds were building up their strength, the modern banking system emerged. The Knights Templar had a system whereby if a sum of money was left at one of their premises, it could be withdrawn from another if the correct paperwork were provided. This helped with the transfer of large amounts of money—the physical movement of valuables from one city to another was complicated and risky. It was the Lombards who became well known for their banking skills, and the Medici family in Florence under Cosimo de Medici (1389–1464) also established a substantial banking network.

Following from Vasco da Gama (c.1460–1524) and later Christopher Columbus (1451–1506), there was great interest in voyages of exploration, many of which generated massive profits from trade in spices and the like. It was the cost of voyages, as well as the risk in case the ship sank, that led a number of people to own ships, and the advent of shareholding. This allowed investors to spread their risks more widely. This also saw the emergence of the great chartered companies in many European countries, the major ones being the English companies, the Muscovy Company, the Levant Company, the Honorable East India Company (HEIC), and the Dutch East India Company (VOC). Many other countries also had these but few equaled the success of the HEIC and the VOC.

Gradually other companies were established on the same basis, and it was not long before various coffee houses in London, Paris, Lisbon, and elsewhere became central to exchanging news about trade. These in turn led to the establishment of informal stock markets. There were also instances of wild speculation with the emergence of the South Sea Company in London and the Mississippi Company in France in the early 18th century. Both tried to assume the government debt, and both resulted in a spectacular crash in stock prices ruining many people's confidence in stocks for many years.

During this period, there was an increase in agricultural developments through the Agricultural Revolution. Trade between European countries saw countries develop greater specialization, and this was accentuated in recent times when refrigeration allowed for ease of movement of foods. Jersey and Guernsey cows became common in England, horned cattle in Spain, and also cattle bred in Switzerland, pigs bred in Denmark, and sheep in England, were raised on an industrial scale as milking machines, larger abattoirs, and much later, canning of meat resulted in the emergence of a number of agricultural companies. This was replicated in terms of olives from Spain and Italy and citrus fruit from southern Europe, and this later led to the development of apple cider from Kent in southeast England.

The shops in London's covered Leadenhall Market, built in 1881, stand on the site of a 14th-century market.

Industrialization

More cautious investing started by the middle of the 18th century, and it gradually meant that with the start of the Industrial Revolution in England, Scotland, Flanders, and elsewhere, companies were able to raise capital far more easily than before. This helped finance the establishment of factories, with inventors designing machines to make textiles and other manufactures on a much more extensive level than ever before. People like Richard Arkwright, Samuel Crompton, and the two men called John Kay all became well-known business figures in England. Gradually they and similar businesspeople in Europe started establishing companies which bore their names. How some of these businesses emerged can be seen through the career of John Cockerill (1790–1840) whose father worked in Russia for Catherine the Great, and who then moved to France and later to the southern part of the Netherlands (later Belgium) where he was involved in making steam locomotives and established a company that was involved in heavy arms production up until its capture by the Germans in 1914; the company ran its blast furnaces until 2005.

During the Napoleonic Wars, Napoleon enforced the Continental System that led to the closing of European markets to the British. This allowed for the emergence of numbers of companies in Europe following the joint stock model, which then, in turn, led to the establishment of stock markets around Europe. Some banks emerged from the wars, with men like Samuel Bleichröder running a business exchanging money for the French, and his son Gerson von Bleichröder establishing a banking operation—the Bleichröder Bank—that helped finance German industrialization.

During the 19th century, there was a move toward more and more joint-stock companies in Britain, France, Belgium, Germany, the Netherlands, and elsewhere. The reunification of both Italy and then Germany transformed the political map of Europe, and the various conflicts in Europe and those overseas that involved Europeans led to the emergence of a substantial arms industry and the desire by governments to have a large heavy-industry capacity. With war looming in the early 20th century, several governments in western Europe, particularly those in Britain, France, and Germany, started subsidizing several of their industries, especially shipbuilding, as the three countries built up their merchant navies.

Many of the companies that operated in Britain in the late 19th and early 20th century were named after their founders, and large numbers of these are still household names: the department store Harrod's, also auctioneers Christie's and Sotheby's. A few like Philip Morris had originally been named after their founder—Philip Morris died in 1873, at age 37, and the company ended up in the hands of a relative and then was bought by totally unrelated people who kept his name. By the late 19th and early 20th century, there were a large number of industrial companies that had the names of their founders: Benz after Karl Benz (1844–1929), Rolls Royce, after C. S. Rolls (1877–1910) and Henry Royce (1863–1933), and Renault after Louis Renault (1877–1944). Some other companies also named after founders were Michelin, founded in 1888, and named after Edouard Michelin (1859–1940) and André Michelin (1853–1931), the German company Krupp Steel run by the Krupp family, the Dutch company NV Philips taking its name from Gerard L. F. Philips (1858–1942), and Citroën founded in 1919, taking its name from André Citroën (1878–1935).

However, from the 20th century, far more companies were involved in naming their companies after the machines made, such as the British firms General Electric Company (GEC), Imperial Chemical Industries (ICI), and the British Oxygen Company (now the BOC Group), the Danish maker of toys Lego, and the German car manufacturer BMW (Bavarian Motor Works). With the exception of Lego, which has a shorter name, the other four companies now use the initials of their name, as do so many other companies including HSBC (formerly Hongkong Shanghai Banking Corporation, now with its headquarters in London), BNP Paribas (formerly two companies, Banque Nationale de Paris and Paribas).

Companies named after people tend to keep the names of the founders such as PSA Peugeot Citroën; there are exceptions such as in the Amsterdam-based KPMG that was formed in 1987 from a merger of Peat Marwick (named after William Barclay Peat and James Marwick) and Klynveld Main Goerdeler (named after Piet Klynveld and Reinhard Goerdeler), becoming KPMG Peat Marwick in 1991, and KPMG four years later. These companies (with the exception of KPMG, which is a partnership) were still reliant on stock markets to raise capital, and the link between them grew stronger as the companies were able to raise capital from these stock exchanges.

World Wars I and II

With World War I, there were major changes in the nature of companies in Europe. Because of the number of men in the war, many factories had to employ women, and working conditions in factories actually improved. After the war, large numbers of women remained in the workforce, so there were now families where both parents worked. The number of jobs open to women remained sharply restricted, but gradually with more and more women in employment, it was only a matter of time before there were numbers of women managers in Britain and Scandinavia, and also in France, the Netherlands, Belgium, and Germany. This coincided with more investment in stocks and shares, and a wider use of banks, with many of them losing money in the Great Inflation of 1923 in Germany and in the stock market crashes from 1929.

The Great Depression affected different countries to varying extents, with Germany, under Hitler from 1933, experiencing an economic boom and quickly regaining its reputation in production of expensive and high-quality manufactures. Germany kept its reputation for technology, Italy for style, and Britain for reliability. With the outbreak of World War II, many of the same needs as during World War I led to far more women in the workforce in many countries.

The Postwar Era

After World War II, the devastation of so much of western Europe saw many companies rebuild their factories, taking advantage of the new developments in industrial design. Some of these were soon able to compete with the established British and Swedish factories undamaged by war. This led to greater prosperity for Germany, and by the 1960s, the British companies were lagging behind. The mid- and late-1970s saw the decline of British Leyland and the British Steel Corporation. This coincided with the Japanese selling far more consumer durables and cars in Europe, eroding the traditional markets of so many companies in western Europe, and resulting in a decline in the manufacturing base in Britain, France, and also later Germany.

With restructuring in the 1980s, many of the companies in western Europe were far more competitive. The economy was far more focused on the services sector—the region attracted far more tourists than ever before, and financial and educational services remained in great demand around the world. A series of bank mergers resulted in the emergence of a number of much larger European financial institutions, many of which had diversified to take in insurance, loans, and other products. This coincided with a large-scale privatization of government corporations. This was spearheaded by Margaret Thatcher in Britain, and later followed in France, Germany, Belgium, Spain, Italy, and other countries. This dramatically transformed the nature of share ownership in western Europe, with many more small investors.

Soon afterward, many mutual companies, especially the building societies in England, were involved in demutualization, again adding to the number of share owners. Many of the companies privatized or demutualized have been very successful, but some of them, especially telecommunications businesses such as Deutsche Telekom, have seen the prices of their stock fall dramatically.

Since the fall of communism in 1989, some western European companies have spread into eastern Europe, taking advantage of the factories, the workforce, and also the markets. One of these, Thimm in Germany, rapidly emerged as one of the largest makers of cardboard boxes in central Europe. There have been companies that took advantage of the raw materials in eastern Europe, and others, such as the tobacco companies, have preferred the less-regulated business atmosphere of eastern Europe. Many other western European companies have also expanded into west Asia, and especially to east Asia and southeast Asia. In most cases this has been successful, but in one celebrated case, Baring's Bank (which had been established in Britain in 1762) went spectacularly bankrupt over a "rogue trader" based in Singapore, resulting in the sale of the bank to the Netherlands bank ABN for £1 in 1995.

The European Union

In addition to many of the companies becoming larger and more powerful with the European Union (EU) and the economic power of Europe, there have also been many sectors of the economy that have been badly hit in recent years. Westland Aircraft was bought by the U.S. firm Sikorsky in 1986, causing a split in the British government that saw the resignation of Secretary of Defense Michael Heseltine. And although some airlines such as British Airways have flourished, and Air France continues to receive large French government subsidies, many other European airlines have closed down. Sabena, the former national airline of Belgium that had existed from 1923, went bankrupt in 2001. Swissair, the former national airline of Switzerland, founded in 1931, went bankrupt the following year. Neither was able to compete with the "cut price" airlines that appeared in Europe during the 1990s, nor airlines like Air Emirates and Singapore Airlines that have increased their patronage in recent years.

The main development in companies in western Europe over the last 20 years has not been in seeking markets outside Europe, but with the help of the heavy protection barriers provided by the European Economic Community (and from 1993, the EU), they have managed to get more and more sales within the EU, especially with the European Union expanding rapidly into central and eastern Europe. There has also been increased collaboration among European businesses, with the most high-profile example being Airbus, which began as a consortium of various aerospace manufacturers and since 2001 has been a standard joint-stock company.

The Schengen Agreement, initially established at a village in Luxembourg, and enhanced by the Treaty of Amsterdam in 1997, has considerably simplified the workings of the EU, with attempts to change it further in the Treaty of Lisbon in 2007. This has helped continue the standardization of company laws, as well as deal with the more politically high-profile problems of immigration and crime. The introduction of the euro, now used in most of western Europe, has also led to a much greater integration of the economies of the 15 members of the Eurozone: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovenia, and Spain.

See Also: European Union; France; Germany; Hanseatic League; United Kingdom.

Bibliography. Derek H. Aldcroft, *The European Economy 1914–2000* (Routledge, 2001); Ivan T. Berend, *An Economic History of Twentieth-century Europe: Economic Regimes from Laissez-faire to Globalization* (Cambridge University Press, 2006); Heather Brewin, *Major Companies of Europe: France* (Gale-Cengage/Graham & Whiteside Ltd., 2007); Heather Brewin and Allison Gallico, *Major Companies of Europe: Benelux Region—Austria, Belgium, Liechtenstein, Luxembourg, Netherlands, Switzerland* (Gale-Cengage/Graham & Whiteside Ltd., 2007); *Europa Yearbook 2008* (Europa Publications, 2007); Allison Gallico, Theresa Rainbird, and Layla Romiti, *Major Companies of Europe: Southern Europe—Cypress, Greece, Italy, Israel, Malta, Portugal, Spain, Turkey* (Gale-Cengage/Graham & Whiteside Ltd., 2007); Susan Hoernig, *Major Companies of Europe: Germany* (Gale-Cengage/Graham & Whiteside Ltd., 2007); Luis Rubalcaba and Henk Kox, *Business Services in European Economic Growth* (Palgrave Macmillan, 2007); Alice Teichova, Herbert Matis, and Jaroslav Pátek, eds., *Economic Change and the National Question in Twentieth-century Europe* (Cambridge University Press, 2000); David J. Smith, *Major Companies of Europe: Central Europe—Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia* (Gale-Cengage/Graham & Whiteside Ltd., 2007); Sue Ward, *Major Companies of Europe: Scandinavia—Denmark, Finland, Iceland, Norway, Sweden* (Gale-Cengage/Graham & Whiteside Ltd., 2007); Katie Wilson, *Major Companies of Europe—United Kingdom and Ireland* (Gale-Cengage/Graham & Whiteside Ltd., 2007).

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Comparative Advantage

When challenged to provide a nontrivial, nonobvious economic insight, Nobel laureate Paul Samuelson listed comparative advantage. Despite general agreement on the topic in the economics profession since David Ricardo's 1817 formulation in his *On the Principles of Political Economy and Taxation*, comparative advantage remains one of the more difficult economic insights for noneconomists to accept.

A simple example (based on Ricardo's) illustrates the principle. Suppose that Portugal produces both wine and cloth more cheaply than does England. Portugal thus has an absolute advantage in the production of both goods. If Portugal can produce wine more cheaply than it can produce cloth, it will be to the advantage of both countries for England to trade English cloth for Portuguese wine, despite the Portuguese absolute advantage in cloth production.

A numerical example can make the principle clearer. Suppose it takes 15 person-hours to produce a liter of wine in Portugal and 30 to do the same in England, and 10 person-hours to produce a yard of cloth in Portugal and 15 to produce a yard in England. If we arbitrarily assume that England has 270 person-hours available and Portugal 180 person-hours available, the most wine Portugal can produce on its own is 12 liters and the most England can produce is 18 liters. Likewise, for cloth production, the most Portugal can produce is 18 yards and the most England can produce is 18 yards.

The opportunity cost of a liter of wine in Portugal is 1.5 yards of cloth; in England it is 2 yards of cloth. Note that although the Portuguese are more efficient at making both wine and cloth than the English, their advantage is greater with respect to the production of wine. Portugal's opportunity cost of making cloth is thus higher than England's because Portugal must give up a greater amount of wine to produce a unit of cloth. If the countries split their labor between wine and cloth before trade, Portugal would have produced 9 liters of wine and 6 yards of cloth and England would have produced 5 liters of wine and 8 yards of cloth.

With trade, if Portugal specializes in wine production and England in cloth production, world wine production is 12 liters and world cloth production is 18 yards. As a result of comparative advantage, the world ends up with more wine and more cloth than if the two countries each attempted to produce both goods domestically. As this simple example illustrates, comparative advantage is built on the idea that the cheapest way to acquire a good is sometimes not to make the good directly but to make a different good that one trades for the desired good.

Comparative advantage works for individuals as well as countries. Tiger Woods might be an amazing chef as well as one of the world's top golfers, but if he is a better golfer than he is a chef, he'll maximize his income if he devotes himself to golf and eats at restaurants when he wants a fancy meal.

What determines the comparative advantage of a particular person or country? Some individuals and countries have natural advantages in a particular area. Tiger Woods has inherent talents as a golfer; Saudi Arabia has an endowment of crude oil. Other sources are based on investment in education or job training. The United States in the 18th century had a comparative advantage in mechanical inventive skills relative to England because so many Americans worked in jobs that required them to develop such skills, while the structure of English industry did not encourage individual workers to innovate. Comparative advantage means that a country (or individual) need not have an absolute advantage in anything to reap the rewards of trade. Absolute advantages are beneficial because they lead to higher incomes, but they are not necessary for trade to confer an advantage on the trading partners.

As is common in economics, explanations of comparative advantage typically make a number of simplifying assumptions. The example given above assumes a single factor of production, constant opportunity costs, perfect mobility of labor between sectors within the two countries, negligible transportation costs, and so on. Relaxing these assumptions makes the mathematical proof of comparative advantage more complex but the principle holds true under all reasonable conditions.

When the assumptions are relaxed, however, distributional consequences come to the fore. If labor is imperfectly mobile among sectors of a country's economy, opening the economy to trade is likely to mean that workers in the sectors without a comparative advantage will end up worse off. In the Portugal-England example, both English winemakers and Portuguese weavers may be made worse off. Another criticism of reliance on comparative advantage as a justification for free trade is that it ignores national security or other strategic concerns. For example, many countries believe a domestic steel industry is vital to their national security because steel is an important component of many weapons.

Dependency Theory

The major theoretical challenge to comparative advantage came with the development after the 1940s of dependency theory by theorists including Raul Prebisch and Andre Gunder Frank. Dependency theorists argued that some countries, particularly in Latin America and the Islamic world, fell into the periphery of the world trading system and would remain trapped in the role of exporter of primary commodities. In a related vein of criticism, modern "fair trade" critics of international trade argue that an approach based purely on comparative advantage fails to address the terms on which trade is conducted. They contend that without attention to the terms of trade, developing countries will be unfairly taken advantage of by more advanced economies.

See Also: Absolute Advantage; Dependency Theory; Factor Endowments; Free Trade; Mercantilism; Monopolistic Advantage Theory; Trade Liberalization.

Bibliography. Thomas A. Friedman, *The World Is Flat: A Brief History of the Twenty-First Century* (Farrar, Straus & Giroux, 2005); Douglas A. Irwin, *Free Trade Under Fire*, 2nd ed. (Princeton, 2005); Andrea Maneschi, *Comparative Advantage in International Trade: A Historical Perspective* (Edward Elgar, 1999).

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Compensation

Compensation as a human resources management (HRM) practice is the linkage between reward and employee satisfaction. Modern organizations can adopt various HRM practices to enhance employee satisfaction. The form and structure of an organization's HRM system can affect employee motivation levels in several ways. HRM practices in general and compensation systems in particular have been shown to be highly related to organizational performance. Reward systems are concerned with two major issues: performance and rewards. Performance includes defining and evaluating performance and providing employees with feedback. Rewards include bonus, salary increases, promotions, stock awards, and perquisites.

Organizations have considerable discretion in the design of pay policies and the choices made have consequences for organizational performance. Organizations that are similar in terms of types of employees and jobs, product, market, size, and so on may choose compensation system designs that differ in their effectiveness for attaining similar goals. Also, large corporations with several different businesses may have multiple reward systems. And while they may share some fundamental philosophies and values, they may differ according to particular business setting, competitive situation, and product life cycle. Thus multiple reward systems can support multiple cultures (or subcultures) within one organization.

HRM practices such as profit sharing, results-oriented appraisals, and employment security have relatively strong universalistic relationships with important accounting measures of organizational and financial performance. Pay level and pay structure are each important for understanding the organizational level implications of pay policy. Pay level practices and pay structures interact to affect resource efficiency, employee satisfaction, and financial performance. Different elements of a compensation plan are considered regarding the relationship between pay systems and organizational performance.

The universalistic relationship between the use of compensation and performance also supports both an agency theory and a behavioral theory explanation. Agency theory posits that basing employee rewards on profits ensures that employee interests are aligned with owner interests. Many profit-sharing plans do not distribute profits equally among employees. Instead, profits are distributed differentially according to employee performance. Compensation systems as a major HRM practice can motivate skilled employees to engage in effective decision making and behavior in response to a variety of environmental contingencies.

Alternative Compensation Systems

Employees are one of the most valuable resources companies have to remain competitive. Managerial compensation strategies differ significantly across organizations, particularly with regard to variable pay. Organizations tend to make different decisions about pay contingency, or variability, rather than about base pay, since contingent pay is more associated with financial performance. In general, organizations implement merit pay or incentive compensation systems that provide rewards to employees for meeting specific goals. Fewer employees work under individual incentive plans while greater numbers of individuals work under some type of group incentive system. A substantial body of evidence has focused on the impact of incentive compensation and performance management systems on group performance. In addition, protecting employees from arbitrary treatment, perhaps via a formal grievance procedure, may also motivate them to work harder because they can expect their efforts to be fairly rewarded.

Development of compensation systems other than wages on a monthly basis, benefits required by law, and bonuses is necessary. Compensation in modern organizations should pay more attention to alternative and more sophisticated compensation systems, such as performance-related pay systems, profit-sharing systems, share-ownership systems and stock options, nonfinancial motives, and benefits not required by law. In this way, compensation as a major HRM practice increases the level of satisfaction and enhances fairness perception of employees working at various functional units and different hierarchical levels.

In a dynamic, unpredictable environment, organizations might achieve this by using organic HRM systems that promote the development of a human capital pool possessing a broad range of skills and that are able to engage in a wide variety of behavior. Today, organizations face environments characterized by increasing dynamism and competition and sustainable fit can be achieved only by developing and applying HRM practices, such as sophisticated compensation systems promoting employee financial participation. Organizations that adopt a greater number of prescribed practices are likely to gain a short-term competitive advantage and enjoy superior performance. However, the implementation of these practices is not always an easy task.

See Also: Motivation; Profit-Sharing; Salaries and Wages.

Bibliography. B. E. Becker and M. A. Huselid, "High Performance Work Systems and Performance Systems: A Synthesis of Research and Managerial Implications," *Research in Personnel and Human Resources Management* (1998); M. P. Brown, M. C. Sturman, and M. J. Simmering, "Compensation Policy and Organizational Performance: The Efficiency, Operational, and Financial Implications of Pay Levels and Pay Structure," *Academy of Management Journal* (2003); B. Gerhart and G. T. Milkovich, "Organizational Differences in Managerial Compensation and Financial Performance," *Academy of Management Journal* (1990); J. Kerr and J. W. Slocum, "Managing Corporate Culture Through Reward Systems," *Academy of Management Executive* (2005); D. P. Schwab, "Impact of Alternative Compensations Systems on Pay Valence and Instrumentality Perceptions," *Journal of Applied Psychology* (1973).

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Compensation for Expropriated Property

When a multinational firm ("parent company") engages in foreign direct investment, defined here as financially investing in facilities or physical assets—usually through a foreign subsidiary—with the expressed purpose of exploring for, manufacturing, or marketing a product in a foreign country, it does so with the understanding that its property rights are legally recognized by the host country government. It is generally agreed that host country governments may unilaterally engage in nationalization of specific privately owned or public/privately owned industries, whereby industry assets revert to public ownership. The process of nationalization, accomplished with compensation to the parent company, is called expropriation. If nationalization is undertaken by the host government without market-value compensation to the parent company, it is considered a case of confiscation, a recognized political risk associated with foreign direct investment decisions made by multinational executives.

However, there has evolved a general consensus among nations (*Resolution 1803 on Permanent Sovereignty over Natural Resources* by the United Nations General Assembly in 1962) that for a lawful nationalization of industries, it should be accompanied by "appropriate" compensation for private property. This United Nations Recommendation essentially upheld the "Hull Doctrine," generally supported by economically-developed countries, recognizing that under international law compensation should be "prompt, effective and adequate"—although a somewhat weaker term, "appropriate compensation," was substituted for "full value" of the expropriated property.

This United Nations Recommendation substantially rejected the "Calvo Doctrine," supported by many less economically developed countries, which left the question of compensation entirely with the host government, or the view of communist nations, whose ideology did not recognize "private property," thus the right of compensation. From the perspective of how the compensation should be measured, there remain two controversial and interrelated steps. The first step entails agreement on the market value of the expropriated property to ascertain the actual economic loss sustained by the shareholders (or private owners) of the multinational corporation. The second step involves a legal determination of the extent to which the shareholders (or private owners) are entitled to compensation for their economic loss.

One important and widely employed international mechanism for protecting a parent company's foreign direct investment is through the use of a bilateral investment treaty. This trade pact establishes the specific terms and conditions for private investment by corporations, or nationals, of one nation-state in the nation-state of the other treaty signatory. One typical feature addressed in bilateral investment treaties is protection from expropriation or confiscation by the host country. If an expropriation does take place, and insufficient compensation ("less than fair market value") is offered by the expropriating government, the bilateral investment treaty typically allows for the expropriated party to seek arbitration recourse through an alternative dispute resolution mechanism. In lieu of attempting to sue the host country in its domestic courts, or seeking legal recourse in home country courts (a difficult undertaking due to the "Sovereign Immunity Principle"), the leading organization employed to arbitrate such compensation disputes between home and host countries is the International Centre for the Resolution of Investment Disputes (ICSID).

The ICSID, established in 1966 under the World Bank–sponsored Convention on the Settlement of Investment Disputes between States and Nationals of Other States (also referred to as the "Washington Convention"), assists in alleviating noncommercial risks posing an impediment to the free flow of private investment among countries. The ICSID's primary purpose is to provide conflicted parties (subject to their mutual consent) facilities for conciliation and arbitration of international investment disputes. Not surprisingly, the ICSID is often referenced in bilateral investment treaties and international law. As of November 2007, there are 155 nation-states that are signatories to the Washington Convention and are thus eligible to employ the services of the ICSID in matters concerning expropriated or confiscated private property.

See Also: Bilateral Free Trade Agreement; Expropriation; Foreign Direct Investment; International Centre for Settlement of Investment Disputes; Nationalization.

Bibliography. International Centre for Settlement of Investment Disputes, *ICSID Convention, Regulations and Rules* (ICSID/15, 2006); J. L. Knetsch and T. E. Borcherding, "Expropriation of Private Property and the Basis for Compensation," *University of Toronto Law Journal* (v.29, 1979); P. Muchlinski, *International Enterprises and the Law* (Blackwell, 1995); E. L. Richards, *Law for Global Business* (Irwin, 1994).

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Competition

Competition exists in economic situations whenever two or more actors seek to outperform one another, in pursuit of some commonly identified goal. Markets are the most prominent site of economic competition, employing a price mechanism to connect buyers and sellers, with sellers competing against each other either through cutting prices or through improving the quality of the goods. Markets can experience an absence of competition where monopolies or cartels exist. However, nonmarket forms of economic competition are also significant, especially where technological innovation is concerned, and these are often compatible with monopolistic practices. As a socioeconomic principle, competition is often contrasted with cooperation.

Competitions can be "positive sum," "zero sum," or "negative sum." A positive-sum competition is one in which all parties are better off, in the aggregate, because they are competing against one another. It is one of the founding claims of economic science that markets are positive-sum competitions. This does not mean that some individuals, firms, or communities will not be worse off, but that the net effect of competition is a positive one. A zero-sum competition is one in which the benefits accrued to one party are at the direct and inevitable expense of another party. For example, should two individuals both lay claim to a piece of land, they face a zero-sum competition. A negative-sum competition is one in which all parties are worse off, in the aggregate, because they are competing against one another. Inasmuch as they destroy economic wealth, wars are negative-sum competitions. During periods in which economies contract, capitalism becomes a negative-sum competition.

The concept of competition evokes contrasting political, moral, and emotional responses. Where it is celebrated, it is associated with freedom, fairness, and pursuit of quality. This has tended to be the view of free market liberals and conservative political movements, which gathered momentum in many liberal democracies from the 1970s onward, and arose in former communist countries from the 1990s onward. However, it can also be denigrated, being associated with social atomization, disregard for the weak, and absence of collective direction. Socialists and critics of the free market tend to view competition in this way, and argue that it reduces or ignores the capacity of human beings to collaborate. Finally, a realist view of competition regards it as neither good nor bad, but a symptom of human nature. The Darwinian principle of "survival of the fittest" is commonly identified as operating in a free market economy, but in a more limited, less destructive form.

Even if markets and capitalism are positive-sum competitions, the question of how to treat the "losers" is an important political and economic question. This is exacerbated by the fact that the losers tend to cluster in certain areas of industry and geographic locations. The phenomenon of de-industrialization, for instance, which affected developed economies from the 1970s, meant that regions such as the American midwest and northeast Britain were harshly hit by loss of jobs and wealth. These jobs reappeared in low-wage economies such as China and Mexico, and economists would argue that the aggregate effect was a positive one. Yet the damage to the regions that "lost" in this international competition presents a challenge to the logic of free market economics. The concept of regional or national "competitiveness" refers to the capacity of a location to succeed rather than fail in the global economy, often through investing in public resources such as education and infrastructure.

Markets

A market exists where sellers compete against each other for the custom of buyers. Historically, markets have often been created in specific places, such as town squares or trading floors, meaning buyers and sellers meet each other face-to-face. The presence of multiple sellers competing in one place offers the buyer the freedom to choose the best deal. A physically located market has limits around how many buyers and sellers it can attract, which consequently limits the amount of competition and choice involved.

However, with technological advances and more sophisticated market structures, the number of buyers and sellers involved grows. If a customer is seeking to buy a car, and is restricted to the car dealers in a small town, then competition and choice are limited by geography. However, if the buyer is able to travel and to compare prices from dealers over a large region or internationally, then competition and choice increase. The development of electronic media such as the internet means that markets can become fully "virtual" and global, so competition hits unprecedented levels. Web sites such as eBay connect buyers and sellers around the world.

The fact that markets place sellers in competition with one another is central to why economists believe they are efficient. In an ideal marketplace, consumers judge the rival bargains on offer, and select the one that benefits them the most, taking into account both the utility and the price of the product. Sellers that offer good value for money will attract a lot of custom, whereas those that don't will not. This creates a clear incentive to sellers to cut prices and/or improve quality, which leads them to seek more efficient production techniques, and to shift resources into areas of production that match consumer demand.

It is crucial that the price of a good is allowed to fluctuate (sometimes in the course of a single deal, such as where "haggling" occurs) or else the competitive process stalls and efficiency is not maximized. It is equally crucial that buyers exercise freedom to select the seller who best serves their interests, or else the same problem arises. Where market competition and consumer choice are present, this ought to drive efficiencies throughout the rest of the economy, including into nonmarket spheres such as firms.

A common criticism of economics is that real-world markets are never as competitive as the model suggests. While there may be some markets, such as stock markets, in which prices are constantly changing, with buyers determining where resources are diverted to, there are a large number of markets that do not operate in this fashion. First, sellers may be bound by some informal, psychological, or cultural norms to maintain similar prices. If three tomato salesmen are in a marketplace, and all succeed in finding customers, there is little incentive for any of them to improve their deal to customers. This type of cooperation develops further if the sellers are socially acquainted with one another. Second, buyers often lack the time or the inclination to compare deals and select their preferred one, but buy the same product or brand repeatedly. Advertising and branding exist to build relationships between buyers and sellers, so that consumers do not choose every product as a one-off transaction, and sellers are not constantly operating in a situation of price competition.

Market Power

The significance of the price mechanism is that, in a competitive market, no single seller can control the price of a product. However, as competition reduces, either in quantity or in intensity, the possibility for a seller to control the price of a product arises. Where a seller—or group of sellers—is able to set the price regardless of consumer demand, this is an instance of market power. Market power is one of the four types of "market failure" identified in the tradition of welfare economics, the other three being "information asymmetries," "externalities," and "public goods." These tend to provide the justification for some sort of regulatory intervention.

Markets have a tendency to reduce the quantity of competition contained within them. This is for the simple reason that inefficient firms selling unappealing products will tend to go out of business, whereas efficient firms selling popular products will grow larger. Where markets contain a small number of sellers, they form what is known as an oligopoly. Where all competition is eliminated, the surviving seller has what is known as a monopoly.

Antitrust laws (also known as competition laws) exist to protect competition in the face of oligopolies and monopolies. However, a sharp distinction is now drawn between protecting competition and protecting competitors. The first piece of antitrust legislation ever created was the 1890 Sherman Act in the United States. From the 1940s until the early 1980s, antitrust law in the United States was regularly used to prevent firms from becoming too large, and to protect smaller firms from being squeezed out of markets. Oligopoly and monopoly were viewed as undesirable in and of themselves, and smaller competitors therefore had to be defended by the state.

Since the 1980s, and the influx of Industrial Organization economics into antitrust policy, policy makers have viewed their role as protecting competition, not protecting competitors. Antitrust authorities now perceive that the presence of competitors in a market is not an automatic indicator of efficiency, and the absence of competitors not an automatic sign of inefficiency. The efficiency or otherwise of an industrial structure becomes a matter for empirical economic analysis. So long as firms are not acting deliberately to exclude potential competitors—for instance, via a cartel—then very large market shares are entirely permissible; indeed, they can be viewed as a sign of efficiency, and therefore beneficial to consumers.

European antitrust authorities have followed a similar path. Although cartels and monopolies were tolerated in many central European countries through the first half of the 20th century, competition authorities emerged in many European nations in the years following World War II. The German economic school of Ordo-Liberalism provided the intellectual foundations for German competition policy. Ordo-Liberalism treats competition as not only a means of achieving efficient economic outcomes, but as an important basis for political freedoms. The legal defense of competitive markets therefore takes on a distinctly ethical and political dimension.

Since the 1980s, the European Commission has become a more active force in European competition policy. Since the late 1990s, it has gradually converged with the American model of employing Industrial Organization economics to defend competition, not competitors. European policy makers use the term "dominance" rather than "market power," and view it as their role to prevent "abuse of dominance," rather than prevent dominance as such.

Anxiety regarding market power has tended to focus on large industrial producers, while political and historical factors also play a role. During periods when the free market is viewed as socially damaging, benign monopolists have been viewed favorably, and almost become an arm of government. When the free market is more in favor, large producers tend to be viewed with greater suspicion, except where they are competing in large, competitive markets. It is worth noting that buyers can also attain market power, where they create "buyers cartels" to fix the maximum price of a product.

Dynamic Competition

The arena of economic competition is never entirely fixed and stable. Where new products and services are being created and sold, they will often create entirely new markets in the process, and destroy previous ones. This process of competing through innovation and the creation of new markets is known as dynamic competition. It is contrasted with the "static competition" that takes place in a stable market, and is closely associated with the ideas of Austrian economist Joseph Schumpeter.

The driving force of dynamic competition is the entrepreneur who helps bridge the gap between technological innovation and buyers. Where a stable market involves several sellers competing to sell similar products, the entrepreneur offers a new product, and therefore initially has no competitors. If this new product somehow renders an existing one obsolete, then the market for that obsolete product is destroyed. This process of "creative destruction" is a different way of understanding the competitive process. Rather than view markets as the organizing frameworks of competition, markets become viewed as internal to competition. Competition becomes a constant remaking of the competitive arena itself.

There are at least two significant implications of this. First, it leads to a very different way of viewing monopolies. In a dynamically competitive environment, monopolies are both inevitable and desirable. The seller who succeeds through dynamic competition has, in all likelihood, taken some substantial risks. Unlike the seller in a stable market who simply reproduces what they (and their competitors) have been doing in the past, the creator of a new product has no certainty that their product will find a market of buyers at all. In order to take this gamble, they need the incentive of a big payoff at the other end. Where their new product succeeds in attracting demand, they will have a monopoly position, which they can exploit as a reward for the gamble. The venture capital industry exists to fuel dynamic competition, and gives an indication of the stakes involved. Venture capitalists expect only a small minority of the businesses they invest in to succeed, but they also expect the rewards to be very large when success does occur.

In many circumstances, however, the monopoly is not sustainable for very long, which damages the incentives to make risky investments. This introduces a role for intellectual property rights such as patents. A patent is a legally entrenched right to exclusive use of a scientific or technological innovation, for a time-limited period. Intellectual property rights, and patents in particular, exist precisely to nurture innovation and dynamic competition. The individual or firm who makes the effort and takes the risk to produce something new is rewarded with a monopoly, not just in the very short term (what might be called "first mover advantage") but in the medium to long term. This allows them to recoup their investment, before the innovation is released for use by their competitors some years later. Patents are especially important in industries such as pharmaceuticals, in which a large amount of research and development is involved, and a large number of unsuccessful products developed.

This leads to the second significant issue, namely time horizons. As its name suggests, dynamic competition takes place over a period of time, but disputes arise over what are the most appropriate time horizons with which to view it. It is debatable how long an innovator should be permitted to have exclusive rights to their intellectual property. In the realm of competition policy, it is debatable whether (or for how long) an innovator should be permitted to exclude competitors through other nonlegal means.

Those who take a very long-term view argue that monopolies are never permanent, and some new innovation will eventually emerge to destroy the monopolist's power. But those who take a more short-term view would argue that allowing a single seller to have exclusive right to an innovation is still a form of market power, and thus inhibits consumer rights. On balance, antitrust authorities tend to have more sympathy with the latter view. U.S. merger guidelines, for instance, state that monopolistic practices are acceptable only if a new competitor is likely to arrive within two years. The notion that a newcomer will eventually arrive, while true, is not considered a sufficient basis to tolerate market power in the short and medium term.

See Also: Antitrust Laws; Capitalism; Globalization; Markets; Market Share; Patents.

Bibliography. Robert Bork, *The Antitrust Paradox: A Policy at War With Itself* (Macmillan, 1978); David Gerber, *Law and Competition in Twentieth Century Europe: Protecting Prometheus* (Clarendon, 1998); Frank Knight, *Risk Uncertainty & Profit* (Kelly & Millman, 1921); Frank Knight, *The Ethics of Competition and Other Essays* (Chicago University Press, 1935); Joseph Schumpeter, *Capitalism, Socialism & Democracy* (Routledge, 1976); Hans Thorelli, *The Federal Anti-trust Policy: Origination of an American Tradition* (Allen & Unwin, 1955); Harrison White, *Markets from Networks: Socioeconomic Models of Production* (Princeton University Press, 2002).

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Competitive Advantage of Nations

The seminal work of Michael E. Porter takes an Industrial Organization (IO) perspective on the management of a nation's assets. This theory aims to explain the reasons for the success of vendors from certain nations in specific branches or industries. Prominent examples are French luxury goods producers, German car manufacturers, Swiss watchmakers, and Japanese fax producers.

By differentiating a nation's production factors in general use factors (infrastructure, financial capital, and skilled labor, which are relevant to all industries) from specialized factors (employees with highly specialized competencies, universities working in specialized fields) and basic factors (land, natural resources, and unskilled labor) from advanced factors (technologies and competencies that make up the knowledge of a nation), Porter's theory challenges both the classic economic wisdom and the IO's conventional Structure-Conduct-Performance (SCP) paradigm:

- Only the basic factors predetermine the structure according to the SCP paradigm. The advanced factors are not inherited, but are created, rather, within a nation in the course of time. Noticeably, the advanced factors are relevant to explain the variance of a vendor's success in most developed industries. For instance, it was not the number of people in the Indian software industry that led to the success of software producers, but the solid mathematical and technical education that many of them possessed.
- In conflict with the classic economic theory, Porter argues that the lack of basic factors is likely to result in a competitive advantage, because it encourages companies to invest in technologies to overcome the disadvantage of scarce, basic resources. An empirical support is given by energy-saving durables created in Japan.

Within this theory, Porter challenges the unidirectional cause/effect relationship inherent to the SCP paradigm. Instead, Porter proposes the "Diamond" of four mutually-reinforcing national determinants. The basic diamond is made up of (1) factor conditions, (2) related and supporting industries, (3) demand conditions, and (4) firm strategy structure and rivalry. Governmental influences (5) and exogenous events by chance (6) are extensions that could reinforce these determinants.

Similar to the factor conditions, the demand conditions are in conflict with the classic economic intuition: A high volume of domestic demand by itself does not provide national vendors with a competitive advantage (which is commonly argued by economies of scale), but needs critical buyers insisting on superior quality of products and services. These customers force vendors always to offer the latest and innovative features and improve the ease of use and availability as well as the value-for-money ratio.

The related and supporting industries provide vendors with a symbiotic environment of strategic, relevant resources. For instance, German car manufacturers owe their success in the international competitive arena to their component suppliers providing them with innovative fuel-injection systems, anti-lock brake controls, etc. These related firms frequently accumulate in industry-specific clusters such as Silicon Valley in computer production or Hollywood in movie production.

The firm strategy, the structure of the industry, and the rivalry is not restricted to the consideration of the number of competing vendors. Instead of striving for monopoly profits by restricting access to the market, Porter claims that competition and rivalry are vital because they encourage both process- and product-related innovations. This argument is in line with the

Austrian School. The existence of intense domestic rivalry provides vendors with an opportunity for "training." Vendors who are used to coping with high levels of domestic rivalry are more likely to succeed in the international competitive arena. In addition, high levels of competition in the domestic market are motivation enough to internationalize or even globalize the business.

In line with this argument, Porter urges national governments to enforce competition rather than protect local vendors by imposing trade barriers. Capital, subsidies, and trade protection might be beneficial in the very early stages of development of an industry, but governments alone cannot foster a competitive advantage of firms in a particular industry. A current example are wind energy plants. Although most of the world's subsidies are granted by the German government, vendors from Denmark, the United States, Spain, and India have achieved substantial market shares in the wind energy industry.

Events of chance are more likely to result in a competitive advantage in nations' well-established diamonds. These events are not restricted to inventions and technological breakthroughs, but include price jumps for basic factors, like the recent rise in oil prices and fluctuations in exchange rates.

The main criticism of this theory stems from the consideration of nations as a demarcation feature of the basic unit of investigation. Thus, the concept does not comprise multinational firms adequately. Moreover, additional determinants such as the influence of national culture have been proposed.

See Also: Absolute Advantage; Comparative Advantage; Economies of Scale; Effective Rate of Protection; Factor Endowments; Leontief Paradox.

Bibliography. H. Davies and P. Ellis, "Porter's Competitive Advantage of Nations: A Time for the Final Judgement?" *Journal of Management Studies* (2000); R. M. Grant, "Porter's 'Competitive Advantage of Nations: An Assessment,'" *Strategic Management Journal* (1991); I. M. Kirzner, "Entrepreneurial Discovery and The Competitive Market Process: An Austrian Approach," *Journal of Economic Literature* (1997); N. J. O. O'Shaughnessy, "Michael Porter's Competitive Advantage Revisited," *Management Decision* (1996); M. E. Porter, *The Competitive Advantage of Nations* (Free Press, 1990); F. A. J. Van den Bosch and A. A. Van Prooijen, "The Competitive Advantage of European Nations: The Impact of National Culture—A Missing Element of Porter's Analysis?" *European Management Journal* (1992).

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Competitive Market Analysis

Competitive market analysis (CMA) is the analysis of the competing companies within a given industry, usually focusing on the top performers. A CMA of the American soft-drink industry, for instance, would usually focus on The Coca-Cola Company, PepsiCo, and the Dr Pepper Snapple Group; an analysis focusing on the New England region might also include Polar Beverages, Adirondack Beverages, and Cornucopia Beverages, the makers of Moxie. CMAs give interested parties—usually one of the companies in the industry—a lay of the land, a sense of the market landscape that goes beyond just the performance of a given company. Depending on the industry and the size of the company, CMAs may be prepared in-house or by outside analysts.

CMAs include, first of all, quantitative data—everything from publicly available information of the sort provided to shareholders (sales figures, capital, number of employees, expenses, et cetera) to figures derived from that data (the biggest sellers in the industry, the fastest-growing companies) to figures derived from both quantitative and qualitative data (ranking and rating the companies). Various metrics may be assessed for each company in the analysis, data that is only of interest when compared laterally among the companies in the field—for instance, in the case of the soft-drink industry, the transportation costs associated with product distribution, or the amount of money spent on sponsorships like Little League scoreboards. In the 21st century, CMAs will usually include search engine data in the analysis, noting the search engine rankings of the included companies with respect to various relevant keywords (which can be an exhaustive list, especially if the CMA concerns an industry that conducts a significant amount of business online, like mail order vendors or domain name services).

Qualitative data forms a significant part of the CMA. This can include everything from visual information—product and logo designs, branded merchandise, Web site screenshots—to consumer surveys. The emphasis of the qualitative data is to examine the points of similarity and difference among competing companies, and to evaluate their strengths and weaknesses relative to one another in as many areas as possible. Efficiency, consistency, and clarity are things looked for in the examination of qualitative data; visual information should convey what the company wants to convey, interactions between the consumer and the company should be consistent and should help to establish user expectations that the company can match, and the overall message should be clear. In the case of large companies or niche markets, these messages are necessarily more complicated than "Coca-Cola is better than Pepsi."

A competitive market analysis provides a business with an understanding of its competitors' strengths, liabilities, goals, and methods of reaching those goals, while putting its own operations in perspective. The business can learn from its competitor's mistakes—avoiding a coffee-cola since there seems to be little market for it, or marketing it differently if they are already committed to it—while also evaluating its competitor's strengths and seeing whether they can be emulated. At the same time, individual corporate identity, what defines competitors in the same field, might be brought into sharper focus. Television networks tend to strengthen their appeal to their existing demographic base, for instance, as well as competing with other networks—and in so doing, they decide which time slots are the most important to them, which audiences they most wish to attract. When fledgling network Fox moved its young animated sitcom *The Simpsons* to a new timeslot to compete directly against NBC's popular and well-respected *Cosby Show,* it was a deliberate move informed not by factors within the company but by factors in the larger market.

The final form of a CMA is a lengthy report that generally places raw data at the back. A summary of findings precedes a list of recommendations or critical findings, followed by less prioritized information organized by category. Analyses can also be conducted on a specific aspect of business operation, such as the popularity of soft drinks among senior citizens, or the effectiveness of Web presence for a soft-drink company.

Competitive market analysis can also be used in the process of price-setting, and is a common process in the real estate market (where the term "comparable market analysis" is sometimes used).

See Also: Advertising; Branding; Competition; Electronic Commerce; Industry Information; Market Audit; Marketing; Market Research.

Bibliography. Lee G. Cooper and Masako Nakanishi, *Market-Share Analysis: Evaluating Competitive Marketing Effectiveness* (Springer, 1989); Rainer Michaeli, *Competitive Intelligence: Competitive Advantage Through Analysis of Competition, Markets and Technologies* (Springer, 2009); Adrienne Schmitz, *Real Estate Market Analysis: A Case Study Approach* (Urban Land Institute, 2001).

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Compliance

Compliance encapsulates numerous obligations that organizations of all types must fulfill. Compliance and the procedures established to meet requirements are becoming a key management concern that is central to running a successful business or organization. In an ever-widening statutory regulatory environment and with commitments to self-regulation, organizations must ensure that they satisfy relevant regulations and guidelines.

The role of compliance is an important area in business management and management in general. Managers and employees within any organization must, where appropriate, respect standards, codes, and regulations. This encompasses all areas of the organization's work that may need to comply with both substantive and modest regulatory conditions subject to the sector and location. Regulatory regimes are not static and evolve with modifications to legislation, which may transform a sector in a positive or negative manner (usually following discussion between the regulators and industry representatives ensuring compliance is reasonable).

Government bodies primarily "regulate" all aspects of economic activity (self-regulation and compliance guidelines can also be included in establishing and adhering to organizational or sector values). Compliance procedures and conditions may be applied to all aspects of the business and organizational behavior, which must be met or negotiated. It is therefore necessary to ensure that acceptable levels of protection and accountability are in place to limit unnecessary damage and harm. With the emergence of an animated global news media, which frequently scrutinizes the activities of companies and organizations in carrying out their responsibilities, good compliance records are essential.

In considering market regulation, compliance concerns may need to address issues of protectionist regulation (to limit monopolies and encourage competition, noticeable in mergers and acquisitions), consumer protection (fair pricing and customer care), systemic integrity (limiting abuses in knowledge differentials), and other organizational practices that impact stakeholders. Competition policies have been introduced by national regulators such as the Competition Commission in the United Kingdom to ensure merger and acquisition activity does not compromise competition.

Emerging Compliance

Emerging compliance is being improved in areas such as digital environments (entertainment and software) where codes of conduct covering intellectual property rights, copyright, and data protection are being abused. At the international level, concerns about protecting intellectual property are noted in the Agreement on Trade-Related International Property Rights (TRIPS) and other international agreements formulated by the World Trade Organization. Compliance demands and procedures vary among countries, which generates a plethora of problems that are difficult to solve (the enforcement issue being the most challenging part of compliance at the international level). The complications associated with the interpretation of regulations and compliance in international business generate further complexities that need to be understood and managed. In the absence of international coordination and sustained harmonization of international regulations, the emphasis for regulation is placed on national and regional regulators.

European Union

Within Europe, the regulatory environment is shaped by membership of the European Union, which seeks and expects a range of compliance with various regulations. Member states also have national regulatory frameworks that may differ from the European model. It is not unusual to find disparities within the state model. Sectors are increasingly regulated; for example, in the United Kingdom market regulation is identifiable in FSA (Financial Services Authority), finance; Oftel, telecommunications; Oflot, lottery; Ofwat, water services; Ofgas, gas services, supply; NICE, drug registration. Compliance practices are frequently amended, modified, and reviewed through monitoring and reviews that are undertaken to ensure that, where possible, regulation and compliance works properly (this frequently includes amendments arising from lobbying and sector concerns). Regulation and compliance is, however, far from simplistic. It can be contentious, unfair, and damaging to all parties.

The lobbying community representing business, most notable in Brussels and Washington, D.C., seeks to influence the conditions within the regulatory framework to reduce the exposure to compliance where unacceptable to a sector. Associations such as the International Chamber of Commerce and its various national and local offices represent business in seeking to reduce unnecessary compliance. This, of course, needs to be studied and assessed on a case by case basis.

Voluntary Codes of Conduct

Corporate governance and corporate social responsibilities have generated interest in voluntary codes of conduct. The desire to become a responsible corporate citizen and instill an effective compliance culture in a positive sense is improving the perception of responsible business behavior. Although far from complete, self-regulation is producing benefits to the company and is improving relations with customers and clients who are demanding responsible internal and external business relations.

Responsibility is increasingly a fundamental in well-managed organizations, for example, internally, health and safety and externally, meeting environmental regulations. The prevalence of risks in various business environments demands a high level of awareness in identifying problems from various sources and the effective management of them through compliance with the regulatory environment.

Compliance and regulation is notoriously complex and costly. Public and private organizations of various size respond in different ways to specific regulation. It is likely that the regulatory regimes in numerous countries will become more stringent in forcing companies and organizations to comply with codes, standards, and legislation. Therefore, companies and organizations need to recognize the full cost of compliance and the intended and unintended consequences of their operations.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Corporate Social Responsibility; Environmental Standards; Legislation; Regulation; Risk Management.

Bibliography. E. Shea, *Environmental Law and Compliance* (Oxford University Press, 2002); A. Tarantino, *Manager's Guide to Compliance* (John Wiley & Sons, 2006).

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Concession (in Negotiation)

When should you offer something to another party when negotiating, how much should you provide, and in what manner should you do so? These are primary questions in the area of concession in negotiations.

In any type of negotiation, a concession is something that you provide to another party when trying to come to a mutually agreeable deal. Typically, two or more parties approach a negotiation with a list of interests—issues they wish to receive from the other parties involved. These can be tangible goods such as money, raw materials, or finished products. They may also be intangible items such as a confidentiality agreement, information exchange, or even an apology.

Concessions are essential for any negotiation to be successful. Consider a simple barter negotiation over the price for a piece of art. The seller wishes to trade the item for as much as possible, while the buyer wants to spend as little as possible. Their opening offers may be far apart, thus a series of concessions over price will be necessary to come to a deal. The seller comes down in price while the buyer comes up, but where they ultimately end is a product of the concessions offered by each party. If neither party concedes on price, or if the concessions are inadequate to bridge the gap between the opening offers, then no deal is possible.

In a more complex negotiation, the mix of concessions across multiple issues is critically important. Many negotiations involve several issues, and those issues may be of different importance to each party. For example a job candidate may wish to negotiate over salary, benefits, and vacation days, but she might care more about vacation days than benefits. Conversely, a job recruiter may also wish to negotiate over those same issues, but he may be more concerned about benefits than vacation days. In such a case, negotiators should look for differences in the intensity of preferences in order to concede on items that matter to one party more than another. In addition, such concessions should not be made on individual items one at a time; rather negotiators can make package concessions. In a package concession, a negotiator will offer more or less of multiple items at once, allowing them to use the mix of issues to work toward a deal of mutual value.

The dynamics of concessions are very important in simple or complex negotiations. One example is bilateral versus unilateral concessions. A bilateral concession is when both parties in a negotiation concede something to the other in alternating turns. For example the seller of the piece of art reduces the price slightly followed immediately by the buyer increasing her offer slightly. In contrast, negotiators should be wary of unilateral concessions, where one party adjusts his offer multiple times before the other party makes any concessions. This creates a power imbalance and sends dangerous signals about the resources and skills available to the party making such concessions.

Concession size is also very important. The size of a concession sends an important signal to the other party about willingness to move any further. Utilizing decreasing concession size sends a signal to the other party that you are reaching your reservation point—the lowest or highest you'll go. In contrast, offering consistent concession increments may signal to the other party that you are willing to continue conceding well beyond the current offer. Typically, a negotiator will start with a modest concession, then increasingly cut the size of future concessions to signal when they can go no further.

The dynamics of concessions in negotiations can vary dramatically across cultures. Much research on the topic has shown that negotiation style can be culturally driven. For example, some cultures have a more communal negotiation style, where the overall result is most important. In contrast, other cultures take an individualistic negotiation approach, where the result for a single party is what matters most. Other differences can manifest in the tone of how concessions are offered. In hierarchical cultures, status differences between parties can be critical in how concessions are offered. Typically someone of a lower status will ask for a concession in highly deferential ways in such cultures. In contrast, concessions may be requested similarly in egalitarian cultures, where status differences play less of a role in the dynamics of negotiated outcomes.

See Also: Arbitration; Decision Making; Mediation; Negotiation and Negotiating Styles.

Bibliography. D. M. Kolb and J. Williams, *The Shadow Negotiation* (Simon & Schuster, 2000); D. A. Lax and J. K. Sebenius, *The Manager as Negotiator* (The Free Press, 1986); R. Lewicki, *Decision-Making in Conflict Situations* (National Institute for Dispute Resolution, 1985); William Hernandez Requejo and John L. Graham, *Global Negotiation: The New Rules* (Palgrave Macmillan, 2008).

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Concurrent Engineering

Concurrent engineering (CE) is an approach to new product development, which differs from the traditional approach because new product development tasks are performed simultaneously, instead of in a sequence. Another fundamental difference between CE and traditional product development is the fact that all relevant aspects of product development are considered throughout all phases, from product concept to delivery of the product to customers.

Historically, it is possible to trace the roots of a sequential or relay-like product development process to scientific administration. Roughly, the best way to have a large task (i.e., developing a new product) accomplished is to divide it into smaller tasks and complete them in a timely sequence. The process worked well for many years and still works in less dynamic markets.

In the 1980s, however, American manufacturers were trying to catch up with Japanese manufacturing prowess and they discovered, among other things, an entirely different way of managing product development. Two Japanese researchers, I. Nonaka and H. Takeuchi, published "The New New Product Development Game" in the *Harvard Business Review* in 1986. The article, an instant classic in business literature, exposed the underpinning philosophy of the Japanese way of developing products and sparked a movement that made concurrent engineering a mainstream approach to product development.

From the viewpoint of process, CE is nonsequential with upstream and downstream activities overlapped and generally processed simultaneously. Also, tasks are not distributed over the functional areas independently; commonly, they are interactively performed and managed according to cross-functional teams.

The first characteristic of these teams is that they are formed from individuals from the various areas relevant to product development, therefore holding complementary capabilities. Ultimately, the idea is to develop the product from a multifaceted view of customers' needs. Generally, marketing, design, engineering, manufacturing, logistics, sales, and even partners, suppliers, and customers take part in the process. Second, organization, management, and performance appraisal is generally by project rather than function.

Finally, CE collects all relevant information/knowledge for new product development (NPD) from manufacturability to customer service. That represents an opportunity and a challenge: An opportunity because it is desirable to combine different views of product development to achieve maximum value perceived by customers. In other words, each function might understand well a nuance that is not well perceived by another. It is a challenge because traditionally functional areas focus on different, sometimes conflicting, aspects of a new product; for example, while engineers may be concerned with functionality, designers may be concerned with aesthetics, and finance concerned with the bottom line. Second, technical capabilities and experience naturally diverge among individuals. Team members have received different formal education, and they have experienced NPD from different perspectives. Therefore, communication tends to be a challenge.

Benefits and Drawbacks

Concurrent engineering is generally associated with reducing time-to-market, optimizing overall NPD expenditures, and delivering better target products or services. Concurrent engineering helps organizations reduce time-to-market because development tasks are performed in parallel as opposed to time sequenced, and because transitions between phases of the project are generally smooth and fast; finally, because there are fewer errors and less reworking, when problems are found, they are generally found much sooner.

CE helps to deliver better target products or services because it makes it easier to match tight project timelines and target costs. More importantly, because it takes into consideration various perspectives among functions involved in product development throughout the entire process, a much sharper picture of what customers want is developed and delivered as a product or service.

In terms of shortcomings, CE is not well-suited for extremely large and complex projects with relatively predictable results such as building a bridge. Also, behind concurrent engineering there is an entirely new way of thinking about product development that needs to be in accordance with the organization's culture. CE is better suited to enterprises where there is excellent communication, openness, and a structure organized by project as opposed to hierarchical by functions. Finally, perhaps more than other approaches to product development, concurrent engineering demands excellent project management skills, techniques, and procedures.

See Also: Product Development; Product Life Cycle Hypothesis; Research and Development; Risk Management; Teams.

Bibliography. Chris J. Backhouse and Naomi J. Brookes, *Concurrent Engineering: What's Working Where?* (John Wiley & Sons, 1997); R. Balamuralikrishna, R. Athinarayanan, and X. Song, "The Relevance of Concurrent Engineering in Industrial Technology Programs," *Journal of Industrial Technology* (v.16/3, 2000); R. Handfield and C. McDermott, "Concurrent Development and Strategic Outsourcing: Do the Rules Change in Breakthrough Innovation?" *The Journal of High Technology Management Research* (v.11/1, 2000); O. Hauptman and K. K. Hirji, "Managing Integration and Coordination in Cross-Functional Teams: An International Study of Concurrent Engineering Product Development," *R&D Management* (v.29/2, 1999); I. Nonaka and H. Takeuchi, "The New New Product Development Game," *Harvard Business Review* (January–February, 1986); P. G. Smith, "Concurrent Engineering Teams," in *Field Guide to Project Management,* D. I. Cleland, ed. (John Wiley & Sons, 1998); K. Umemoto, A. Ando, and M. Machado, "From Sashimi to Zen-In: The Evolution of Concurrent Engineering at Fuji-Xerox," *Journal of Knowledge Management* (v.8/4, 2004).

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Confidentiality

The confidentiality of personal and business information is an increasingly important issue in international business law. Jurisdictions differ significantly in the scope and depth of protection provided for both personal data (e.g., medical information) and business information (e.g., the details of a person's or company's bank accounts). Failure to comply with a jurisdiction's confidentiality laws can result in criminal penalties in some instances, and businesses operating in multiple jurisdictions must take care to comply with the relevant law in each.

Confidentiality rules have grown increasingly complex since the widespread adoption of generalized confidentiality statutes and regulations in the 1970s. For example, the United Nations Declaration of Human Rights lists privacy as a basic human right, and the European Union (EU) passed a Data Protection Directive in 1995 that requires all data processing to have a "proper legal basis" that incorporates a balance between the vital interests of the data subject, the legitimate interests of those controlling the data, and any contractual obligations. The directive requires that anyone about whom data is collected has a right of access to it, to have inaccurate data corrected, recourse against anyone who unlawfully processes the data, to withhold permission for the use of the data in certain circumstances, and to know the source of the data. Sensitive data concerning ethnicity, religion, political views, sexual history, union membership, or health can only be processed with explicit consent. Further EU rules govern transfer of data from within EU countries to agencies outside the EU. These rules have proven complicated to implement, leading to a lengthy disagreement with the United States over the provision of airline passenger lists in 2005.

One key area of disagreement among jurisdictions is the privacy of financial information. Offshore financial centers like the Channel Islands, the Isle of Man, Switzerland, Luxembourg, Bermuda, the Cayman Islands, the Bahamas, and others tend to have strong confidentiality laws protecting financial information. Governments in larger economies, such as Germany, France, and the United States, tend to view financial confidentiality as a means of tax avoidance and tax evasion and seek to undermine domestic confidentiality rules through international agreements that encourage the sharing of financial information between governments. In 2008 the German government sparked a major international controversy by purchasing stolen confidential financial information from a former employee of a Liechtenstein bank and using the information in tax evasion investigations in Germany.

Confidentiality with respect to financial matters has a long history, with some arguing that it has roots in the Code of Hammurabi in Babylon and biblical texts. More recently, European civil codes incorporated financial privacy provisions and a common law duty in jurisdictions that follow British law from the 1924 case of *Tournier v. National Provincial Bank*. *Tournier* concerned a bank official who told an employer that one of his employees had bounced checks and that the bank suspected a gambling problem. As a result, the employee was fired. The English court found for the employee, holding that the bank had a duty to protect the employee's financial privacy. Confidentiality should be distinguished from secrecy, associated with anonymous bank accounts, bearer bonds, and the like. Most jurisdictions no longer permit secrecy with respect to financial matters, but confidentiality remains an important legal concept.

Expanding on the historical code provisions and *Tournier*, jurisdictions like Switzerland and the Cayman Islands have created statutory confidentiality regimes that structure the relationship between individuals and financial institutions. For example, under the Caymanian Confidential Relationships (Preservation) Law 1979, information cannot be disclosed without consent or an order from the local court. Like many such laws, the statute goes beyond the specific banking context of *Tournier* to cover:

> confidential information with respect to business of a professional nature which arises in or is brought to the Islands and to all persons coming into the possession of such information at any time thereafter whether they be within the jurisdiction or thereout.

Criminal sanctions, including imprisonment, apply to those who breach the statute.

Although there are statutory exceptions to the requirement of consent, countries concerned with tax issues find these inadequate in many instances. For example, while most jurisdictions' statutes make exceptions for criminal investigations, the exceptions typically only apply to matters that are a domestic crime as well. This precludes disclosure of most information related to income tax evasion investigations in jurisdictions that lack an income tax, such as the Cayman Islands.

Disputes over confidentiality in financial matters are likely to continue to be a major issue between the Organisation for Economic Co-operation and Development (OECD) countries and jurisdictions with economies that specialize in financial transactions. In addition, conflicting confidentiality laws and regulations will continue to be a problem in areas from national security to transportation, as different jurisdictions seek to ensure that businesses operating within their borders comply with local laws.

See Also: European Union; Financial Market Regulation; Global Capital Market; Globalization; Tax Havens.

Bibliography. Rose Marie Antoine, *Confidentiality in Offshore Financial Law* (Oxford, 2002); *Tournier v. National Provincial Bank* (1K.B. 461, 1924); *Toward a Level Playing Field: Regulating Corporate Vehicles in Cross-Border Transactions* (International Tax and Investment Organization, 2002).

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Conformance/Conformity

Conformance or conformity is generally defined as adherence to a standard, specification, or regulation. In literature, this concept usually means adjusting behaviors to align with the norms of the group. Norms are the unwritten rules or standards of behavior for group members that will result in a kind of "equilibrium" pattern of behavior across group members. Usually, the more heterogeneous a group is in its membership (gender, ethnicity, age, etc.), the slower a group will develop stable norms. Norms cover every aspect of our social life, from performance (such as how hard to work for what kind of quality and levels of tardiness), appearance (such as personal dress, when to look busy, when to slack off, or how to show loyalty), social arrangement (such as how team members interact), to allocation of resources (such as pay, assignments, allocation of tools and equipment). In a way, our social life is maintained by implicit or explicit norms.

Homogenous groups tend to establish norms faster; in business, this may affect both decision making and team performance.

To conform is to change or adjust behavior or attitudes to the perceived norms of a certain group so that there is a perceived agreement or correspondence between one's behavior and the behavior of most members in a group. Sometimes conforming is quite automatic, and at other times people feel pressure to fit in with the crowd. Within the above definition, it is important to highlight that the change in behavior or attitude is a result of either a real pressure or an imagined pressure from external sources. Typically, it is because of larger societal understandings and implicit norms (pressure) that one should be, for example, subdued at church, casual at a bar, and patient when in line.

The classic studies done in the area of conformity are both amazing and disturbing in their implications. They give us insight into the willingness to conform at inappropriate times, and what it takes to resist. For example, S. Milgram's obedience experiments are probably one of the classic and infamous sets of studies in social psychology. He studied a dilemma that when following one rule (e.g., following the directions of an expert) means breaking another (e.g., hurting another human being), how are we to know which rule to follow? He found that people are willing to obey an authority figure who instructed them to perform acts that conflicted with their personal conscience. Those of us who read about Milgram's obedience experiments often mistakenly conclude that people are evil and would harm a stranger if given the opportunity. Attributing cruelty to the internal (evil) disposition of the participant misses the whole point of Milgram's experiment—which is that the situational factors, not the individual character, determine behavior in the obedience paradigm.

Another famous study on conformity was conducted by Solomon Asch where he examined the extent to which pressure from other people could affect one's perceptions. In his experiment, he asked the subject to make a judgment of line length (which was designed in such an obvious manner that it was impossible to make a mistake) after the other "subjects" unanimously chose an obvious wrong line (certainly all the other "subjects" were confederates who had been instructed to give incorrect answers). In total, about one-third of the subjects who were placed in this situation went along with the clearly erroneous majority. Why did the subjects conform so readily? When they were interviewed after the experiment, most of them said that they did not really believe their conforming answers, but had gone along with the group for fear of being ridiculed or thought "peculiar."

Apparently, people conform for two main reasons: Because they want to be liked by the group and because they believe the group is better informed than they are. However, not everyone conforms in any situation. A few factors such as group size, unanimity, group composition, cohesion, status, public response, prior commitment, and individual self-confidence will contribute to the likelihood of conformity. For example, social psychologists have been trying to figure out if gender differences play a role in conformity. Possibly because of the stereotype that women are supposed to be submissive, past research about conformity found that women consistently conformed more than did men. However, some researchers found that when women were unfamiliar with the tasks presented in an experiment (such as questions about sports) they were more likely to conform. However, when men were subjected to the same situation (for example, if they were asked questions about fashion) they showed a higher conformity rate. Since many of the studies that showed a gender difference included tasks and topics that were more geared toward men's interests, it should not be surprising that the results showed a gender difference that in reality might not exist.

Another major reason why some people avoid conforming is their desire to be an individual. Individuation is to emphasize one's own uniqueness in order to stand out from the crowd. Most people do not mind conforming most of the time, but still like to think of themselves as individuals, thus not conforming.

Conformity can be destructive, such as when a military unit kills unarmed civilians. Conformity can be constructive, such as when people hurriedly follow each other out of a burning building. Nonconformity can be constructive, such as when a business executive blows the whistle on his corporation's unethical business practices. Yet nonconformity can also be destructive, such as when an antiwar protester decides that violence is the only way to get across his message. Thus, conformity is neither good nor bad in and of itself. It depends a great deal on the context and our values.

See Also: Accountability; Attitudes and Attitude Change; Corruption; Cultural Norms and Scripts; Culture-specific Values; Decision Making; Enculturation; Teams.

Bibliography. S. E. Asch, "Opinions and Social Pressure," *Scientific American* (1955); S. Milgram, *Perils of Obedience* (Harper, 1973).

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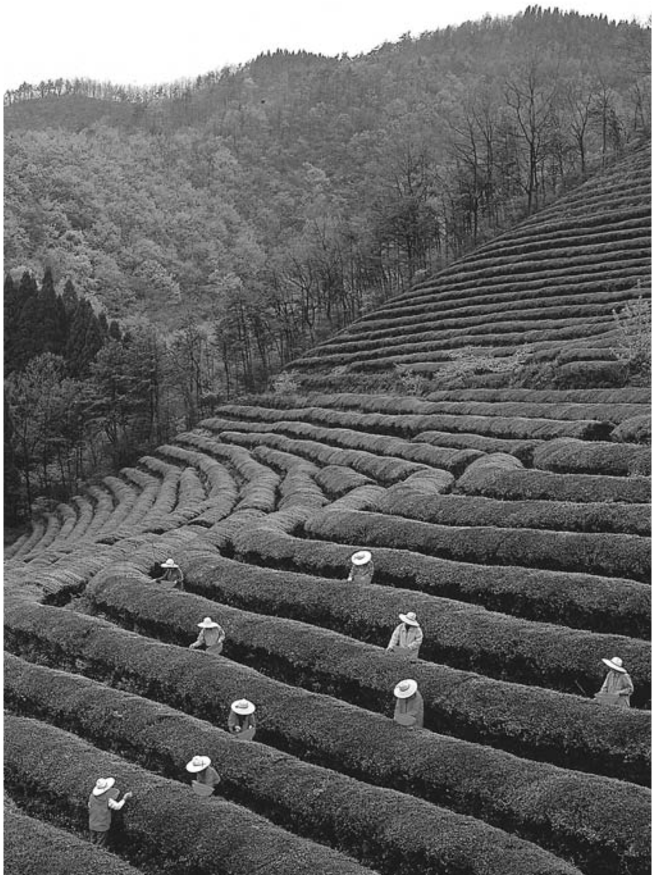
Confucian Work Dynamism

Confucius was a Chinese philosopher who lived around 500 B.C. and wrote extensively about the pragmatic rules of living. Geert Hofstede and Michael Bond's research on global cultures demonstrated that individuals and firms in China and other Asian countries focused on a dynamic future-oriented mentality and reflected a deep sense of harmony and stable relationships, as recommended in Confucius's writings, and labeled this dimension of culture "Confucian work dynamism."

The interest in Confucian work dynamism and future orientation emanated from a rise in competitive dominance in the latter part of the 20th century of some East Asian countries such as Japan and the "four dragons" (or "tigers")—Hong Kong, Singapore, South Korea, and Taiwan—as well as south Asian countries such as Malaysia, Thailand, and Indonesia. Immigrant Chinese families controlled most of the business and economic operations in many of these countries, and researchers attributed their success primarily to their reliance on the Confucian work ethic, which focused on the quality of relationships a person maintained, as well as their performance of their social and civic duties.

The Confucian work dynamism scale was based on an instrument called the Chinese Value Survey (CVS), which was administered in 23 countries and based on the values as seen by native Chinese social scientists. In addition to the four cultural dimensions identified by Geert Hofstede, Michael Bond discovered a new dimension and labeled it "Confucian work dynamism," to emphasize the importance of practical ethics based on the following principles: (1) the permanence of society is contingent on imbalanced relationships expressing mutual and complementary obligations between father and son, older and younger brother, ruler and subject; (2) "virtuous behavior" toward others entails not treating others as one would not like to be treated by them; (3) the family is the foundation and archetype of all social organizations; individuality should be subdued if it diminishes harmony, and it is very important to maintain everybody's face by preserving others' dignity; (4) virtues in life involve acquiring skills and education, working hard, being thrifty, having a sense of shame, and being patient and persevering;



A group of workers on a tea plantation in China, where the Confucian work ethic may be contributing to economic growth.

and (5) individuals should have a sense of commitment and organizational identity and loyalty.

The Confucian Work Dynamism Index has been shown to be positively correlated with the economic growth of countries as well as to entrepreneurship orientation. Scholars also hypothesized that a high savings rate in east and southeast Asian countries was a consequence of the Confucian ethic that promoted long-term orientation. Predictably, these societies scored high on the Confucian Dynamism Index, while Western societies scored lower. Interestingly, some non-Confucian countries like India and Brazil have also scored high on this dimension.

In other empirical studies, the Confucian Dynamism Index has been shown to be negatively correlated to "this year's profits," but positively correlated to "profits 10 years from now." It has also been shown to be strongly positively related to a measure of "marginal propensity to save."

Some have argued that Confucian dynamism is also associated with a system of authoritarian pluralism distinguishable from the liberal democracies of the Western world. For example, drug trafficking is heavily penalized in countries such as Singapore, Malaysia, and Thailand. Divorce rates are significantly lower than those of Western societies as family is relied upon as a form of social insurance. Attacks on other beliefs are relentlessly pursued, since most societies are pluralistic as far as religions are concerned. Finally, the press is free, yet not a "fourth estate"—while the freedom of the press is valued as a stipulation for good governance, it has no absolute right and is expected to blend with the national consensus.

Hofstede and others in their later empirical studies observed that the Confucian Dynamism Index taps into only certain aspects of Confucian ethics and excludes others such as filial piety and hence reinterpreted the meaning of this construct as "long-term orientation." This dimension depicts the fostering of virtues oriented toward future rewards, particularly perseverance and thrift. On the other hand, the polar opposite term, short-term orientation, represents cultivation of the virtues related to past and present, in particular, respect for tradition, preservation of face, and fulfilling social obligations.

Certain facets of Confucian societies and their related explanations have been questioned. For example, a high rate of savings, which is considered a distinguishing feature of these societies, may be caused by comparatively high costs of consumption coupled with the high taxes on consumption and the poor availability of social security for the elderly, rather than just long-term orientation.

Second, even though "persistence" and "thrift" are positively loaded on the Confucian Dynamism Index, the index also includes other items that have inconsequential association with long-term orientation, such as "ordering relationships by status and observing this order" and "having a sense of shame." Moreover, some negatively related items, such as "respect for tradition" and "personal steadiness and stability" are not necessarily inversely related to long-term orientation. To the contrary, positive relationships have been shown between taking a long-term perspective and appreciation of how history and tradition define opportunities and capabilities for the future.

Finally, William Ouchi's work identified reasons other than the Confucian work ethic as shaping a country's (particularly Japan's) long-term orientation. Because Japan has limited arable land, the planting and harvesting of crops can only be accomplished with the cooperation of 20 or more people. Hence, it is more out of necessity rather than cultural considerations that people in this society have developed the skills to work together in harmony and where individual concerns are outweighed by concerns for group welfare.

See Also: Asian Tigers; China; Cross-Cultural Research; Cultural Norms and Scripts; Culture-Specific Values; Entrepreneurship; Gannon's Cultural Metaphors; Guanxi; Hofstede's Five Dimensions of Culture; Japan; Schwartz Value Theory.

Bibliography. Neal Ashkanasy, Vipin Gupta, Melinda S. Mayfield, and Edwin Trevor Roberts, "Future Orientation," in *Culture, Leadership and Organizations: The Globe Study of 62 Societies*, R. J. House et al., eds. (Sage, 2004); Kuochung Chang and Cherng G. Ding, "An Exploratory Study of the Effects of Chinese Cultural Characteristics on the PRC Governmental Buying Behavior," *Journal of International Marketing and Marketing Research* (v.21, 1996); Richard H. Franke, Geert Hofstede, and Michael H. Bond, "Cultural Roots of Economic Performance: A Research Note," *Strategic Management Journal* (v.12, 1991); Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations* (Sage, 2001); Geert Hofstede and Michael H. Bond, "The Confucius Connection: From Cultural Roots to Economic Growth," *Organizational Dynamics* (v.16/4, 1988); D. S. Hong, "Dynamics of Asian Workplaces—An Introductory Essay," *Work and Occupations* (v.24/1, 1997); Bih-Shiaw Jaw, Ya-Hui Ling, Christina Yu-Ping Wang, and Wen-Ching Chang, "The Impact of Culture on Chinese Employees' Work Values," *Personnel Review* (v.36/5–6, 2007); David A. Ralston et al., "Eastern Values: A Comparison of Managers in the United States, Hong Kong, and the People's Republic of China," *Journal of Applied Psychology* (v.77/5, 1992); Christopher J. Robertson and James J. Hoffman, "How Different Are We? An Investigation of Confucian Values in the United States," *Journal of Managerial Issues* (v.12, 2000).

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ConocoPhillips

Headquartered in Houston, Texas, ConocoPhillips operates in the energy sector and has operations in 40 countries. Conoco and Phillips merged in 2002 and created ConocoPhillips, which then acquired Burlington Resources in 2006. ConocoPhillips currently employs 33,000 people and has US$183 billion of assets. ConocoPhillips was ranked 9th, 10th, and 12th in 2007, 2006, and 2005, respectively, in the Fortune Global 500 list. ConocoPhillips is the third largest integrated energy company in the United States in terms of market capitalization and oil and natural gas reserves. Among key competitive advantages of ConocoPhillips are reservoir management and exploration, 3-D seismic technology, high-grade petroleum coke upgrading, and sulfur removal.

Conoco, called the Continental Oil and Transportation Co. in 1875 when it was established, was one of the first petroleum marketers in the West. Conoco's founder, Isaac E. Blake, started the company out of his vision of lighting houses using kerosene instead of candles and whale oil. The company introduced many new products such as benzene to clean stoves, candles, ready-mixed paints, hoof oil for horses, and even a popular medicinal ointment.

In 2002 Conoco decided to merge with Phillips Co. Phillips, then called Phillips Petroleum Company, was established in 1907 in Oklahoma. The founders, brothers named Frank and L. E. Phillips, both had an entrepreneurial spirit and were innovative. The Phillips brothers pioneered the natural gas industry by opening in 1917 the first natural gasoline plant for extracting liquid by-products from natural gas, which allowed the liquid by-products to be used in motor fuels. The company continued to research new opportunities, including gas-processing plant technologies. The company formed its research and development group to continue its innovations; its focus on research and development and innovation continues today.

Burlington Resources was established in the 1860s. The discovery of oil and gas on the company's land brought change in the 1980s, and Burlington Resources expanded into the oil and gas industry. During the 1990s, Burlington Resources became the nation's largest independent natural gas exploration and production company. In 2006 ConocoPhillips acquired Burlington Resources.

The operations of ConocoPhillips are as follows. The exploration and production group explores and produces oil, natural gas, and natural liquids around the world; this group has exploration operations in 23 countries and production facilities in 16 countries. Another group is responsible for refining, marketing, and transporting oil, and is the second-largest refiner in the United States, with 12 U.S. refineries, six in Europe, and one in Asia. The natural gas gathering, processing, and marketing group is responsible for the natural gas operations of ConocoPhillips and has 63 natural gas processing plants. The chemicals and plastics group produces chemicals and plastics through Chevron Phillips Chemical Company LLC, a joint venture with Chevron and one of the world's largest producers of many chemical and plastic-related products. In addition to these four groups, ConocoPhillips focuses on developing new energy sources and technologies from conventional to heavy oil and natural gas to alternative supplies of energy. Among its emerging businesses are biofuels, power generation, and proprietary technologies.

Conoco was the first company that established filling stations and constructed refineries, and it developed and received a patent for the Vibrosis method of seismic oil exploration in the United States. Phillips was the first company to develop and market propane for home heating and cooking, built the first long-distance multiproduct pipeline, and invented a process to make high-octane gasoline possible. The acquisition of Burlington Resources enhanced the company's position as a leading producer and marketer of natural gas. ConocoPhillips's recent activities remain innovative and include commercial production of renewable diesel fuel, the first Alpine satellite oil field, a global water sustainability center, and a partnership with Tyson Foods, Inc., to produce renewable diesel fuel.

See Also: Acquisitions, Takeovers, and Mergers; Chevron; Entrepreneurship; ExxonMobil.

Bibliography. D. Carey et al., *Harvard Business Review on Mergers & Acquisitions* (Harvard Business School Press, 2001); ConocoPhillips Company, www.conocophillips.com (cited March 2009).

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Consumer Behavior

Consumer behavior is essentially the attitudes, intentions, decisions, and actions of individuals as everyday consumers in the marketplace. The study of consumer behavior is embedded in a host of domains in social and behavioral sciences, such as anthropology, psychology, sociology, economics, and history, with reflection on social psychology, marketing, and management. As explaining and predicting consumer behavior can be very challenging, it becomes more so for marketers doing business globally compared with nationally or regionally. This is because planning and implementing marketing efforts necessitates a profound understanding of consumer motivations and expectations along many cognitive, affective, and behavioral dimensions; consequently, this can differ substantially across country boundaries, given that consumer behavior is subject to cultural, economic, and societal influences. Identifying the extent of consumer deliberation in decision processes is also essential to facilitate efficient and effective marketing communication efforts in international operations.

A prominent view of consumer behavior is how it is embedded in capitalism, marketing, and consumption ideologies. Such consumption ideologies can be traced back to Georg Simmel in the 1900s. Also motivated by scholars such as Max Horkheimer and Theodor Adorno in 1944, this study expanded over time through sociologists, anthropologists, historians, economists, and specialized consumer behaviorists and consumer psychologists. Studies in the area of consumer research in many instances rely on consumption ideologies as a background presumption, where those studies proceed to investigate its corollaries and implications.

The American Marketing Association (AMA), the largest professional marketing association in North America for individuals and organizations involved in the practice, teaching, and study of marketing worldwide, describes consumer behavior as the outcome of two main components: marketing and psychology. This view presents consumer behavior as the dynamic interaction of affect and cognition, behavior, and environmental events by which people conduct the trading facets of their lives. According to this perspective, social psychology (a study of the two-way influence between social groups and an individual's attitudes, motivations, and actions such as reference group influences) and cognitive psychology (a study of all knowledge and mental behavior such as attention, perception, comprehension, memory, and decision making) represent the two main disciplines that the AMA describes as germane to studies of consumer behavior.

Systematic studies of consumer behavior emerged only with the rise in mass production, communication, and sales through big organizations. Advertising and marketing research started earlier in the century in North America and Europe with the objective of practically investigating how to market goods to consumers. Consumer behavior research commenced in the marketing departments of business colleges and universities in the United States in the 1950s. However, it was still tied to economic studies of the consumer as a rational individual having innate needs to be met by produced goods and services, disregarding social and marketing influences. Afterward, motivation research emerged, which involved the use of analytical methods of investigation such as in-depth interviews, focus groups, and projective techniques. It hence started probing into the emotional aspects of consumer attitudes and actions. This path was more psychology-linked, and it was undertaken both in academic research and in the business world.

However, looking into subconscious consumer actions and perceptions as such came to be considered by some as unethical and manipulative, which led to the relative decline of the use of motivational research at that point. Starting in the late 1960s, scientific experimentation spread widely, where studies of the consumer as a rational information processor acquiring and analyzing information in order to make brand choices became dominant. This motivated information processing theories of consumer behavior to dominate related research in the 1960s and 1970s, where they were moderated by psychological processes and also incorporated some individual differences and social and cultural influences. New perspectives of consumer behavior emerged in the 1980s that differed from the earlier positivist philosophies (those based on the notion that only scientific knowledge is genuine knowledge, and the latter can only come from positive verification of theories through strict scientific method and methodologies) that had taken over the field until that period in time.

The new shift that relied on nonpositivist philosophies, involving more qualitative and naturalistic research, caused a stir in the field between supporters and skeptics. However, it broadened studies in the domain of consumer behavior to become multi- and inter-disciplinary, where scientists from other disciplines such as sociology and anthropology engaged with interest in studying "the consumer" alongside psychologists and economists. This more recent consumer behavior perspective addresses the study of consumption and purchase decision processes of products/services as also carrying some symbolic, cultural, and emotional implications, even those decision processes of products once thought to be solely based on rational choice behavior (e.g., the decision to buy a car or a washing machine). Along these lines, consumers are perceived as socially connected human beings constituting part of a network of cultures, and consumption is analyzed as an integral part of human existence.

Behavior Models

Models of consumer behavior depict steps and activities that individuals experience in searching for, evaluating, selecting, purchasing, using, and discarding products/services with the objective of fulfilling needs, wants, and desires. The standard model of the consumer purchase decision process involves a number of steps that basically are problem recognition, information search, evaluation, purchase, and post-purchase evaluation. Consumer buying behavior is largely linked to the consumer's level of involvement and perceived differences among brands offered on the market. These two important criteria distinguish four common characterizations of purchase-related behavior: Complex buying behavior, habitual buying behavior, variety-seeking buying behavior, and dissonance-reducing buying behavior. Complex buying behavior involves a high level of consumer involvement in the purchase, where the consumer perceives many significant differences among available brand choices; an example of this behavior is illustrated in a consumer engaged in the decision to purchase a new car. In habitual buying behavior, involvement in the purchase is low and the consumer perceives a few significant differences among available brands. This can be exemplified in a consumer buying weekly or monthly food groceries such as bread, cooking oil, salt, etc.

In the case of variety-seeking buying behavior, a low level of consumer involvement in the purchase is coupled with the consumer perceiving significant differences among the brands; this can result in the consumer engaging in a great deal of switching among brands in order to experience each and satisfy his/her variety-seeking tendency. An example of this behavior is in the purchase of varieties of cheese, yogurt, or desserts, or in the purchase of a shampoo or liquid hand soap. In such cases, the purchase for the consumer might be characterized by a low level of involvement emanating from habit and routine; however, prior knowledge and/or usage may lead to perceived differences among various brands, motivating the consumer to switch among them in repeat purchases to pursue diversity.

Lastly, dissonance-reducing buying behavior is characterized by a high level of involvement in the purchase but a few significant differences perceived between available brands; in such cases, though the consumer takes time and effort in the purchase process, the purchase action takes place more quickly than expected due to the absence of important differences between alternative brands on the market. An example of this buying behavior is a parent in the process of purchasing an educational toy for his/her child; the parent may decide to look with involvement into a number of options for comparison purposes; however, the planned effort and time may be cut short by a perceived lack of difference in the features exhibited in available alternatives.

Though examination of consumer buying behavior focuses on elements linked to purchase decisions, investigating the behavior of consumers encompasses an extensive set of other phenomena. This includes other facets such as beliefs, inferences, attitudes, preferences, intentions, and memories occurring before and/or after consumption. This is reflected in attempts to understand issues such as customer satisfaction, consumer search and choice, purchase rationalization, regret and returns, brand loyalty, and switching behavior, among many others. Adoption behavior also represents a significant phenomenon exhibited in the consumer adoption decision process (modeled into steps of awareness, interest and information search, evaluation, trial, and adoption/rejection). This links to innovation diffusion and innovative behavior that affects such notions as timing of choice and adoption and is influenced by consumer-specific and market-related factors.

The buying process involves problem recognition, information search, evaluation, purchase, and post-purchase evaluation.

Consumer behavior embodies a broad formalization of its phenomena through existing consumer behavior theories that evolved over time and continue to develop further; the core objective of such theories is to explore and explain a majority of consumer-related phenomena, where some theories are competitive and others complementary. Emanating from those theories are a number of models used to present and/or predict the why, what, how, when, and where of an individual's behavior in purchasing goods and services. Consumer behavior models may be classified into two types: The monadic models and multi-variable models, which explain market parameters and factors influencing purchases.

Monadic models rely on theories in microeconomics; they are embedded in explaining human beings as economic entities acting to maximize utility within the constraints of income and price. Such models overlook the emotional side of human beings that relates to social satisfaction and desires, and they also fall short of accounting for an imperfect marketplace where knowledge is inadequate and where there are many practical constraints, such as time and effort. On the other side, multi-variable consumer behavior models rely on more diverse theories that retain elements from the behavioral sciences to incorporate psychological effects, social influences as well as individual and cultural ramifications that moderate information acquisition and processing.

Classical and widely used examples of the multi-variable models are those proposed by James Engel, Roger Blackwell, and Paul Miniard (EKB), Philip Kotler, Joel Cohen, and others, where further developments on such models are advocated and introduced over time by other researchers. Standard models divide influences on the consumer purchase decision process into internal and external components. The internal component covers individual differences and psychological factors at play in influencing decisions to buy, such as personality, value and lifestyle, motivations, consumer resources, prior knowledge, cognitions, and affections. The external component covers outer environmental influences on consumer purchases, such as demographic, social, economic, cultural, and situational factors.

Focusing on understanding either internal or external factors in isolation results in the critique of an incomplete modeling of the process in consumer research. More recently, though, investigating the intricate relationship between internal and external factors has uncovered more insights into varying behaviors of consumers. For example, studying the influence of social class or family lifecycle/composition on cognitive (thought-based) and affective (emotion-based) choices and expectations of individuals provides a more extensive understanding of purchase decision-making processes and outcomes.

Marketing

Marketers adapt and direct the marketing mix elements (mainly the 4Ps, representing marketing inputs involving product, price, place, and promotion) of a product/service at consumers with the aim of encouraging specific brand choices. In interacting with specific marketing mix elements of a product/service, consumers are usually bombarded with influences based on their own needs, personal characteristics, culture backgrounds, attitudes, and perceptions. Marketing practitioners may find it particularly insightful to dig deep into relevant theory-based studies in their pursuit of a critical and intense comprehension of various consumer behavior aspects in the marketplace.

Though emanating from academic research, theories do not just stand on hypothetical grounds because, after their development, inherent assumptions and propositions are tested empirically in real life via such vehicles as surveys and experiments. This usually takes place more than once along different perspectives on different samples in different countries, and also through the eye and interpretation of various researchers. As practitioners expose themselves to this rich body of research-based theories and models, they usually identify with consumer behavior that they face in the marketplace, situating it within terms and phenomena long held in academic literature.

Consequently, the process might be easier for marketers who develop early on a richer interest in and engagement with academic marketing literature; this can be undertaken through adopting some theoretical perspectives that may offer marketers a base along which to examine, evaluate, and compare/contrast actual behaviors in the market with those modeled by consumer behavior theories. Such a process can support them in exploring, explaining, and predicting consumer attitudes and actions in different situations, cultures, and countries, a challenge made harder in doing business at the international and global levels.

See Also: Buying Motives/Behavior; Consumer Needs and Wants; Consumption; International Marketing Research; Marketing.

Bibliography. George E. Belch and Michael A. Belch, *Advertising and Promotion: An Integrated Marketing Communications Perspective*, 8th ed. (McGraw-Hill Irwin, 2009); E. K. Clemons and G. G. Gao, "Consumer Informedness and Diverse Consumer Purchasing Behaviors: Traditional Mass-Market Trading Down, and Trading Out into the Long Tail," *Electronic Commerce Research Applications* (v.7/1, 2007); Scott G. Dacko, *The Advanced Dictionary of Marketing* (Oxford University Press, 2008); Del I. Hawkins, David L. Mothersbaugh and Roger J. Best, *Consumer Behavior: Building Marketing Strategy* (McGraw-Hill/

Irwin, 2007); George P. Moschis, "Life Course Perspectives on Consumer Behavior," *Journal of the Academy of Marketing Science* (v.35/2, 2007); Jerry C. Olsen and J. Paul Peter, *Consumer Behavior and Marketing Strategy* (McGraw-Hill/Irwin, 2008); Patricia Mink Rath, *The Why of the Buy: Consumer Behavior and Fashion Marketing* (Fairchild, 2008); Michael R. Solomon, *Consumer Behavior: Buying, Having, and Being* (Pearson/Prentice Hall, 2009).

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Consumer Needs and Wants

Needs and wants reside within the discipline of motivation and are closely interlinked. Needs are the manifestation of physiological, personal, and/or social motives and wants are the means of fulfilling them. So, taking a simple example, an individual may need to buy a replacement car, and the car they want to buy to solve their transport problems is a brand new Jaguar. This want for a Jaguar will be based on their utilitarian expectations, for example, quality, safety and design, and their hedonic aspirations and fantasies for this brand. Accordingly, needs and wants are important constructs because they help us to understand the "what," "why," and "how" of behavioral choices that people make, individually and collectively.

The Economic Perspective

To understand needs and wants more fully, it is useful to consider them from three interpretative positions, namely (1) economic, (2) psychological, and (3) sociological and anthropological perspectives. The economic perspective maintains that needs are associated with "economic man," whereby individuals act as rational, self-maximizing, economic individuals who engage in limitless goal-orientated consumption that offers them the most satisfaction from the products and services they buy. Examining this through expectancy theory, goal-orientated consumption thus becomes driven by the expectation of achieving a desirable outcome that will satisfy consumers' needs.

In consumption, then, consumers' choice of brands is influenced by their perceptions of what they judge will offer the most positive consequences for them. Thus, for marketers, the challenge becomes one of persuading consumers that their ongoing consumption of their brands offers the best choice in "feeding" their wants and thus satisfying their needs. Inherent within this perspective is the idea that although needs may be temporarily satisfied, wants do not diminish. Instead, with the choices offered by a plethora of marketing offerings, consumers can continue to accumulate possessions without exhausting their wants. This raises some important ethical questions for marketers, which will be discussed below.

The Psychological Perspective

The psychological perspective is well-represented by the ideas of Abraham Maslow, who urged for the cultivation of higher-order needs in order for individuals to attain self-fulfillment, and, in so doing, to nurture a more caring society. Maslow argued that all human needs are innate and fragile and thus should be protected from social forces that have the potential to destroy them, for example political and economic pressures. In his well-known hierarchy of needs, Maslow makes a distinction between upper- and lower-order needs, where individuals strive toward self-actualization as they move back and forth between their physiological, safety, belongingness, and ego needs. As Maslow argued, individuals are more likely to self-actualize if these needs are cultivated, and, where they are, the contribution of such individuals in helping to create a more empathetic society is significant. In this respect, Maslow maintained that need gratification should be encouraged because of the individual and collective benefits it brings.

Marketing offerings, then, are typically based on this needs hierarchy. However, marketers have typically been selective in what they have extracted from it, which has led to criticisms of marketing that encourages individuals to pursue lifestyles where their individualistic, conspicuous consumption of brands abounds with its transient benefits, with little consideration for others.

Sociological and Anthropological Perspectives

The sociological and anthropological perspectives regard consumption as being socially determined, meaning that the social context of consumption is important. They argue that all needs share a common cultural element and they cannot be separated into physiological (lower) and psychological (upper) need states. Accordingly sociologists examine society, principally differences and distinctions, in order to understand where needs come from. For example, sociologists are interested in material culture, where goods are used as symbols to denote status and membership within a group.

While the advent of credit cards has meant that it has become much harder to judge status, as more people gain access to brands that convey social standing, sociologists are interested in how rank within groups influences need states and thus the satisfaction of wants through consumption. Consequently, fulfilling needs and wants through consumption can act as a cultural indicator, for example, marking differences in society and between groups, i.e., class and gender boundaries.

Behavior

Understanding the influence of consumers' needs and wants on their behavior, then, is inherently complex, yet this is vital for marketers. Summing up these explanations, an economic account of needs and wants would judge all needs as equal, i.e., the need for art is as important as the need for food. The psychological perspective and Maslow in particular disagree, maintaining that the status of needs is dependent on the physiological and psychological state of the individual. For example, if a person in the Western world is literally dying from thirst, then their bodily needs (physiological) and their mental faculties (psychological) will be totally dominated by the urgent need to find any drinkable fluid. In this respect we can begin to appreciate the interdependency between these two types of need states.

Hence we can also begin to understand the complex relationships between mental and physical needs-orientated behavior, for example, compulsive eating and striving to belong, purchasing body-kits for cars and self-esteem. Similarly, anthropologists and sociologists agree, physiological and psychological needs, and their satisfaction, cannot be separated. They conclude that, within a social context, a person in Western society, dying from thirst, would be unthinkable, and therefore if this did happen it would be reflective of a wider Western societal problem, where the needs of an impoverished group were not being recognized or met. This, in itself, mirrors the status attached to the ability to consume freely in the endless pursuit of needs, contrasted with those who are economically and socially excluded and thus are unable to partake in this cultural ritual.

Ethical Questions

Consumer needs and wants thus raise important ethical questions. Principally, economic growth requires consumption to maintain it, and conspicuous consumption in particular. Consequently mass consumer society has emerged as the major source of economic and social influence. It has been argued that consumers have been socialized into thinking that they want more and more—that they have a right for their needs to be satisfied, and that only though fulfilling their wants, albeit temporarily, will they feel a sense of accomplishment. Yet this focus on needs satisfaction through conspicuous consumption has been charged with undermining the morals of society by encouraging "false values," materialism, unrestrained choice and indulgence, and isolating individuals from their traditional communities as they seek "never-to-be fulfilled" promises from their consumption choices, which, in turn, feeds consumers' anxiety and self-doubt, undermining their sense of subjective well-being, and so reducing their levels of happiness with their lives.

However, this bleak account of needs fulfillment and its consequences for individuals and society assumes that all consumers are passive recipients of marketing messages. It fails to appreciate more contemporary understanding of consumers and their cultures of consumption, where consumerism is regarded as a process of shared, social learning, laden with emotion, symbolic meaning, and identity, and consumers less as culture bearers and more as culture producers. Thus, through marketing offerings premised on needs and wants, consumers possess an assorted repertoire of mythic and symbolic resources that enable them to play with their utilitarian and hedonic aspirations on all levels.

Yet overall, it has to be acknowledged that marketing's emphasis on needs and wants creates a culture that transforms individuals into consumers living in consumption communities, socialized into the mindset of consumerism—where Coca-Cola rather than water is "the real thing."

See Also: Advertising; Branding; Buying Motives/Behavior; Consumer Behavior; Consumption; Lifestyle Research; Marketing.

Bibliography. E. J. Arnould and C. J. Thompson, "Consumer Culture Theory (CCT): Twenty Years of Research," *Journal of Consumer Research* (v.31, 2005); Z. Bauman, *The Individualized Society* (Blackwell, 2001); R. Belk, "Possessions and the Extended Self," *Journal of Consumer Research* (v.15, 1988); A. Borgmann, "The Moral Complexion of Consumption," *Journal of Consumer Research* (v.26, 2000); M. Douglas and B. Isherwood, *The World of Goods: Towards an Anthropology of Consumption* (Allen Lane, 1978); A. H. Maslow, *Motivation and Personality* (Harper Row, 1970 [1954]); M. Poster, ed., *Jean Baudrillard: Selected Writings* (Polity Press, 1988).

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Consumer Surveys

Within consumer-based economies and political systems, the importance of consumer opinion and its role in predicting consumer behavior is often a key factor in decision-making processes within businesses, by providers of services such as healthcare, and by governments. In general, consumer surveys intend to measure consumer attitudes, expectations, and preferences and attempt to predict future consumer behavior. The tendency to measure instead what the surveyed consumers are prepared to admit to—either to the survey team or to themselves—is an ever-present danger, and guarding against this is a key factor in the design of robust, reliable sampling strategies, data collection systems, and analysis. The link between stated consumer opinion and future consumer behavior is not simple and the interpretation of consumer survey data is a key area of expertise.

The identification of an appropriate sample group and/or an understanding of the implications of choosing a particular sample group is key. Sample groups for consumer survey research can be considered in two broad groups: Those designed to provide a quick and relatively inexpensive overview and those that use stratified, sometimes randomized sampling techniques to provide results that can be generalized to form the basis of conclusions about the population as a whole. In general, this type of consumer survey aims for a representative sample of the consumer group who are likely to be geographically disparate. Both approaches are useful—the key to successful consumer survey work lies in understanding the differences inherent within the two approaches. Conversely, contradictory questions may be included deliberately, specifically to identify consumers whose responses are potentially unreliable.

Either of the major sampling strategies may be used with a variety of data collection methods, focusing around the delivery of direct and indirect questions in person, by telephone, or online. The design of robust questions for the collection of consumer data is the second key factor that influences the validity and reliability of the data and their likely link to future consumer behavior. Avoiding common pitfalls—questions that make assumptions about consumers' knowledge/opinion, double questions, or contradictory questions—is important alongside the design of questions that will accommodate the full range of answers while providing the means to summarize the resultant data.

Direct verbal questioning forms the basis of consumer intercept surveys, typically carried out in the street, within shopping centers or retail parks, or other areas where access to a large group of target consumers is likely. Consumer intercept surveys begin with screening questions to confirm that the respondent is a suitable member of the appropriate sample group, followed by the administration of the full survey instrument, and concluding with thanks and either a small gift or monetary reward as closure. Consumer intercept surveys may be used with simple product testing or comparison techniques, which on occasion offers an advantage over telephone surveys, although the basic premise is similar.

Telephone, postal, and online surveys are commonly used and follow similar principles, being primarily influenced by the sampling strategy, the questions developed, and the response rates, which vary widely. Online consumer survey work is cheap, convenient, and may be appropriate for certain technical areas or where a predetermined sample group is available. The difficulties of obtaining a representative sample online remain a key limitation, however.

Analysis of consumer surveys may include the numerical collation of responses, the cross-linking of responses from different questions or groups, and/or the drawing out of direct quotes to give a feel for the people behind the statistics. In general, the analysis of data from consumer surveys follows the broad, overarching principles of data analysis, based around the identified research questions and the levels of measurement employed. The interpretation of results is also an area where the limitations of the initial target sample merit consideration and the implications of, for example, a self-selecting sample should give perspective to any interpretation of the results.

See Also: Buying Motives/Behavior; Consumer Behavior; Consumer Needs and Wants; Focus Groups; International Marketing Research; Lifestyle Research; Marketing; Market Research.

Bibliography. P. Chisnall, *Marketing Research* (McGraw Hill Higher Education, 2004); J. Collis and R. Hussey, *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*, 2nd ed. (Palgrave Macmillan, 2003); M. B. Davies, *Doing a Successful Research Project: Using Qualitative or Quantitative Methods* (Palgrave Macmillan, 2007): M. Easterby-Smith, R, Thorpe, and A. Lowe, *Management Research*, 2nd ed. (Sage, 2002); D. George and P. Mallory, *SPSS for Windows Step by Step: A Simple Guide* (Allyn and Bacon, 2001); J. Gill and P. Johnson, *Research Methods for Managers,* 3rd ed. (Paul Chapman, 2002); W. Gordon, *Goodthinking—A Guide to Qualitative Research* (NTC Publications, 1999); D. E. Gray, *Doing Research in the Real World* (Sage, 2004).

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Consumption

The term *consumption* is used in different academic disciplines in different ways. Depending on the specific academic background, people ask how supply and demand and, in other words, production and consumption in economy and society are related to each other. Or they investigate how individual people, social classes, or societies realize their consumption practices. The consumption practices illuminate differing empirical answers concerning how much actors spend for specific goods and services. Furthermore, consumption research inquires into the preference structures of individual actors, households, or classes and their corresponding rationalities that lead consumption behavior. How consistent are preference structures due to changing empirical backgrounds of time, space, and related culture? Finally, consumption research is also concerned with the relationship between earnings and spending. Are observed consumption practices directly related to a specific level of income and other available financial resources and vice versa? Which socioeconomic context variables (historical time, geographical framework) specify the relationship and in which way do attributes such as age, gender, class, occupation, and lifestyle have their own impacts on the way in which consumption is realized?

Economics has a long history of changing concepts dealing with consumption. Adam Smith argued in *The Wealth of Nations* that "consumption is the sole end and purpose of all production" while later, John-Baptiste Say in his so-called law of supply and demand saw production as the real ground-work of wealth or value. Criticizing Adam Smith, John-Baptiste Say argued:

> How great, then, must be the mistake of those, who, on observing the obvious fact, that the production always equals the consumption, as it must necessarily do, since a thing can not be consumed before it is produced, have confounded the cause with the effect, and laid it down as a maxim, that consumption originates production.

This statement has evolved to textbook knowledge as "supply creates its own demand," a formulation by which John Maynard Keynes had summarized Say's law, although ongoing voices say that Say's thought was more differentiated than such shorthand definition suggests. Keynes turned previous discussion on its head by strengthening the role of customers at a macroeconomic level, which led to the formulation that demand creates its own supply. What Keynes had in mind was that economic growth can be created best by strengthening incentives for consumption. For Keynes, the sphere of consumption was based upon socio-psychological dispositions of human agents which are remote from the economic theory existing before.

Past Consumption Research

During the last 70 years economic consumption research has moved in many different directions. While Keynes attributed the cognitive dimension of perceptions in combination with issues of uncertainties to consumption, other authors strengthened other aspects. Franco Modigliani stressed the aspect that consumers differ concerning their decisions within their life cycles; J. K. Galbraith linked consumption to a historically new phenomenon of an affluent society, while T. Scitovsky bridged the discussion to human needs. The later points of discussion overlapped clearly with historical and sociological views dealing with consumption.

Historians investigate consumption issues from many different perspectives. They ask which specific goods are used and consumed in different centuries, how and why goods are bought, the evolution of consumption patterns within socioeconomic changes, and how different societies are constituted and portrayed by specific "regimes" of consumption. Historians also produce analytic stories of specific consumption goods (e.g., history of tea consumption) or practices of consumption (e.g., history of cooking or traveling) that serve as pieces of historical change and that are simultaneously items of historical diagnosis where particular elements of analysis stand as examples for the whole. Max Weber discussed the rise of industrial capitalism in relation to Protestant ethics and the inherent consumption ascetics, but in the 20th century historians came up with labels of a "consumer society," which had changed the previous face according to the progress and spirit of changing times.

A pioneer of socioeconomic consumption research was Thorstein B. Veblen, who was a representative of early American institutionalism. Veblen, who also discussed limitations of marginal utility theory and reflected on the organization of science, authored *The Theory of the Leisure Class* (1899), the first and most famous book among his seven book publications. It is now considered a sociology classic, though its focus was as much economic, anthropological, and psychological as sociological. In the book, Veblen coined the term *conspicuous consumption* to describe tendencies of economic activities to be driven by nonutilitarian, even impractical motives that are more akin to tribal and prehistoric behavior than rational economics.

Veblen's discussion of conspicuous consumption went well beyond possession of material objects. He extended his socio-psychological analyses to religious practices, gender relations, sports, the cultivation of accents, manners, and other factors not widely studied at the time. He was highly critical of the leisure class, including its treatment of women. He anticipated the trophy wife phenomenon of the modern leisure class by noting that marriage was largely another acquisitive activity for men of the leisure class. Veblen's discussion was a starting point of subsequent debate, which we find in the interface between consumption studies, and research on lifestyles and social inequalities.

New Research

Current consumption research is increasingly interdisciplinary. Among many specific perspectives, five empirical research areas are of specific significance. First, the links between consumption behavior and social order are of specific research interest. Drawing the landscape of local, regional, national, and international consumption profiles in contrast to different classes, household types, lifestyles and their modifications over time is specifically on the agenda. The work of P. Bourdieu provides an excellent example of how well an empirical study of consumption patterns can serve as background diagnosis of a society. Inequalities become visible in terms of material and cultural disparities within vertical and horizontal disparities through differing consumption patterns.

Microeconomic and microsociological patterns and conditions of consumption behavior also need to be fostered for further exploitation. This research area involves social conditions of learned behavior as well as further investigation into decision-making structures and contextualizing network structures that help to decode the grammar of human behavior relevant for consumption processes, including intentional refusal of consumption by saving or philanthropy.

A topic that is getting more attention is the role of consumers as active agents. What is the role of a consumer in society, how can he/she be protected by legal rights strengthening the autonomy of consumers compared to traders or producers? Further, consumers see themselves increasingly as political decision makers or voters through their own decision for (and against) specific products or labels. Since markets often offer a variety of competing products to satisfy a single need, consumers decide for boycott of specific brands if negative secondary information is available, e.g., discrimination practices at the workplace or negative treatment of the natural environment.

Another area of research explores the social code of consumption processes at a symbolic level, or which signs are transported for which purposes. J. Baudrillard wrote:

> Consumption is neither a material practice, nor a phenomenology of "affluence." It is not defined by the food we eat, the clothes we wear, the car we can drive, nor by the visual and oral substance of images and messages, but in the organization of all this as signifying substance. Consumption is the virtual totality of all objects and message presently constituted in a more or less coherent discourse. Consumption, in so far as it is meaningful, is a systematic art of the manipulation of signs.

Consumption processes and their diffusion modes seem to have overlaps to diffusion processes of social trends and social fashions. The research area must integrate elements of thought that have been provided by separate disciplines (e.g., sociology, psychology, consumption behavior, history, economics, anthropology, neurobiology) in order to reintegrate individual aspects for a better theory of diffusion processes of consumption behavior.

Of further interest are those research topics that treat consumption as part of a changing consumption society, which is itself part of international processes of homogenization and heterogenization. An increasing trend toward so-called issues of sustainability and greening of industry and society creates new demands, provides new business opportunities, and changes consumers' profiles and their consumption patterns. Especially, debate on globalization is asking if consumption practices occur at an international level that are elsewhere labeled as phenomena of an ongoing process of "McDonaldization." McDonaldization processes can be highlighted in different fields of consumption practices, e.g., in food industries, textile industries, tourism, entertainment industries, by credit cards, or in many other fields of application.

See Also: Advertising; Branding; Buying Motives/Behavior; Consumer Behavior; Consumer Needs and Wants; Lifestyle Research; Marketing; Status.

Bibliography. J. Baudrillard, *The System of Objects* (Polity Press, 1988); D. Bögenhold, "Social Inequality and the Sociology of Life Style. Material and Cultural Aspects of Social Stratification," *American Journal of Economics and Sociology* (v.60, 2001); P. Bourdieu, *Distinction: A Social Critique of the Judgment of Taste* (Harvard University Press, 1984); J. K. Galbraith, *The Affluent Society* (Houghton Mifflin, 1958); J. M. Keynes, *The General Theory of Employment, Interest and Money* (Macmillan, 1936); F. Modigliani, *The Collected Papers of Franco Modigliani, Vol. 2: The Life Cycle Hypothesis of Saving* (MIT Press, 1980); A. Offer, *The Challenge of Affluence: Self-Control and Well-Being in the United States and Britain Since 1950* (Oxford University Press, 2007); G. Ritzer: *The McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life* (Pine Forge Press, 1995); J.-B. Say, *A Treatise on Political Economy* (Lippingcott, Grambo & Co., 1855); T. Scitovsky, *The Joyless Economy: An Inquiry Into Human Satisfaction and Consumer Dissatisfaction* (Oxford University Press, 1976); A. Smith, *The Wealth of Nations* (Dent & Dutton, 1970); N. Stehr, *Moral Markets: How Knowledge and Affluence Change Consumers and Products* (Paradigm Publishers, 2008); T. B. Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* (Macmillan, 1889).

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Contagion

Contagion is related to extremely high levels of international financial co-movements. However, there is not consensus in academic literature about what contagion represents. It denotes an increase in probability that a crisis in one country is caused by a crisis in another country. Second, it involves the asset price spill-over effect from a crisis-stricken country to others. Third, if fundamentals do not provide any justification for a significant increase in cross-country price and quantity co-movements there must a contagion involved. Finally, international transmission mechanisms will have stronger impact during the financial crisis. Nevertheless, the contagion effect must change the level of co-movements and unconditional market volatilities. Otherwise, a strong cross-country conditional correlation during a shock does not constitute contagion.

Recent Crises

The frequent outbreaks of crises in recent financial history have led to a widespread interest in academic circles. The Mexican crisis commenced on December 20, 1994, initiated by a 12.7 percent decline in the national currency's value. The peso was allowed to freely float in order to avoid the depletion of foreign exchange reserves. In addition, the financial system was supported by a $52 billion rescue package provided by the U.S. government. Even though this incident did not have global repercussions, the so-called Asian crisis initiated by the Thai baht's 10 percent devaluation in June 1997 did send a ripple throughout the region. Other currencies in the vicinity were severely hit, with the exception of the Singaporean dollar and the Taiwanese dollar. Due to its currency board policy, the Hong Kong dollar was pegged to the U.S. dollar, but the economy suffered deflation, which was an alternative correction mechanism. The International Monetary Fund (IMF) provided substantial bail-out packages to help these countries restructure economies and introduce more effective market models.

The Malaysian prime minister, Dr. Mahathir bin Mohamad, blamed wealthy speculators like George Soros for destabilizing emerging markets. However, a study conducted in the Korean Stock Exchange (KSE) indicates that during the crisis foreign investors were not buying (selling) stocks based on the previous increase (decrease) in the market. In addition, the stock return of the previous day did not have any predicting power about the foreign investors' trade the next day. By contrast, before the onset of the crisis foreign investors demonstrated positive feedback trading at KSE. The root of the Asian crisis may be found in the short-term lending of banks exposed to these markets. When Korea stopped defending its foreign exchange parity on November 14, 1997, exposed banks had a minus 1.5 percent abnormal return (compared with minus 0.71 percent for unexposed counterparts). When the bailout agreement with IMF became evident on December 1, 2007, the abnormal return was 2.07 percent (as opposed to 1.22 percent for parties unexposed to the Korean market). Nevertheless, the differences between these bank groups were statistically insignificant.

The impact of the Asian crisis was mainly regional, unlike the subsequently ensuing Brazilian currency and Russian bond crises in 1998. Speculators diverted their attention from Asian currency to the Brazilian real, assuming that the strong currency policy was not matched by appropriate fiscal and monetary austerity.

The doubling of interest rates to 43 percent and belated tax reforms were not sufficient to reverse the decline. Immediate investors' response was capital flight and an apparent loss of confidence in emerging markets. On August 17, 1998, the Russian government devalued the ruble and publicly announced its decision to place a moratorium on debt repayments, which was conducive to an increase in spreads between bond issues in emerging and developed economies, respectively. Foreign investors, such as the Long Term Capital Management (LTCM) hedge funds, were severely affected. In order to counteract the loss of $550 million on August 21, 1998, LTCM decided to seek recapitalization. In view of the size of this fund (notional principal in excess of $1 trillion) the Federal Reserve decided to support the $3.65 billion bailout package provided by 15 financial institutions in September 1998. The Brazilian real crisis did not only have short-term ramifications. As part of efforts to improve deteriorating terms of trade with the largest trade partner in South America and support economic growth, Argentina was forced to devalue its national currency in 2001.

In order to evaluate the ramifications of the LTCM bailout, market participants can be separated into companies that took part in the LTCM bailout, financial companies that were directly exposed to LTCM but never participated in the bailout deal, banks that do not have any exposure to hedge funds, and banks that do have exposure to hedge funds but not LTCM. It was found that following the bailout announcement on September 24, 1998, the largest negative abnormal return was recorded by banks directly involved in the bailouts and those that had been exposed to hedge funds. Financial institutions with either indirect exposure to LTCM or no exposure to hedge funds were not as adversely affected.

See Also: Asian Financial Crisis; Brazil; Currency; Globalization; International Monetary Fund; Mexico; Russia; Tequila Effect.

Bibliography. H. Choe, B.-C. Kho, and R.,M. Stulz, “Do Foreign Investors Destabilize Stock Markets? The Korean Experience in 1997,” *Journal of Financial Economics* (1999); K. J. Forbes and R. Rigobon, “No Contagion, Only Interdependence: Measuring Stock Market Movements,” *Journal of Finance* (2002); J. M. Halstead, S. Hedge, and L. S. Klein, “Hedge Fund Crisis and Financial Contagion: Evidence from Long Term Capital Management,” *Journal of Alternative Investments* (2005); B.-C. Kho, D. Lee, and R. M. Stulz, “U.S. Banks, Crises, and Bailouts: From Mexico to LTCM,” *American Economic Review* (2000); M. Pericoli and M. Sbracia, “A Primer on Financial Contagion,” *Journal of Economic Surveys* (2003); A. C. Shapiro, *Multinational Financial Management* (John Wiley & Sons, 2006).

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Context

The terms *high context* and *low context* were popularized by American anthropologist Edward T. Hall to describe the broad-brush cultural differences that can exist between different societies. During the early 1950s, Hall defined culture as a means of communication that takes place through symbols, or “silent languages.” He identified five such languages, including the languages of time, space, material goods, friendship, and agreements. As he continued his research, Hall found common patterns in the ways that people in different cultures and societies used these five different languages: He observed that some people tended to communicate in a relatively explicit fashion, while others communicate effectively with much more implicit information. Drawing on these findings, Hall proposed a distinction between what he called “high context” and “low context” cultures.

In accordance with this classification system, a high-context culture or society is one whose members establish a few close connections among each other over a long period of time. High-context cultures tend to place a great emphasis on friends and intersecting networks of long-term relationships based on trust and mutual understanding. This high degree of shared understanding means that members of high-context cultures are able to communicate with each other effectively without the need for explicit information: Many aspects of cultural behavior are implicit since most members have learned what to do and what to think over their many years of interaction with each other. Since knowledge of how to behave in a high-context culture is hidden, it is difficult for outsiders to understand the rules of a society, and it is often difficult for the insider members of high-context cultures to explain these rules to outsiders. The time needed to create close relationships acts as a further barrier to integration.

By contrast, the members of a low-context culture or society tend to establish many connections with each other. These connections, however, are typically short-lived in duration; they are also comparatively more superficial than relationships in high-context cultures insofar as they are based not on friendship, but often only serve specific purposes. In low-context societies, cultural behavior and beliefs may need to be spelled out explicitly so that members of society know how to behave. Compared to members of high-context societies, people in low-context cultures tend to be more precise, specific, and require more explicit information in order to communicate effectively. Unlike high-context cultures, low-context ones are relatively easier for outsiders to enter: Much of the information that they need to participate is highly visible in the cultural environment, and they can form relationships relatively quickly.

Hall’s concepts of high and low context can be helpful in describing the cultural behavior of specific countries. The United States, for example, can be seen as a low-context culture. Americans tend to communicate in explicit terms: They value candor and frank discussion, and are likely to voice disagreement openly. Plain speaking—the act of saying exactly what one thinks—is a virtuous trait in the eyes of many Americans. In the business world, Americans tend to make contacts easily and casually, and negotiate contracts that are explicit, complete, and literal.

Compared to the United States, France is a more high-context culture. In French society, relationship building and social contacts are of great importance. Business negotiations are typically preceded by a lengthy process of establishing trust. This process commonly includes dinners and lunches that are not only opportunities to discuss business but also have a ceremonial quality. The contents of French contracts are typically open to interpretation.

Japan is generally considered to be a very high-context culture where effective communication is possible through relatively little explicit information. An example of high-context Japanese communication is *haragai*, a form of guttural speech that seems incomprehensible to Westerners but that represents for the Japanese an effective medium of communication. Typical of a high-context culture, in which relatively less overt communication is needed, Japanese business negotiations are conducted without explicit statements of agreement and disagreement: To make an overt and blunt statement when subtle communication would suffice is considered abrupt and rude in Japanese society.

Not surprisingly, these different ways of communicating have at times led to cross-cultural problems in communication. Americans often complain that the Japanese are reluctant to voice direct disagreement—they appear never to say no. While it may be true that the Japanese prefer not to say *no* in the explicit fashion preferred by Americans, it is incorrect to say that they do not express disagreement. It would be more precise to say that their high-context expressions of disagreement are difficult for members of low-context cultures to understand.

Some critics of Hall argue that, although it is sometimes useful to describe some aspects of a culture as high or low context, it is misguided to apply the terms to entire cultures because societies can contain both forms of context. "High" and "low," argue the critics, are less relevant as a description of an entire people, and more useful to describe and understand particular situations and environments.

See Also: Acculturation; Cross-Cultural Research; Cultural Norms and Scripts; Culture-Specific Values; Silent Language of Hall (Nonverbal Communication); Space.

Bibliography. Richard R. Gesteland, *Cross-cultural Business Behaviour—Marketing, Negotiating, Sourcing and Managing Across Cultures* (Copenhagen Business School, 2002); Edward T. Hall and Mildred R. Hall, *Understanding Cultural Differences* (Intercultural Press, 1990); Susan C. Schneider and Jean-Louis Barsoux, *Managing Across Cultures* (Prentice Hall/Financial Times, 2003).

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Contract Repudiation

Repudiation is a term used to describe circumstances where a party acts or expresses intent not to accept the obligation of a contract, hence the term *contract repudiation*. Repudiation amounts to a breach of contract where the refusal to perform is clear. Refusal to perform may be evidenced by words or voluntary acts, but it must be distinct, unequivocal, and absolute. In today's global economy, business law is a global practice, and the obligations of contracts have become increasingly important; therefore, contract repudiation often leaves at least one party to a contract dissatisfied.

Generally, a definite and unconditional repudiation of a contract by a party, communicated to the other, is a breach of contract, creating an immediate cause of action in a court of law. This is so even if it takes place long before the time prescribed for the promised performance; further, before conditions specified in the promise have even occurred. Ironically, contract repudiation should be encouraged where the promisor is able to profit from his default, so long as he or she places the promisee in as good a position as the promisee would have been in had performance been rendered. Typically, a breach of contract entitles the other party to compensation for the loss sustained as a consequence of the breach. But with the exceptions and subject to express contractual rights of determination, a breach of contract by one party does not discharge the other party from performance of his or her unperformed obligations. Otherwise stated, repudiation by one party standing alone does not terminate the contract. It takes two to end it: Repudiation on one end, and acceptance of repudiation on the other.

There are, however, two circumstances where a breach of contract by one party entitles the other to elect to put an end to all remaining primary obligations of both parties. The first is where the contracting parties have agreed, whether by express words or implication of law, that any breach of the contractual term in question shall entitle the other party to terminate the contract—where there is a breach of condition. The second is where the event resulting from the breach of contract has the effect of depriving the other party of a substantial portion of the benefit as intended by the contract. In other words, where there is a "fundamental breach."

When one party elects to put an end to all remaining primary obligations of both parties, it is referred to as the determination or rescission of the contract, or as treating the contract as "repudiated" or "accepting the repudiation" of the contract breaker. Under Florida law, for example, where an obligor repudiates a duty before he has committed a breach of contract by nonperformance, and before he or she has received all of the agreed exchange for it, his or her repudiation alone gives rise to a claim for damages. The contract is not rescinded as from the beginning, however. But both parties are discharged from further performing obligations under the contract. Still, rights that have already been unconditionally acquired are not divested or discharged, and a full arbitration clause will normally continue to apply to disputes arising upon the acceptance of repudiation. In rare circumstances, advance payment may be recovered—that is, if the contractor has provided no consideration in the nature of part performance. Such an instance is made clear in the realm of anticipatory repudiation.

Anticipatory repudiation is a term in the law of contracts that describes a declaration by one party to a contract, the promising party, that they do not intend to live up to their obligations under the contract. Where such an event occurs, the other party to the contract, the performing party, is excused from having to fulfill their obligations. The repudiation, however, can be retracted by the promising party so long as there has been no material change in the position of the performing party; further, a retraction of the repudiation restores the performer's obligation to perform on the contract.

In the event that the promising party's repudiation makes it impossible to fulfill its promise, then retraction is not possible and no act by the promising party can restore the performing party's obligations. For example, if Willie promises to give Guillermo his new golf clubs in exchange for Guillermo's building him a new residence, but Willie sells his golf clubs to Chuck before Guillermo commences the job, Willie's act constitutes an anticipatory repudiation. Essentially, Guillermo is excused from performing. Once the golf clubs have left Willie's possession, it is impossible for Willie to fulfill his promise to give Guillermo his new golf clubs.

In the global markets of today, contract repudiation can have devastating effects not only on individuals, but also on the local economy. Because business in the United States is very much intertwined with business in several other economies, a strong foreign presence in international markets may help to make up for a downturn in the local economy. As a result, the performance of contractual obligations is of utmost importance.

See Also: Arbitration; Contracts; International Law; Mediation.

Bibliography. Gerald E. Berendt et al., *Contract Law and Practice* (Matthew Bender and Company, 2007); Amy Hilsman Kastely, Deborah Waire Post, and Sharon Kang Hom, *Contracting Law*, 3rd ed. (Carolina Academic Press, 2005); Restatement (Second) Contracts § 253.

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Contracts

A contract is an agreement among two or more parties. It includes a promise, or mutual set of promises, freely agreed to and in exchange for something of value. Once properly set in place, the agreement will be enforced by the court. We will now take a closer look at how contracts are formed, how contracts are voided and how contracts are enforced by the courts.

What Makes a Contract?

A contract is formed when the two essential contract elements are in place: mutual assent and consideration. Mutual assent refers to an offer made by one party, plus the acceptance of this offer by the other party. Consideration is something of value: Each party must promise to give something of value to the other in order to bind the contract. When mutual assent and consideration come together, the law claims there has been a "meeting of the minds" and a contract is formed. Memorializing it on paper will make it more certain to be enforced in court, but an oral contract is as legally binding as a written one.

When determining if a party has made or accepted an offer, the courts use an objective interpretation of contract formation. The court considers: Would the reasonable person believe she or he had just entered into an agreement? A defense of "but that's not what I really meant" will not move the court. The court makes no attempt to peer into a person's mind, it looks only at behavior. If Tom behaves in a way to lead Fred to reasonably conclude that Tom and Fred have a contract, the court will likely honor Fred's reasonable belief.

The creation of a contract begins with the offer. In order to fulfill the legal definition of an offer, it must convey that the one making the offer (the offeror) has a serious intention to enter a contract; to be bound to the agreement if the offer is accepted. The courts employ their objective standard here: Was it reasonable to believe that the offer was sincere? When Tom says to Fred, "I'm so sick of repairing my house, I'd sell it for a dollar," Fred has no reasonable expectation that he may now pull four quarters out of his pocket and complete a cash transaction for Tom's home.

The key characteristic of a legal offer is its completeness: It contains all the essential components of the deal and nothing of substance remains to be negotiated. It should be specific in terms of quantity, price, and description. It should state who may accept and spell out the appropriate manner of acceptance, including the time limit for acceptance. And it must be communicated to the potential buyer (offeree). An offer is not an offer until the potential buyer hears it.

The offeror is the master of the offer: She or he is free to revoke the offer at any time prior to a communication of acceptance, even if the offeror has stated that the offer will remain open. For example, let's assume you are a musician and you enter negotiations to sell a recording to Bighits Records. You tell Bighits, "I'll give you the exclusive right to buy my recording for $50,000 at any time in the next 90 days." Later you change your mind, and send a letter to Bighits revoking the offer. The offer is now null and void, even though we are still within the 90 days.

As is often the case within the law, this general rule is subject to certain limits. The offer may not be revoked if Bighits gave something of value in order to hold the offer open. Assume Bighits responds to your initial offer and gives you $5,000 to keep your offer open for the full 90 days. Now you may no longer revoke your offer to sell the recording. This "option contract" is a contract in and of itself: you offered to sell a right; Bighits accepted. Both parties give something of value to bind the deal: Bighits gave cash; you gave up your right to sell to anyone but Bighits. All the elements of a contract are in place and the courts will enforce it as such. Acceptance of the offer will complete the requirement of mutual assent. Again, the courts employ an objective standard: It is the offeree's behavior that matters. The court will not be moved by a statement that one did not intend to accept if the offeror was justified in believing the offer had been accepted.

Just as an offer must conform to certain standards to fulfill the legal definition of an offer, an acceptance also must meet certain standards. As the master of the offer, the offeror sets the specifics of most of these standards. The offeror controls when the offer may be accepted. The offer may normally be accepted until the offer is overtly terminated or until the end of the stated life of the offer (i.e., "this offer is good for the next 90 days").

The offeror also controls how the offer may be accepted, determining what medium should be used to communicate the acceptance, be it fax, mail, or some other means. There is an automatic implication that whatever medium was used to make the offer is an authorized medium. According to the widely adopted "mailbox rule," if the offer is accepted via an authorized medium, that offer becomes binding the instant it is dispatched. If an unauthorized medium is employed, the acceptance is not binding until it is received. Thus, if the U.S. mail is authorized, an acceptance is binding the second it is dropped into a mailbox, and the offer could not be revoked while the letter was in the mail. However, if U.S. mail was not authorized, the offeror could revoke the offer while the letter was in transit. It was delivered via an unauthorized medium and would not become binding until received.

One may not accept an offer while simultaneously attempting to alter the terms of the offer. The "mirror image rule" requires that an acceptance be unequivocal. Any attempt at alteration converts the acceptance into a counteroffer. So, Sam Seller offers to sell four tires to Dave Driver for the sum of $500. Dave replies by stating, "I accept your offer, but I want the tires mounted with no change in price." Legally, Dave has rejected the offer, then made a counteroffer. Sam is now the recipient of an offer that he is free to accept or reject. If Sam rejects, Dave cannot attempt to back up and say, "I now accept your original offer." Sam's original offer disappeared the instant Dave countered.

An acceptance need not be a completely mechanical "I accept" in order to furnish mutual assent. For example, Dave could express dissatisfaction with the deal and it would still be an acceptance. ("I think that is highway robbery, but I accept anyway.") Dave could make an implicit term explicit. ("I accept, assuming that the tires meet U.S. government safety guidelines.") And the inclusion of a request within Dave's acceptance does not automatically convert it to a counteroffer. ("I accept, but I would like you to consider mounting the tires for no additional charge.")

What Is Consideration?

The sine quo non of any contract is consideration. It is the glue that holds the contract together. Consideration is something that is (a) a detriment to the one accepting, (b) induced by the one offering, and (c) given in exchange—it is a promise for a promise. When a court decides if something does or does not act as consideration, the key is the detriment to the one giving the consideration, not the benefit to the one receiving. An example will clarify why the law looks at it this way. August Uncle makes an offer to Neal Nephew: "If you don't drink alcohol until your 25th birthday, I'll give you $10,000." Neal accepts in an unequivocal fashion and follows through on his promise. On Neal's 25th birthday, August states, "I'm not going to give you the $10,000. After all, I derived no benefit from your behavior. Therefore I owe you nothing."

A court will not allow August to weasel out of his obligation because he did not benefit. August was the master of this offer. The law will not allow him to rewrite the terms when the moment comes for him to perform. August also loses if he argues that Neal suffered no loss by abstaining. Neal sacrificed a clear legal right—the right to consume alcohol. Giving up this right is a legal detriment to Neal. Neal's adherence to this obligation and acceptance of this detriment is the glue that holds this entire agreement together. That is the consideration he offered in exchange for $10,000. That consideration makes the entire contract binding on both parties.

What Breaks a Contract?

The issues here fall into two categories. The first deals with the parties involved. The law recognizes that certain people may not form a contract: they lack "contract capacity." The second category deals with the facts involved. The basic suppositions of fact that support the contract may have been misunderstood or may change through no fault of the parties.

As politically incorrect as it may be, every law student is taught to remember that people who may not form a contract are described by the "three i's": infants, idiots, and the intoxicated. The legal adage is that one contracts with an infant (person below the age of 18) at one's own peril. An adult contracting with a child will be held to his promises. Yet the child may disaffirm the same contract at any time prior to his/her 18th birthday and even for a "reasonable period" thereafter.

If you form a contract with one who is mentally incapacitated—either by level of IQ or level of intoxication—the law is not so clear. Generally speaking, if you were reasonable in assuming that the other party had the capacity to contract, the contract will be enforced. But if you knew or should have known that the other party may be compromised, that other party will be able to void the contract. The reasoning is fairly straightforward. The law expects a certain amount of prudence on the part of one forming a contract. For example, it is a simple matter to ensure that you are not forming a contract with a child: You insist on seeing a birth certificate or other proof of age. Not so with mental capacity. It is possible for one who is incapacitated to appear within the bounds of "normal" on some occasions and to some observers. If you formed a contract with the reasonable expectation that the other party had the capacity to contract, the court will support that reasonable expectation.

Mistakes concerning, or alterations in, the basic facts surrounding a contract may void that contract. For a mistake of fact to void a contract, that mistake must demonstrate three qualities: the mistake must be mutual, the mistake must have a material effect on the agreement, and the risk of the mistake must not have been assumed by the one attempting to void the contract. For example, let's assume Ben Buyer agrees to purchase a cow from Dan Dairyman. Dan and Ben negotiate a price based on the number of calves the cow is expected to produce over her lifespan. After the agreement is made, it is discovered that the cow is sterile and incapable of producing offspring. Here, the mistake is mutual: Neither Ben nor Dan had an accurate understanding. The impact is material: A cow capable of breeding is worth several times more than a one that is not. And Ben did not agree to the risk. He did not negotiate to buy an animal "as is," but negotiated specifically to buy breed stock. Under these circumstances, Ben may rescind this contract for "mutual mistake."

Contracts may also be rescinded if a change in the basic facts makes performance of the contract impossible or if the change frustrates the contract's basic purpose. "Impossibility" is exactly what it sounds like: it becomes impossible for one party to perform. Two people contract for the rental of a hall for a gathering. Prior to the day of the gathering, the hall burns down. Performance has become impossible and the contract is rescinded as a matter of law.

"Frustration of essential purpose" refers to a change in basic facts causing the entire agreement to become irrelevant. To use a classic case from England: A royal coronation was scheduled and a parade route established. Many people with homes along the route offered their houses for rent. These rentals were for just a single day—the day of the coronation. When the coronation was postponed, the original purpose for the rental contracts disappeared. The courts voided the contracts using a line of reasoning we have seen before: The renters did not contract to assume this risk. In such a set of circumstances, the court will often void a contract.

Is a Written Contract Required?

The general rule is that an oral agreement is as much a contract as a written agreement. However, the Statute of Frauds, first enacted in England in 1677, requires that certain agreements must be evidenced by writing in order to be enforceable. Every state in the United States has enacted some form of this statute. While the coverage alters from jurisdiction to jurisdiction, common provisions include the following:

- Sale of an interest in land (not only a transfer of ownership of real property, but also leases of over a year; mineral rights; easements; etc.)
- Promises to pay the debts of another; promise by an executor to pay the debts of an estate
- Promises in consideration of marriage
- A promise that cannot be performed within one year
- Sale of goods at a price of $500 or more

It is important to note that courts may be fairly expansive in what is termed "written evidence." A single, formal document labeled "contract" is not required. If one can piece together a paper trail of letters, e-mails, checks, and the like that demonstrate that an agreement was in place, this may fulfill the requirement of written evidence.

How Are Contracts Enforced?

If one party to the contract does not live up to a promise, that party is said to have breached and will likely owe damages to the disappointed party. What the disappointed party often wants—but rarely receives—is specific performance: An order from the court that the breaching party must deliver on the promise. Specific performance is usually reserved for situations where what is bargained for is unique; the classic example is real estate. As each parcel of land is unique, a court will often order specific performance to transfer ownership of a contracted-for piece of real property.

But in most cases the court will order only money damages, which is seen as a replacement for performance. The most common way of calculating damages is "expectation" or benefit-of-the-bargain damages. Herb Homeowner contracts with Bob Builder to build a new home on Herb's lot. Just as Bob is about to begin work, Herb announces that he does not want a house on the lot and will not pay Bob to build one. Clearly, an order of specific performance makes no sense: Bob has little interest in building a home no one wants. What Bob wants is the benefit of the bargain. He wants money damages equivalent to the profit he would have made by completing the home and being paid according to the terms of the contract. The court will subtract Bob's construction costs from the contracted home price to determine Bob's profit and order Herb to pay that amount. Bob has now received the expectation of profits he had when he formed the contract.

Courts will sometimes use an alternative method called "reliance" damages. The goal here is to place the injured party in the same position he or she would be in had the contract never been formed. This is usually done if any estimate of expectation damages would be too speculative for the court to rely upon. In the example above, let's assume that Herb's lot is partially covered with quicksand and many builders feel that it would not be possible to place a stable building on the property. Here, it is impossible to estimate Bob's building costs, thus it is impossible to estimate his profits or even to determine if there would be any profits. So the court will unwind the contract and compensate Bob for any work he may have done or expenses he may have incurred prior to Herb's cancellation.

See Also: Contract Repudiation; Cross-Licensing; Licensing; Warranties.

Bibliography. B. A. Blum, *Contracts: Examples and Explanations*, 2nd ed. (Aspen, 2001); K. W. Clarkson, R. L. Miller, G. A. Jentz, and F. B. Cross, *Business Law: Text and Cases* (South Western, 2009); R. J. Consiver, ed., *Barbri Bar Review: Multistate* (Thompson, 2006); W. McGovern, L. Lawrence, and B. D. Hull, *Contracts and Sales: Conterporary Cases and Problems*, 2nd ed. (LexisNexis, 2002).

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Control Systems

Control systems are designed to provide corrective action to align actual performance with standard performance. Effective control systems use feedback to determine whether organizational performance meets established standards to help the organization achieve its objectives.

Managers like to be in control; they try to shape their organization's future by formulating and implementing strategies designed to achieve objectives. For this reason, control systems are ubiquitous in organizations. There may be traditional budgetary control systems or the more recent and sophisticated strategic control systems. There may also be management control systems or business control systems.

When the structure of an organization is created, it results in subdivision of responsibility and dispersal of the total managerial task among different organizational units. Since the activities of each of these units are to be coordinated, control systems are necessary. Control systems are, in fact, devices to enforce or facilitate desirable behavior so that the organization, as an entity, moves toward its predetermined goals.

Control systems operate on the basis of the control cycle. This cycle is made up of a process that has four elements: Establishing standards, measuring actual performance, evaluating actual performance against standards, and determining corrective action. The control process works to bring performance in line with the predetermined plan. Standards are in the form of budgeted performance. Measurement of performance is done through an appraisal system. Actual performance is evaluated with reference to the standards, and positive or negative variation is observed. Corrective action follows so that performance corresponds to standards.

Control systems may be classified as preventive or corrective, formal or informal, direct or indirect, or social or individual controls. Preventive controls are mechanisms designed to reduce the possibility of errors and minimize the need for corrective action. Corrective controls are mechanisms to correct errors that have occurred. Formal controls are prescribed in nature and are based on quantitative, objective data; for instance, financial controls are based on accounting data and are used to quantify performance in fiscal terms. Informal controls are emergent in nature and are based on quantitative, subjective data; for example, adherence to ethical standards can only be ensured through informal means. Direct controls are exercised in face-to-face situations such as controlling performance through direct observation. Indirect controls are exercised though the means of mechanisms such as financial statements and information systems. Social controls act through the collective will of groups in organizations. Individual control takes place through direct interventions.

Control systems are also classified as open- and closed-loop systems. Open-loop control systems are those in which the output has no effect on the input. Closed-loop control systems are those in which the output has an effect on the input in such a way as to maintain the desired output value. A closed-loop system includes some way to measure its output to sense changes so that corrective action can be taken.

In organizations that operate globally, control systems assume special importance. The relationship between headquarters and subsidiaries in a multinational corporation, for instance, is determined on the basis of the distribution of authority among them. Where centralization of control systems is preferred, it results in concentration of authority at the headquarters. Where authority is delegated to the level of subsidiaries, decentralization of control systems takes place. Each of these options has its own set of advantages and disadvantages, making it challenging for organizations to decide in favor of one or the other. As an illustration of this dilemma, consider the case of Alfred Sloan of General Motors. When this multinational corporation chose a multidivisional structure, Sloan found that when the headquarters retained excessive power and authority, the subsidiaries having the operating divisions lacked sufficient autonomy to take their own decisions. Conversely, when too much power and authority was delegated to the subsidiaries, they tried pursuing their own set of objectives, ignoring the needs of the greater corporation. The design of control systems in multinational corporations thus has to deal with special challenges not faced by organizations operating domestically.

The term *control systems*, apart from its use in the context of organizations, has several other connotations. For example, there are several references to control systems in the context of technical systems such as power line control systems or lighting control systems. Interestingly, the basic principles of technical control systems are much the same as they are for organizational control systems. In the case of an automatic washing machine or a toaster, for instance, the combination of components that might be electrical, electronic, mechanical, or hydraulic operate together to maintain system performance close to a desired set of performance specifications. That is how washing machines "know" when to stop washing and start rinsing, and toasters "know" when to stop toasting. Control systems play a vital role in making any system work to predetermined specifications. They also provide feedback that helps in adjustment of systems to keep them working efficiently and effectively.

See Also: Accountability; Centralized Control; Centralization; Empowerment; Management Information Systems.

Bibliography. Alfred P. Sloan, Jr., *My Years with General Motors* (Doubleday Business, 1990); Don Hellriegel, Susan E. Jackson, and John W. Slocum, Jr., *Management: A Competency-based Approach* (South-Western/Thompson Learning, 2005); Ricky W. Griffin and Michael W. Pustay, *International Business: A Managerial Perspective* (Pearson Prentice Hall, 2007).

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Convertibility

A currency is convertible when it can be exchanged freely for other currencies (or, in the past, gold). Restrictions on convertibility act as a barrier to international trade and capital flows; similarly, for convertibility to be meaningful, other barriers to trade must come down. Since the 1980s, convertibility has spread rapidly, as a large number of countries reduced or eliminated these barriers.

Since countries can impose several levels of currency controls, economists distinguish between different kinds of convertibility. The main distinctions are between current and capital account convertibility, and external and internal convertibility. Current account convertibility refers to the use of a currency for current account transactions, i.e., international payments for goods and services, interest and dividend payments, and remittances or gifts. Capital account convertibility means the absence of restrictions on international capital flows. External convertibility refers to transactions between residents of a country and nonresidents, while internal convertibility is the right of residents to hold assets denominated in foreign currency and to carry out transactions with them.

During the international gold standard, the major economies of the world maintained convertibility between their national currencies and gold at fixed ratios, and permitted international movements of gold with little interference. The U.S. dollar, for example, was defined as equivalent to 23.22 grains of gold. Issuers of these currencies were obligated to convert them to gold on demand at the defined rate ("par value"), and therefore the currencies were convertible to each other. The beginning of the period is not clearly defined, as various countries adopted the gold standard at different times (Great Britain in 1821, Germany in 1871, France and Switzerland in 1878, the United States in 1879, Japan in 1897).

Before that, these countries had followed either a silver or bimetallic standard, and in principle their currencies were convertible, but convertibility was frequently suspended during wars or financial crises. At the end of the 19th century, however, convertibility at the par value was considered to be a prime goal of monetary policy. The stability and confidence this provided helped the great expansion of international trade and investment during this period, sometimes regarded as the first age of globalization.

The outbreak of World War I in 1914 saw the belligerent countries impose strict trade and currency controls, and the gold standard and convertibility were suspended. During the inter-war period (1918–39) attempts were made to restore convertibility, but economic instability, high unemployment, and competitive devaluations led to these attempts being less than successful. During World War II, international transactions again came under severe controls, and currencies became inconvertible.

At the end of World War II, the International Monetary Fund (IMF) was established to promote the smooth functioning of the international monetary system. One of its principal objectives was "to assist in the establishment of a multilateral system of payments in respect of current transactions between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade" (Article 1). Specifically, under Article 8 of the IMF charter, members were to remove restrictions on current account transactions (though such restrictions could be maintained on a temporary basis). Article 6, however, allowed members to regulate international capital movements, since they could be disruptive to the fragile macroeconomic stability of most economies in the immediate postwar period.

For many years, most industrial countries other than the United States and Canada maintained some "temporary" restrictions on current account transactions, particularly for nontrade items. Most developing and centrally planned countries had severe foreign exchange restrictions, and their currencies remained inconvertible.

With inconvertible currencies, international trade often took the form of barter or countertrade. Sometimes this was straightforward—for example, Pepsi-Cola's sale of soft drinks to the Soviet Union in the early 1970s in exchange for vodka. Frequently, it was more complex, like a three-way deal in the 1980s involving the export of cars from Germany to Romania, paid for in jeeps that were sold to Colombia, which paid for the jeeps in coffee and bananas, which were sold to a German supermarket. These transactions, of course, were more difficult to arrange than payment in cash, and inconvertibility was a major barrier to trade.

By the end of the 20th century, the situation had changed considerably, as the benefits of integrating national economies into the global economy became apparent to policy makers. Today, the 23 countries considered "industrial" in the IMF's classification have no restrictions on the use of their currencies, which are fully convertible externally. Their residents also have almost complete freedom to hold accounts denominated in foreign currency, and therefore their currencies are internally convertible as well.

A majority of developing countries and former centrally planned countries have also accepted the obligations of Article 8, and dismantled currency restrictions on most current account transactions as part of comprehensive liberalization programs. Capital account convertibility has been given lower priority, and is more controversial. While the gains from free trade in goods and services are clear, free flows of capital are seen to have costs as well as benefits. The major benefits to developing countries are more resources and investment (since capital is expected to flow from developed to developing countries), leading to an increase in the standard of living. However there is a potential cost: As recognized in Article 6 of the IMF, macroeconomic stability can be endangered by large inflows of capital, since these would generate inflationary pressures. A second cost, illustrated in the Asian crisis of 1997, is that capital inflows can be reversed quickly, leading to severe dislocations in an economy, and by contagion, in other economies as well. Developing economies, therefore, are proceeding carefully in establishing convertibility in the capital account. Most also restrict residents' ability to hold foreign currency accounts, because of concerns about dollarization, and thus do not have internal convertibility.

See Also: Barter; Countertrade; Currency; Current Account; Capital Account Balance; Capital Controls; Capital Flight; Dollarization; International Monetary Fund.

Bibliography. J. Bhagwati, "The Capital Myth: The Difference Between Trade in Widgets and Dollars," *Foreign Affairs* (1998); Stanley Fischer, *Should the IMF Pursue Capital-Account Convertibility?* (International Finance Section, Department of Economics, Princeton University, 1998); R. B. Johnston and Mark Swinburne, *Exchange Rate Arrangements and Currency Convertibility: Developments and Issues* (International Monetary Fund, 1999); J. Braga de Macedo, B. Eichengreen, and J. Reis, *Currency Convertibility: The Gold Standard and Beyond* (Routledge, 1996); International Monetary Fund, *Currency Convertibility and the Fund: Review and Prognosis* (IMF, 1996).

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Cooperatives

Cooperatives are associations freely created by a group of people to meet their shared needs and to achieve their common purposes. They are democratically controlled organizations in which the ownership, benefits, risks, and losses are shared. They constitute the "third sector" representing the social economy paradigm as an alternative to current globalization trends. Cooperatives are based on trust, self-esteem, shared responsibility, the common welfare, solidarity, and mutual assistance—values that contrast with competition, individualism, control, and coercion, which characterize the private enterprise.

Cooperatives are created to meet different economic and social needs and purposes of its members. There are cooperatives of production, consumption, banking, housing, community development, and others to solve shared problems related to education, health, employment, culture, and recreation. Their economic relevance, though not widely recognized, is unquestionable. Some available data indicate that more than 800 million people worldwide are involved in a cooperative; they are a very important source of employment, redistribution of wealth, and social equity.

This Mongolian herders' cooperative gathered to review plans to increase their production of vegetables in 2007.

The idea of cooperatives is not recent. Their origin can be traced to the beginning of the 19th century, when the utopian socialists began imagining new forms of organization. Robert Owen and Charles Fourier, for example, conceived cooperatives as an alternative organizational arrangement compared to capitalism and competition. The Rochdale pioneers also developed cooperative experiences in the interests of its members under some main principles: Voluntary and open membership, democratic control, economic participation, autonomy and independence, education and training, cooperation with other cooperatives, and concern for the community's interests. One of the most remarkable examples of the 20th century is the successful Mondragón Cooperative Corporation in Spain, which has demonstrated some advantages of cooperatives over traditional capitalist enterprises.

Cooperatives remain an important organizational option in the 21st century to overcome the failures of multinational corporations and the market economy to ensure economic development and to meet the social needs of the majority of the population. Cooperatives formed from the factories recovered in Argentina reaffirms that workers are able to run companies and to design and control their own work. The autonomous Zapatista municipalities in Mexico are also a good example of the possibilities of cooperatives to solve community problems. The cooperative movement is increasingly seen as an important option for social change in favor of economic democracy and social empowerment.

Cooperatives are distinguished from private companies by their purposes, their governance structure and their modes of operation. Their purposes are shared; they protect the interest of the association under a principle of solidarity, instead of individual goals. Management involves the active participation of its members. Decision making is accomplished through an equal distribution of power because each member has a vote regardless of the contribution that he or she has made to capital. Their governance structure can be represented by an inverted pyramid in which the members of the cooperative are the highest authority and the board of directors depends on them. Finally, their mode of operation is collaborative, and is based on mutual aid and shared responsibility.

Some characteristics raise important advantages compared to private enterprise and its traditional bureaucratic structure based on a vertical division of labor and centralized decision making. Members of the cooperative are highly motivated people disposed to collaborate: They appreciate their position as co-owners, so they know everything they do or cease to do has an impact on performance, results, and profits. Cooperatives adopt a flat scale of remuneration to avoid large wage differentials between levels, which means greater internal equality; they attain a greater internal cohesion based on collaborative work to reduce direct control and hierarchical authority. In addition, inter-cooperative collaboration facilitates the creation of tools like mutual support funds to overcome temporary difficulties, producing solidarity economy initiatives that favor local development. Teamwork and participation reduce the required bureaucratic apparatus and, consequently, their operating costs. Finally, benefits produced by the cooperative do not have to be given to external shareholders, which propitiates a greater social distribution of profits.

However, cooperatives also confront some difficulties and problems. On the one hand, globalization of markets increasingly presses cooperatives to compete with private companies, which has led to the need to adopt more entrepreneurial forms that threaten their nature and purposes. Needs of the members of the association are gradually displaced by the imperative of growth and accumulation that all economic enterprises need to survive in highly competitive and dynamic markets. Cooperatives appear to be trapped in a dilemma because economic success seems at odds with social effectiveness.

On the other hand, democratic governance of cooperatives involves more time to make a decision, delaying opportune responses demanded by dynamic markets. In addition, such democratic structures do not imply necessarily the democratization of the production processes and the introduction of participatory arrangements to favor collective solution of problems at work. This contradiction between democratic governance and authoritarian shop practices generates frustration among the members of the cooperative, because they know they can participate in main decisions but, at the same time, they realize they are excluded from the day-to-day decisions in their workplace.

The accumulated experience of cooperatives is very important for the future. Emerging social movements are increasingly demanding greater participation to prevent abuses of the state and corruption of large private corporations; cooperatives reemerged as an alternative that could lead to building a new social project to transcend the current market economy and globalization. This option would be based on a growing social participation to establish new institutions of regulation of state actions as well as private economic freedom, allowing a real economic integration of the world based on the general well-being of society.

See Also: Antiglobalization Movement; Consumer Needs and Wants; Fair Trade; Democratic Globalization; Individualism/Collectivism; Sustainable Development.

Bibliography. David C. Korten, *The Great Turning From Empire to Earth Community* (Berrett-Koehler, 2006); William Foote Whyte and Kathleen King Whyte, *Making Mondragon: The Growth and Dynamics of the Worker Co-operative Complex* (ILR Press, 1991); Kimberly A. Zeuli and Robert Cropp, *Cooperatives: Principles and Practices in the 21st Century* (University of Wisconsin–Extension, 2004).

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Co-Production

Co-production has had various meanings over the years. In the 19th century, for example, the *Oxford English Dictionary* was "co-produced" from volunteer contributions of millions of slips of paper. For many years it referred to film co-production and the co-production of armaments. But today, the most frequent use of co-production is as a Web 2.0 tool where customers actually produce their own products and services. In the past, customers expected companies to do a lot of the work for them. Now, companies are expecting customers to do more of the work themselves.

The changes in the meaning of co-production are astounding. During the Cold War era, co-production meant transferring manufacturing know-how to allies to enable them to produce weapon systems. Co-production has also long meant film companies working together on a movie or a television venture in which more than one broadcaster is providing the funding. In publishing, co-production refers to the process where a book is created and sold to publishers in different countries in a joint production. The firms adapt or translate the book into their local language, sending the digital files for printing back to the originator who co-ordinates the overall production.

In the manufacturing sector co-production refers to a system in which multiple products are produced on the same production run for customers that differ in their product price thresholds or upgrade desires. A more recent definition of co-production is when clients work alongside professionals as partners in the delivery of social services. One refers here to the "co-production sector" where service users are regarded as assets involved in support and delivery of services. Co-production redefines clients as assets with experience, the ability to care, and many useful skills.

One frequently used definition of co-production today emerges from the barriers to entry that many firms face when going into a foreign market. These include physical barriers, political and regulatory barriers, trade sanctions and export controls, market barriers, cultural barriers, and so forth. Many firms overcome these barriers by entering into arrangement such as joint ventures, licensing agreements, franchises, mergers and acquisitions, or greenfield investment. Another way to overcome market barriers is when companies cooperate to produce goods. This kind of co-production allows firms to share complementary resources, take advantage of unused capacity, shift the location of production, and benefit from economies of scale. Companies may cooperate to make components or even entire products. In cross-manufacturing agreements, companies in different markets can cooperate to manufacture each other's products for their local markets.

The newest definition starts with the notion of customers as the new co-production sector. This ranges from something as mundane as pumping one's own gas or taking cash out of the ATM to something as sophisticated as designing one's own laptop computer. In the internet era of relationship marketing, customer testimonials, and reputation networks, companies are creating goods, services, and experiences in close cooperation with experienced and creative consumers. They tap into their intellectual capital and reward them for what gets produced, manufactured, developed, designed, serviced, or processed. Co-production allows firms to reduce their own costs while giving the customer greater control and value. The net result is a value chain that increases usage, satisfaction, trust, loyalty, and ultimately lifetime customer value.

Co-production in this sense is a dynamic process composed of distinct stages where consumers can become involved. Certain economic, cultural, and technological preconditions have to be met. For example, customers from poorer economies may not be ready to attach greater value to customization in their needs satisfaction. Nor may the threshold of ease and accessibility of Web-based tools have been reached. Nor may customers have much of the determining resource in co-production, their own time. A highly innovative culture will lead to more co-production than a highly standardized or hierarchical culture. Also, the product makes a difference. A washing machine has a limited number of features and offers limited incentives for co-production than does a laptop computer. Situational factors such as trust make a difference (can I trust that my e-ticket will be honored?). Of course, the cost-benefit analysis in a co-creation activity is core.

A good example is the Swedish multinational IKEA. IKEA customers are accustomed to collecting unassembled pieces of furniture from a warehouse on the fringe of a metropolitan area in their own large car. They transport these kits to their own homes and, using tools provided by the manufacturer, they assemble the components into a sofa or a table. Southwest Airlines early on shifted booking to the customer through a simple Web interface for completing transactions. The incentive was the double awards credit (which it has since eliminated without negatively impacting their business).

Benefits

For decades, consumers have been saving up their insights and rants because they didn't have adequate means to interact with companies. The era of co-creation and co-production has led to new forms of business. Customers are the minipreneurs, that is, consumers turned into value-creating entrepreneurs. They are also called e-lancers, micro businesses, Web-driven entrepreneurs, free agents, cottage businesses, co-preneurs, co-creators, eBaypreneurs, ad-sponsored bloggers, PodCasters, and so on.

Changes in the value chain lead to increased company revenue at a lower cost. When customers are given the opportunity of performing tasks themselves, their system usage increases and they are able to capture more value. Operating costs to the firm decrease since the do-it-yourselfer needs less help. This leads to a virtuous circle: Usage contributes to satisfaction, satisfaction leads to trust, trust leads to loyalty, and loyalty leads to an increase in the customer's lifetime value to the company.

The Information Age

Co-production is now powered by Web 2.0 (online tools that enhance creativity, information sharing, and collaboration) and by Generation-C (customers imbued with creativity, content, and control). Generation-C entrepreneurs are multitaskers and they like constructing products rather than being sold to. They want to be interactive and want to customize as they choose. They are the emerging "co-production sector" where customers are regarded as assets, involved in mutual support and the delivery of products and services. Rather than being treated as "end users," they are now seen as untapped potential assets.

Co-production in the Information Age has morphed into a number of new terms such as crowdsourcing, do-it-yourself advertising, customer product development, mass customization, and customer ticket clipping. Today's co-producers enjoy a wide range of highly-developed tools, resources, and processes at their disposal. This includes hardware, software, ICT and skills; design, production and manufacturing; ways to monetize assets; new marketplaces; new forms of advertising; and new ways to find talent and manage finance, payment, and logistics. Wikipedia, the free online encyclopedia, is a good example of modern co-production because it allows anyone to change or create an article. Wikipedia content improves over time as more and more accuracy is gained through an exposure of articles to the whole community.

Where this all will lead is probably to the ballot box. Joined-up government, place-based policy making, and co-production with citizens offer exciting new possibilities for creating flexible, dynamic, and democratic governments.

See Also: Consumer Behavior; Entrepreneurship; Focus Groups; Service Expectations; Value Chain.

Bibliography. Seigyoung Auh, Simon J. Bell, Colin S. McLeod, and Eric Shih, "Co-Production and Customer Loyalty in Financial Services," *Journal of Retailing* (v.83/3, 2007); Taco Brandsen and Victor Pestoff, "Co-Production, the Third Sector and the Delivery of Public Services: An Introduction," *Public Management Review* (v.8/4, 2006); S. Carlson, "The Net Generation Goes to College," *Chronicle of Higher Education* (October 7, 2005); Marcia-Anne Dobres, "Inside the Politics of Technology: Agency and Normativity in the Co-Production of Technology and Society," *Technology and Culture* (v.48/1, 2007); M. Etgar, "A Descriptive Model of Consumer Co-production Process," *Journal of the Academy of Marketing Science* (v.36, 2008); Selma Oener and Taner Bilgic, "Economic Lot Scheduling with Uncontrolled Co-Production," *European Journal of Operational Research* (v.188/3, 2008); Tale Skjolsvik, Bente R. Lowendahl, Ragnhild Kvalshaugen, and Siw M. Fosstenlokken, "Choosing to Learn and Learning to Choose: Strategies for Client Co-Production and Knowledge Development," *California Management Review* (v.49/3, 2007); Wei-Feng Tung and Soe-Tysr Yuan, "A Service Design Framework for Value Co-Production: Insight from Mutualism Perspective," *Kybernetes* (v.37/1–2, 2008).

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Copyright Infringement

Copyright infringement is the violation of copyright law through the illegal use of protected material. This includes both the reproduction of that material and the creation of derivative works from it. In the case of media (movies, music, books, software, et cetera), reproduction is also called *piracy*—a term that is sometimes contested, but has in fact been used this way with reference to books and documents since at least the beginning of the 17th century, longer than copyright law itself has existed. One of the controversies surrounding copyright has always been that infringement is not exactly theft; while it may impact the copyright owner's profits (as in bootleg DVDs), the law does not require that it do so. And while it may bring to the infringer profits reaped from someone else's property, in the case of derivative works the labor and intellectual contribution of the infringer is still involved—and, again, profit is not necessary to constitute an infringement. Although copyrights can be filed, material is copyrighted regardless of whether a filing was made; the filing is simply helpful in the event of a court case, to provide proof of the validity of the rights-owner's claim.

Enforcing a copyright claim begins with a cease and desist letter, which in many cases is sufficient, because of the fear of legal reprisals or the infringer's previous misunderstanding of the relevant law. If this proves insufficient, the rights-holder can then file a lawsuit, and will often seek a preliminary injunction, which prevents the infringer from continuing the alleged infringement until the trial has completed. This will nearly always be done in cases that the plaintiff expects to be settled out of court, because of the additional hassle for the defendant. If the trial is resolved in the plaintiff's favor, he is entitled to a permanent injunction against the defendant's further infringement, and/or monetary damages, depending on the circumstances of the infringement.

The Doctrine of Fair Use

The doctrine of fair use is a concept in American copyright law that permits certain uses of copyrighted material without requiring permission from the copyright owner, even over the owner's objections. Similar doctrines obtain in the copyright laws of other countries.

There are four factors used to determine if fair use applies, which the Copyright Act of 1976 identifies as, first of all, the purpose or character of the use, including whether such use is of commercial nature or for nonprofit educational purposes. This factor considers, for instance, whether the use of the copyrighted material is merely derivative (not protected under fair use) or transformative (protected). Satire and parody are protected instances of fair use, in theory: in practice it's important to remember that the copyrighted material must be necessary to the parody. Inserting scenes from other movies into your own movie is more likely to be derivative than transformative—and even if the court rules in favor of transformativeness, the legal costs to see that decision through are prohibitive.

Not every educational use is fair use, which stands to reason when one considers the amount of educational material that is copyrighted; if it were permissible to ignore copyright simply because one's use is educational and nonprofit, schools would Xerox their textbooks rather than purchase multiple copies of them, which in turn would lead to textbook publishing being too unprofitable for the industry to persist, a classic (or textbook) example of the process by which copyright infringement can have consequences beyond the impact on a single rights-holder.

The second factor is the nature of the copyrighted work. This expressly does not mean that the extent of protection from copyright infringement is proportionate to the artistic merit of the work. The type of work can be a factor, though. It is in this second factor that the "idea-expression dichotomy" comes into play: facts and ideas cannot be copyrighted. Contrary to what many people think, for instance, you cannot copyright an idea for a movie or novel—you can only copyright the expression of that idea, i.e., the screenplay (and finished film), the novel, and the distinctive characters involved. Even in the case of the characters, trademark is much stronger protection than copyright, which is why major properties like Indiana Jones are trademarked. The name and likeness can be trademarked; every work in which they appear can be copyrighted; but the idea of an archaeology professor having serial-inspired adventures on major digs is fair game for anyone. Likewise, though you can copyright your memoir about your life with your ex-spouse, you cannot prevent her from writing her own book about those events.

Another wrinkle here is the fact that although inclusion of a patentable idea in a copyrighted work does not constitute a patent claim, it does prevent anyone else from making a patent claim on the idea, regardless of whether the copyrighted work is the source of the claim. The famous example of this, well-known in discussions of intellectual property law, is Arthur C. Clarke's description of the idea of geosynchronous communications satellites, which prevented Bell Labs from patenting such satellites they developed in-house. The functionality doctrine likewise prevents patentable ideas from being protected by trademark alone. The fact that we have had to bring up both trademark law and patent claims in a discussion of copyright fair use hints at some of the problems legal reformers have with the body of IP law as it now stands; the difference in protections offered to an idea in a copyrighted work and an idea in a patent claim depends essentially on the paperwork the rights-holder filled out.

As mentioned previously, work is copyrighted at the moment of creation, and the courts have ruled that copyrighted work is treated equally whether it is published or not. An unexpected wrinkle of this, one that may be the object of concern in the 21st century as privacy concerns become prominent, is that fair use applies equally to unpublished work as well, which in a bogeyman slippery slope scenario provides a little brother with the legal right to publish excerpts of his sister's diary, provided his parody is sufficiently transformative.

Another factor is the amount and substantiality of the portion of the copyrighted work used. Both words are important here. Since 1991's *Grand Upright Music v. Warner Bros Records*, use of song samples in music do not constitute fair use if the sample is long enough to be recognizable. There is a commonly held belief that up to 300 words of a written work can be quoted and constitute fair use; there is no legal basis for this belief. Book reviews may not often provide excerpts longer than that, but that is as much because of space concerns—while term papers may well quote more than that, and theses will almost certainly do so, and both of these instances are commonly considered fair use.

The last factor is the effect of the use upon the potential market for or value of the copyrighted work. This includes, but is not limited to, the impact of the usage on the rights-owner's profits. Giving away bootlegged copies of a DVD has a clear impact on the rights-owner's profits, for instance. A *MAD Magazine* parody of that movie that persuades the reader that the movie isn't worth watching—or a review that spoils the ending—has just as much impact but is almost certainly protected as fair use. Another common misconception is that any reproduction of a portion of a copyrighted work is fair use if the source is credited, for which there is no basis in either the letter or the spirit of the law.

Though many of our examples may seem trivial, the significance of the fair use doctrine extends beyond its interest in upholding First Amendment freedoms of speech; a 2007 study by the Computer and Communications Industry found that one-sixth of the American gross domestic product was generated by fair use (search engines, for instance, depend on fair use protections).

Bootlegging

The word *bootlegging* can be hard to nail down, and in its broadest sense simply means the creation of a recording not authorized by the owner of the pertinent rights. This can include illegal copies of albums, movies, and software, and in the 21st century the term "bootleg" has been used, especially in Europe, to refer to bastard pop music, a form of computer-manipulated music in which elements of multiple songs are combined into a new song that retains the familiarity of its source material. (The classic bastard pop formula is A+B: the vocals of one song with the music of another.) But typically, especially in the United States, bootlegging is understood to refer to the recording of concerts, and the subsequent distribution of those recordings.

Though it is possible to buy such recordings, there is a long history—going back to the early days of blues, and especially strong since the advent of touring rock bands—of not-for-profit behavior among bootleggers. Despite the high cost of bootlegging in earlier decades, when recording equipment was costlier and bulkier, the resulting tapes were typically only traded for other tapes, or made available for the cost of reproduction. Though this does not constitute fair use and does not make the copyright any less infringed, it did have the desired effect: because little money was changing hands, record labels had little reason to go after bootleggers after the fact, and in such cases when they did decided to be bothered by the practice, their efforts were confined mostly to the prevention of such recording. Some bands, most famously the Grateful Dead, embraced bootlegging and encouraged taping of their concerts. While the band is not always the rights-holder, this still makes the matter more difficult to pursue in court.

The Digital Millennium Copyright Act

The ambitiously named Digital Millennium Copyright Act was passed unanimously by the Senate and signed into law by President Clinton in October of 1998. Principally, the DMCA updated the language of copyright law to reflect the existence of the internet and digital media, and implemented the two treaties signed by members of the World Intellectual Property Organization in 1996. It explicitly extended the reach of copyright in order to protected copyrighted material from being illegally reproduced electronically—such as through the online sharing of mp3s—and limited the liability of internet service providers. If you put a copy of the new Indiana Jones movie on your Web site, you are the one in trouble—not the cable company through which you connect to the internet, or the company you rent your online data storage from.

An area the courts are undecided on is the legality and liability of linking to copyright-infringing material. While it has not explicitly been found legal, neither has anyone yet been found liable for it yet, except in such cases when the linker was trying to get around an injunction by linking to material they had been forced to remove from their own Web site.

See Also: Intellectual Property Theft; Patents; Trademark Infringement.

Bibliography. Ben Depoorter and Francesco Parisi, "Fair Use and Copyright Protection: A Price Theory Explanation," *International Review of Law and Economics* (v.21/4, 2002); Wendy J. Gordon, "Fair Use as Market Failure: A Structural and Economic Analysis of the 'Betamax' Case and Its Predecessors," *Columbia Law Review* (v.82/8, 1982); Pamela Samuelson, "Copyright's fair use doctrine and digital data," *Publishing Research Quarterly* (v.11/1, 1995); B. Rosenblatt, *Digital Rights Management: Business and Technology* (M&T Books, 2001); Clinton Heylin, *Bootleg! The Rise & Fall of the Secret Recording Industry* (Omnibus Press, 2004).

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Core

"The core" refers, collectively, to those affluent, heavily industrialized, and highly developed countries from which emanates the majority of global economic activity. Prime examples of "core" nations include the United States, Japan, Germany, France, and the United Kingdom (UK). Understanding the nature of "the core" and how it interfaces with non-core areas of the world is essential to understanding economic development and the global economic system.

From a practical standpoint, the notion of "the core" is useful in accounting for the fact that there is great heterogeneity among the nations of the world in terms of their respective nature and level of involvement in the global economic system. Some countries are very inwardly focused—domestically producing most products consumed and not engaging in extensive exporting. Other countries—the "core" countries—are heavily involved in global economic activity. In this regard, a core nation's role in the global economic system typically involves high levels of both transnational exporting (of domestically produced products) and importing (of foreign-made goods). It should thus be of little surprise that core nations are typically home to the world's largest and most global businesses. For example, 337 of the corporations in the 2007 Fortune Global 500 are headquartered in five core nations (162 in the United States, 67 in Japan, 38 in France, 37 in Germany, and 33 in the UK). Nine of the 10 largest global corporations are headquartered in these five core nations.

The notion of the core also helps account for vast international heterogeneity with regard to level of wealth. Core nations tend to be very wealthy in terms of a host of indicators such as gross domestic product (GDP), per capita income, and average household income. Consider, for example, that although the United States and Japan account, respectively, for only 4.67 percent and 2.09 percent of the world's population, they account for 25.4 percent (United States) and 9.86 percent (Japan) of global wealth and 21.67 percent (United States) and 7.05 percent (Japan) of the world's GDP. The world's seven wealthiest nations, while accounting for only 11.66 percent of the world's population, account for 54.81 percent of global wealth and 43.48 percent of the world's GDP.

Theoretically, the notion of the core formally originated in the context of dependency theory. This theory of economic development was created in the late 1950s and 1960s by development scholars in poor nations who felt that then dominant theories of development failed to adequately account for the fact that the uneven diffusion of technical progress had heavily contributed to the division of the global economy into two types of countries (i.e., affluent, heavily industrialized, and highly developed "core" nations, and less affluent, relatively unindustrialized, and underdeveloped "peripheral" countries [e.g., inwardly focused, agrarian African nations such as Burundi, Rwanda, Tanzania, and Zambia]). Further, these scholars believed that existing conceptualizations of economic development focused far too heavily on understanding "core" nations while also misguidedly laying much of the blame for the underdevelopment of poor countries on these nations and their disadvantaged peoples.

Dependency theory holds, most essentially, that "peripheral" countries may suffer negative (economic, cultural, and developmental) consequences as a result of forming economic bonds with "core" nations heavily involved in the global economic system. Dependency proponents contend, in this regard, that the formation of ties with "the core" may cause "peripheral" nations to become highly dependent on the core and that self-serving, potentially imperialistic core leaders may take advantage of this situation by exploiting key peripheral nation resources (e.g., human labor and water, lumber, minerals, and other raw materials).

However, it should be noted that the hypothesized outcomes of interaction with the core for peripheral countries differ in the two main forms of dependency theory. In the context of "orthodox (or radical) dependency," increased linkage to core nations is viewed as necessarily leading to the "development of underdevelopment" (i.e., worsened economic conditions and quality of life) in "the periphery." In the less extreme "unorthodox" version of dependency theory, development and underdevelopment can occur simultaneously. Here, the level of development in the periphery is viewed as being a function of the manner in which the periphery interacts with the core. It is hypothesized, for example, that interactions with the core involving foreign direct investment (i.e., allowing companies located in the core to purchase or establish wholly owned production facilities in peripheral territory), foreign debt, and export trade lead to a higher level of dependence and less positive and slower peripheral development than interactions based on the acceptance of foreign aid and foreign trade.

From a theoretical perspective, it is also important to understand that the hypothesized role of the core in dependency theory is diametrically opposed to the core's role in (the previously dominant) modernization theory. The latter theory of economic development contends that poor nation development is predicated first and foremost on the establishment of close economic bonds with the core. From this perspective, less-affluent, peripheral nations are necessarily brought up to core-nation standards (i.e., modernized) as a result of increasing involvement in the global economic system—realized perhaps only by forging intimate economic ties to the core. Modernization theorists contend that the developmental benefits of this increased level of involvement in the global economic system necessarily "trickle down" from the core to the periphery.

The Case of China

Consider China's rapid, ongoing ascension toward "core" status. The world's largest country was for many years a relatively isolated, inwardly focused peripheral nation in the background of the modern global economic system. In the last three decades the Chinese economy has not only become very global but has also doubled in size every eight years. In addition, during this same period of time, nearly 400 million Chinese people have emerged from poverty—many of them by personally becoming part of the global economic system as a result of moving from farms in rural areas to manufacturing jobs in large cities.

Although China's amazing rise toward the core can be viewed as at least somewhat supportive of both the unorthodox version of dependency theory and modernization theory, its development defies simple, complete explanation by either theory. Consistent with unorthodox dependency theory, China's (highly uneven and far from completely core-like) development is predicated significantly on high levels of foreign trade—both importing and exporting—with governments and corporations in established core nations. At the same time, more consistent with modernization theory, the growth of China's economy can also be credited to high levels of foreign direct investment from core nations. However, neither theory adequately takes into account other developmental factors including, but not limited to, high levels of personal savings and the leveraging of outsourcing-based partnerships with core-nation manufacturers (to gain access to key technologies that can be used to spawn Chinese firms that eventually compete in the global marketplace against the very same core-nation companies outsourcing their manufacturing to China in the first place).

See Also: China; Dependency Theory; Economic Development; Industrialized Countries; Less Industrialized Countries; Periphery.

Bibliography. James Davies, Susanna Sandstrom, Anthony Shorrocks, and Edward Wolff, "Estimating the Level and Distribution of Global Household Wealth," World Institute for Development Economics Research of the United Nations University, www.wider.unu.edu (cited March 2009); Peter Evans and John D. Stephens, "Development and the World Economy," in *Handbook of Sociology*, N. J. Smelser, ed. (Sage, 1988); Gary Gereffi, "The International Economy and Economic Development," in *The Handbook of Economic Sociology*, N. J. Smelser and R. Swedberg, eds. (Princeton University Press, 1994); Fareed Zakaria, *The Post-American World* (W. W. Norton, 2008).

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Corporate Accounting

Corporate accounting is the measurement, summary, and interpretation of financial information and events pertaining to a company or organization. More than just bookkeeping, the key word in corporate accounting is the *account* of the name—the tale it tells, the explanation of the numbers.

The core of accounting is the double-entry bookkeeping system, which originated with Luca Pacioli, a Franciscan friar in 15th-century Venice who taught mathematics to Leonardo da Vinci. Pacioli streamlined the system in use among Italian merchants, and included it in his seminal mathematics textbook, from which it was quickly adopted across Europe. In double-entry bookkeeping, every transaction leaves a record in two (or more) accounts—the debit account from which money is leaving, and the credit account to which it is going. Balancing a personal checkbook, by contrast, is usually done according to a single-entry bookkeeping system.

Double-entry bookkeeping involves multiple copies of the same information. Sales transactions generate receipts for both parties. Deposit slips are collected after making bank deposits. These source documents are saved, with their information recorded into daybooks, of which there are usually multiple types for different types of data—a sales journal, a tax journal, and so on. After a set period of time—usually monthly, weekly, or quarterly—the figures from each journal are tallied to provide a financial picture of the period. Those tallies are further recorded—a process called posting, in accounting terminology—in the book of accounts (or ledger), and balanced to make sure that debits and credits are equal.

Double-checking the ledger is done by producing an unadjusted trial balance, an accounting document usually made in three columns, the first of which contains the names of accounts with non-zero balances. Debit balances are recorded in column two, credit balances in column three. If the respective totals of the two columns aren't the same, an error has either been made during the posting process or revealed by it. Once any such errors have been taken care of, the balance is adjusted according to the needs of the business—typically correcting for inventory amounts—and an adjusted trial balance is produced and used as the basis for a variety of financial statements. Those statements include the P&L—the profit and loss statement—the statement of retained earnings, the balance sheet, and the cash flow statement.

In preparing financial statements, accountants in the United States are bound by Generally Accepted Accounting Principles (GAAP); other countries have other terms for their standards, and an international set of standards is of increasing importance. Common law countries—like the United States and the United Kingdom—do not specifically set their standards in law, though there is growing sentiment that they would benefit from doing so. It is part of the body of common law, required of publicly traded companies by the SEC, set by the Governmental Accounting Standards Board and the Financial Accounting Standards Board according to the type of accounting. The SEC has announced that by 2016, it expects the accounting standards followed by public companies to adhere to those of the International Accounting Standards Board (IASB), reflecting the increasingly global nature of doing business.

The objectives of GAAP are to ensure that financial statements are useful to investors and creditors both actual and potential, in order to help them make financial decisions in which the company is involved. GAAP is organized into four "basic assumptions," four basic principles, and four basic constraints. The assumptions are that the company is a business entity, with a financial identity independent of its owners; that it is a "going concern," expected to remain in business indefinitely; that a stable currency such as the dollar will be the unit used in financial statements; and that the company's economic activities transpire over a time period that can be divided up for the purpose of preparing reports.

The four principles are the cost principle (companies report their actual costs, not the fair market value of their assets), the revenue principle (companies record when revenue is realized or earned, not when cash is received), the matching principle (expenses have to be matched with revenue), and the disclosure principle (sufficient information should be disclosed to allow the readers of financial statements to make informed decisions). The constraints are the objectivity principle (financial statements should be based on objective evidence), the materiality principle (that which would impact a decision is significant and material), the consistency principle (the same accounting methods should be used year to year), and the prudent principle (err on the side of understating the company's success, not overstating it). In the unlikely event that adhering to GAAP would create a misleading financial statement, the accountant is ethically bound to depart from GAAP practices and explicitly note the departure and the nature of the misapprehension that would have resulted.

International standards differ not so much in their objectives as in their specifics; the International Financial Reporting Standards (IFRS) adopted by the IASB specifically lay out the financial statements and documents that are to be produced for a variety of situations and uses. IFRS also explicitly calls for comparability as a qualitative characteristic of a standards-compliant financial statement: the statements produced for any two companies should be similar enough in structure and type of content that it is easy for potential investors to compare the two companies without having to do any "translation." In general, the IFRS reflect the specificity and tendencies of code-law countries such as much of western Europe and Asia. Regardless of the set of accounting standards adhered to, separate standards—again, more specific than GAAP—obtain when preparing reports for tax purposes, where very specific information needs to be identified.

One reason for the switch to IFRS is because of growing dissatisfaction with American corporate accounting practices, as a result of recent accounting scandals. 2002 saw every major accounting firm—Arthur Andersen, Deloitte & Touche, Ernst & Young, KPMG, and PricewaterhouseCoopers—charged with negligence or admitting to other forms of wrongdoing, amid the indictment of Arthur Andersen over the Enron scandal, the bankruptcy of WorldCom only weeks later, and a stock market downturn credited in part to the failure of investor confidence in the accurate reporting of the companies in which they were expected to invest.

See Also: Accounting Harmonization; Accounting Software; Compliance; Cost Accounting; Enron Corporation; International Accounting Standards Board; International Financial Reporting Standards.

Bibliography. Troy Adair, *Corporate Finance Demystified* (McGraw-Hill, 2005); John R. Emshwiller and Rebecca Smith, *24 Days: How Two Wall Street Journal Reporters Uncovered the Lies that Destroyed Faith in Corporate America or Infectious Greed* (HarperInformation, 2003); Bethany McLean and Peter Elkind, *The Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron* (Portfolio, 2004).

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Corporate Change

Firms, as organizers of productive activities, undergo a continuous process of change. To remain competitive in a world characterized by rapid shifts in technology and resource utilization patterns, firms need to commit themselves to all manner of transition and transformation. However, firms also need to deliver a dynamic response that takes into account all major stakeholders, including customers, suppliers, regulators, and global competition. Corporate change management thus strives to meet customer and market demands by reexamining the relevant processes of production and service delivery. The assumed response may be driven by specific needs of the firm: There could be a felt need for new product-market strategies that fully meet changing market demand or there could be a desire to maximize resources by dealing with managerial and control inadequacies.

One way of managing change is to undertake a merger. Mergers can redraw the boundaries of a firm. It is traditionally assumed that mergers are conducted when a firm with high asset valuations purchases another firm with low asset valuations. It is believed that under the better management of the high-asset purchaser, the assets of underperforming targets will be directed toward more profitable projects. Seen this way, a merger leverages the strengths of one firm by combining with another firm. A number of studies explained the merger waves of the 1980s and 1990s in such terms. However, recent evidence suggests that target valuations are much higher than the average firm, which casts doubt on such a motive for a merger.

A firm's strategic change and rapid growth objectives may also be important in explaining the motive for wanting to merge with another firm. Mergers can be undertaken to allow diversification or vertical integration, help achieve resource sharing and operational efficiencies, or permit access to global markets. Research on organizational change suggests that many such opportunities are more fully exploited by identifying and coordinating complementary products or processes. Strategic complementarities are about how two activities when joined together produce an outcome that is better than when activities are undertaken on their own account. Complementarities associated with new technologies, changes in people-oriented organizational systems, and globalization help make mergers successful and enduring.

The success of the modern corporation is built on possessing unique capabilities or resources. Such capabilities may be related to a product, process, or a way of doing things that meets an existing or potential market need. But any attempt to strengthen firm products, processes, or ways of doing things often carries within it the danger of an inflexibility that ensures operational efficiency but also an inability to build new skills and capabilities. As a result, it becomes harder and harder to anticipate and make changes that assimilate new technologies and processes effectively, turning firms' "core" businesses into "noncore" operations and making "unique" products not very unique. In these situations, firms may experience contraction, which will be noted in the processes of privatization, divestment, or many other types of restructuring programs. Corporate restructuring in the 1980s saw a major realignment of existing firm assets, resulting in divestment and selling off of a large number of activities and assets. The release of resources through the disposal of assets that are unimportant to the main operational areas of a firm is a major plank of the strategic approach to corporate change.

Leveraged buy-outs (LBOs) are a good example of how corporate changes are undertaken in response to the inability or unwillingness of current owners and managers to take the business through to its new stage of development. Businesses sometimes need to inject new capital or attract or warrant the management talent, or introduce financial innovations such as new debt and equity structures, which can more appropriately be achieved through an LBO. LBOs thus serve an important corporate objective.

Corporate change thus manifests itself in many shapes and forms of "restructuring," "reengineering" operations, and "rethinking" strategy and organization. Such initiatives are an essential part of the process of growth in an economy that seeks to make the best use of available resources.

See Also: Acquisitions, Takeovers, and Mergers; Citigroup; Corporate Governance; Privatization; Product Development; Technology.

Bibliography. M. Marks and P. Mirvis, *Joint Forces: Making One Plus One Equal Three in Mergers, Acquisitions, and Alliances* (Jossey-Bass, 1998); R. Miles and C. Snow, *Organizational Strategy, Structure and Process* (McGraw-Hill, 1978); P. Milgrom and J. Roberts, "Complementarities and Fit Strategy, Structure, and Organizational Change in Manufacturing," *Journal of Accounting and Economics* (1995).

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Corporate Codes of Conduct

Nearly every large domestic and multinational corporation today has a corporate code of business conduct as part of its formal corporate governance system. The nature and content of the codes vary considerably and they are influenced by the national cultures from which they originate and/or are applied. However, in general, corporate codes of conduct are voluntary, self-regulatory statements of business moral standards, legal compliance, organizational policy, and/or civic responsibility that hold those governed or affected by the codes accountable for ethical behavior in accordance with them.

Corporate codes of conduct can be classified into three categories: codes of compliance, codes of ethics, and codes of best practice. Codes of compliance emphasize strict alignment with enacted legal and regulatory requirements. For example, the passage of the Foreign Corrupt Practices Act in 1977, the creation of the 1991 U.S. Corporate Sentencing Guidelines, the implementation of the Sarbanes-Oxley Act of 2002, and other legislative enactments influenced the content of corporate codes of compliance by explicitly criminalizing executive actions that authorized inaccurate accounting and financial reporting to investors, resorting to global bribery to obtain business, and violating workplace health and safety standards. Corporate codes of compliance are designed to prevent criminal misconduct and to protect the firm from the risk of financial and litigation costs due to illegal and/or unethical employee behavior.

Corporate codes of ethics are not designed to prevent criminal misconduct but to enable current responsible corporate action. These codes state the values and principles that form the purpose of the corporation and the current prioritized moral responsibilities that employees have to all company market and non-market stakeholders and for which they are held accountable. For example, the Johnson & Johnson Credo is a corporate code of ethics that identifies and prioritizes the moral responsibilities of company leaders in making ethical strategic business decisions. This corporate code of ethics provided critical moral guidance to global corporate decision makers who took Tylenol off the shelves when product tampering was documented, thereby morally prioritizing the safety needs of current customers over the financial needs of current investors. The corporate code of ethics enabled uniform, timely, principled global business decision making in a crisis situation by providing value prioritization guidance and a comprehensive stakeholder moral frame of reference to exercise responsible business judgment—even when it would have been legally defensible to delay such a business decision.

Corporate codes of best practice are aspirational in nature and geared to the future direction of corporate moral progress. For example, the United Nations Global Compact and the Caux Roundtable's Code delineate moral best practices that would improve future world prosperity and global corporate citizenship relations between business and its many stakeholders worldwide. Such codes of best practice provide direction and incentives for continual corporate moral improvement in the global marketplace.

A corporate code of conduct is, however, only one part of an organization's ethics and compliance system. Its credibility among market and non-market stakeholders depends on the extent of participant drafting, transparency, monitoring and enforcement that were and remain part of its implementation. In general, codes which are drafted with the wide involvement of market and non-market stakeholders rather than narrowly promulgated as directives from top executives and company legal counsel are more likely to be taken seriously since all parties affected have been empowered to "own" the code standards.

Code transparency entails clear understanding, widespread dissemination, distribution within and outside the company, and regular training with compliance sign-off/affirmations regarding its provisions and applications. Codes can be internally and/or externally monitored. Internal monitoring is best conducted by a certified, trained ethics and compliance officer (ECO) with an operational organizational ethics development system that provides for anonymous and/or nonanonymous reporting of ethics and/or legal violations, strong internal control procedures, whistleblower protection from retaliation, with full investigative and resolution power to make both announced and unannounced monitoring visits. External monitoring can be conducted by certified, trained professional auditors, government regulatory officials, certified benchmarking experts, and/or contracted international NGO consultants.

Codes can also be internally and externally enforced. Internal enforcement means that violations of the company standards of conduct will result in appropriate corrective action including discipline. Documented disciplinary measures include but are not limited to counseling, oral and written reprimands, warnings, probation or suspension without pay, demotions, reductions in salary, termination of employment and/or restitution. External enforcement may entail government regulatory intervention, criminal and/or civil legal proceedings, and domestic or international court involvement.

See Also: Accountability; Compliance; Corporate Governance; Corporate Regulation; Corporate Social Responsibility; Johnson & Johnson; Risk Management.

Bibliography. D. Leipziger, *The Corporate Responsibility Code Book* (Greenleaf Publishing, 2003); S. P. Sethi, *Setting Global Standards: Guidelines for Creating Codes of Conduct in Multinational Corporations* (John Wiley & Sons, 2003).

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Corporate Diplomacy

Corporate diplomacy is the intersection of international business and international relations. Since the days of the East India Company and other joint-stock companies, the role of business in relationships between countries has intensified, and in the 20th century the spread of transnational corporations brought about an awareness of the effects and responsibilities attendant to this larger role. Sony had become, in some sense, the public face of Japan on the international stage, or in the international department store; Coca-Cola and McDonald's had assumed the same role for the United States. With great power, as another transnational icon would have it, came great responsibility. In the 21st century, corporate diplomacy is poised to become a prominent part of public diplomacy.

Public diplomacy, since the Cold War era, has been discussed as the segment of international relations conducted outside of government. Asian exchange students in Midwestern high schools, Peace Corps volunteers working in Belize, European youths backpacking across the continent—these are all examples of public diplomacy. But so are American movies playing in Germany, French comic books in school libraries, and Japanese video games in living rooms around the world. Though the term *public diplomacy* was first coined as a euphemism for propaganda—government-sponsored or at least government-approved—the phrase has uprooted itself from its euphemistic soil and become attached to a living and more literal truth. Public diplomacy is something that simply happens, planned or not—the development of recording media in the late 19th and early 20th century greatly accelerated the exportation of cultural goods like music, movies, and later television, software, video games, and so forth.

Government may not be directly involved in public diplomacy, then, but remains interested in it. In its propagandist use, public diplomacy was associated with the United States Information Agency. When the USIA folded in 1999, the State Department instituted the Award in Corporate Excellence, given to companies that practice and promote social responsibility and pro-American attitudes overseas. There are joint ventures between business and government to counter anti-Americanism abroad, on the theory that such prejudices are bad not only for American foreign relations but for American business interests.

Corporate diplomacy, that component of public diplomacy practiced by corporations, is more deliberate than those cultural exports, which were produced for domestic audiences first (though the international audience is increasingly of concern in the crafting of blockbusters and television shows). Particularly since the end of the Cold War and the fall of communism—and the many fresh and emerging markets that have since been opened to global business—businesses have seen the competitive advantage of working diplomatically rather than trying to do business in the same way all over the world. The simplest example of this is the use of non-beef sandwiches by American fast food chains in India, but corporate diplomacy has advanced far beyond just adapting products to local concerns. Foreign-owned companies stand out less, less likely to be bastions of their home country's values imposed on a local population of employees and customers; American-based oil companies do business with Iran and Russia with a good deal more success than the American government, even while that government often makes their work more difficult.

Corporations are doing more than opening plants in other countries, they're instituting outreach programs, investing in infrastructure, easing the cultural friction where their bubble of culture floats through the sea of the world. One of the classic examples of the difference between corporate diplomacy and government diplomacy is the American embassy in Baghdad ... where only 3 percent of the staff speak Arabic. Business concerns would never let this happen at a Baghdad McDonald's, a Baghdad Gold's Gym. Milton Friedman's famous declaration that the only social responsibility of business is to increase its profits without breaking the rules is either proving outdated or redundant—perhaps there is an extent to which social responsibility is the best way to increase profits.

See Also: Corporate Social Responsibility; Globalization; International Chamber of Commerce; International Marketing Research.

Bibliography. Shaun Riordan, *The New Diplomacy* (Polity, 2002); Robert D. Schulzinger, *U.S. Diplomacy Since 1900* (Oxford University Press, 2001); Ulrich Steger, *Corporate Diplomacy: The Strategy for a Volatile, Fragmented Business Environment* (Wiley, 2003); Robert Trice, Miyako Hasegawa, and Michael Kearns, editors, *Corporate Diplomacy: Principled Leadership for the Global Community* (Center for Strategic and International Studies, 1995).

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Corporate Governance

While definitions vary, corporate governance can be explained as the set of rules, policies, laws, measures, and instruments that have an effect on the manner in which a company is ruled. These factors can be external to the company, meaning that they are given by the environment in which the company develops its business activity, or internal to the company, such as its board culture. Good corporate governance is appreciated by the market, as investors are more willing to place their money in those companies with higher governance standards. On the other hand, low-level corporate governance discourages investment, because it is seen as an obstacle to the good performance of the company. Financial scandals involving bad governance practices, such as those at Enron or Parmalat, as well as initiatives in the form of laws or voluntary codes aimed to improve corporate governance, have existed both in the past and in recent times.

The way institutions are governed varies among countries and over time. With the development of large public companies, a separation between ownership and management has occurred. Companies are now owned by a large number of investors who cannot directly rule the company. Therefore shareholders appoint directors and pass on the control of the company to them. These, collectively known as the board of directors, hire the CEO and managers. The main task of the board of directors is to represent the owners and protect their interests in the company. But problems arise because directors and shareholders may have diverging objectives.

In academic literature this is called a principal-agent problem, which finds its theoretical base in the agency theory. According to this theory, a principal, in this case the shareholder, hires an agent, the director, to perform a task on his or her behalf. Once the agent has been appointed to carry out the job, they may not have incentives for seeking the principal's best interest, but their own. In order to avoid this possible situation, measures need to be taken to align the interests of both parties. The instruments used to achieve this target may vary from reward schemes, such as remuneration linked to the company's long-term performance, to enforcement schemes.

The aspiration of any initiative on corporate governance is to have a board made up of directors who make decisions and behave with honesty, diligence, integrity, and commitment to the company and the shareholders. Different measures can be undertaken in order to accomplish this broad and somehow challenging goal. Some countries have passed acts that establish detailed compulsory rules. This has been the path followed by the United States with the Sarbanes-Oxley Act. In other cases, good corporate governance practices are compiled in the form of codes that are of voluntary application. These codes may be issued by professional organizations, international institutions, financial market supervisors, stock exchanges, or other entities. As their application is not compulsory, companies merely explain if they comply or not with the recommendations or principles. Thanks to these disclosures, investors can decide whether to rely on the company's practices.

For its importance and international scope, the Organisation for Economic Co-operation and Development (OECD) initiative must be highlighted. The OECD Steering Group on Corporate Governance has the following mission:

> Co-ordinate and guide the Organization's work on corporate governance and related corporate affairs issues [...] and to guide and support OECD outreach activities in the area of corporate governance.

In order to do so, it issued its Principles on Corporate Governance in 1999, which were revised in 2004, and a methodology for assessing their implementation. These principles address six main areas: legal framework, exercise of shareholders rights, equal treatment of all shareholders, importance of stakeholders, transparency and disclosure, and board structure.

See Also: Board of Directors; Corporate Codes; Enron Corporation; Investor Protection; Organisation for Economic Co-operation and Development; Sarbanes-Oxley.

Bibliography. Gueler Aras and David Crowther, "Governance and Sustainability—An Investigation Into the Relationship Between Corporate Governance and Corporate Sustainability," *Management Decision* (v.45/3–4, 2008); John Colley, Wallas Stettinius, Jacqueline Doyle, and George Logan, *What Is Corporate Governance?* (McGraw-Hill, 2004); Kenneth A. Kim and John R. Nofsinger, *Corporate Governance*, 2nd ed. (Pearson/Prentice Hall, 2007); Chris A. Mallin, *Corporate Governance*, 2nd ed. (Oxford University Press, 2007); Robert A. G. Monks and Nell Minow, *Corporate Governance* (Wiley, 2008); Giles Proctor and Lilian Miles, *Corporate Governance* (Cavendish, 2002); Zabihollah Rezaee, *Corporate Governance and Ethics* (Wiley, 2009); Avanidhar Subrahmanyam, "Social Networks and Corporate Governance," *European Financial Management* (v.14/4, 2008).

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Corporate Income Tax

Corporate income tax is the tax paid by business corporations on their corporate profit or income. It is an important consideration in making business decisions such as investing and financing. Differential corporate tax rates among countries are an important factor for multinational companies in choosing their investment locations. Although the significance of corporate income tax as a source of government revenue has gradually declined over time, it is a highly political issue in many countries. Unlike sole tradership and partnership businesses, corporations are recognized as artificial legal entities. Because of their separate legal status apart from the owners of the business, corporations are also required by law to pay income tax.

The history of corporate income tax is quite long and complex in many countries. For example, in the United States, corporate income tax predates personal income tax, although its importance has gradually declined over time. Further, the corporate income tax has implications for personal income tax. In the United States, while corporate income is taxed twice, first at the corporate level and then at the individual level when individuals report dividends as part of income in their tax returns, in Australia shareholders are protected from this "double-dipping" through the imputation tax system, where each dollar of dividend paid out of after-tax profit carries an imputation tax credit.

Low corporate income tax rates and exemption from corporate income tax for several years (also known as a tax holiday) are among the tax incentives used by various countries to attract foreign direct investment (FDI). Corporate income tax plays an important role in corporate financing decisions as well. Because interest paid on borrowed capital is tax deductible, this tax deductibility makes borrowing an attractive option to magnify shareholders' returns. For example, if the interest expense for a corporation is $10 million and the corporate income tax rate is 30 percent, then effectively the corporation pays an interest expense of $7 million. Similarly, in computing cash inflows and outflows in relation to an investment decision, corporations need to measure after-tax cash inflows and outflows to arrive at a correct decision.

Effective corporate income tax rates vary from country to country. For example, in 2007, the corporate income tax rates in some selected countries were as follows:

Country	Effective Corporate Tax Rates
Australia	30.0%
China	33.0%
France	33.3%
Germany	38.4%
India	42.2%
Singapore	20.0%
United Kingdom	30.0%
United States	40.0%

Note: Based on 2007 KPMG and PricewaterhouseCoopers corporate tax surveys.

In many common law countries that also predominantly use outsider systems of finance, income measured for financial reporting purpose (i.e., for reporting to shareholders of the company) can be quite different from tax rules used for determining corporate income tax liability. It is quite legitimate in these countries, for example, to use the straight line depreciation method for financial reporting purposes while using some form of accelerated depreciation method for tax reporting purposes. To the contrary, in many Roman law countries, which predominantly use insider systems of finance, the rules used for financial reporting purposes closely follow the rules used for tax reporting purposes.

When corporate income measured under tax laws differs from corporate income measured using financial reporting standards, the resultant tax difference turns into some kind of asset or liability. Suppose in a common law country like Australia, a corporation reports a profit of $200 million to shareholders. But when the tax laws are applied to this company, the profit turns out to be $170 million. If the corporate income tax rate is 30 percent, the company's tax liability in relation to current year's income will be $170 million x 30% = $51 million. But the income tax expense based on the income statement reported to the shareholders would be $200 million x 30% = $60 million. The difference of $9 million is a deferred tax liability for the company to be reported in its balance sheet. Had the difference been in the opposite direction, that is, tax liability > income tax expense by $9 million, the company would have reported the difference as a deferred tax asset. It would be treated as an asset because it is a tax payment that the company is making now with the expectation of saving an income tax of $9 million in the future. To what extent these tax savings materialize depends on the extent to which the tax rules and the tax rate remain the same. If the tax rate changes in the future before the deferred tax asset or liability is realized, the amount of this deferred tax liability or asset will be required to be restated, reflecting the new tax rate.

When the application of tax rules to a company's revenues and expenses produces a loss for the company, the loss is called a "tax loss." Tax laws in some countries allow tax losses to be adjusted against future tax liabilities or past tax payments.

See Also: Taxes; Tax Havens; Tax Holiday.

Bibliography. S. James and C. Nobes, *The Economics of Taxation: Principles, Policies and Practice* (Financial Times–Prentice Hall, 2000); R. Jankowski, *Profits, Taxes, and the State* (Praeger, 1998); KPMG, *Corporate Tax Rate Survey* (KPMG, 2007); R. La Porta, F. Lopez-de-Silanes, A. Shleifer, and R. W. Vishny, "Legal Determinants of External Finance," *Journal of Finance* (1997); G. A. Plesko, "The Corporate Income Tax: Impact and Incidence," in *Handbook on Taxation*, J. A. Richardson, ed. (Marcel Dekker, 1999); W. B. Hildreth and J. A. Richardson, eds., *Handbook on Taxation* (CRC Press, 1999); PricewaterhouseCoopers, *2007 Worldwide Tax Summaries* (PricewaterhouseCoopers, 2007).

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Corporate Social Responsibility

Corporate social responsibility (CSR) is the concept that business has a set of multidimensional obligations to meet the expectations of society's global stakeholders by fulfilling economic, legal, ethical, ecological, and discretionary philanthropic responsibilities. The belief that modern corporations have a responsibility to society and nature that extends beyond the economic responsibility to make money or profits for investors has become a key element in global corporate governance and a pervasive global expectation in light of the tremendous power exercised by multinational corporations (MNCs). The history and nature of CSR and the business case for it as a new global expectation requiring a strategic corporate response are dimensions of this concept to consider.

History and Nature of CSR

CSR has been discussed throughout the 20th century, but it was Howard R. Bowen's book *Social Responsibilities of the Businessman* (1953) that originated the modern debate on the topic. Bowen reasoned that there would be general social and economic benefits that would accrue to society if business recognized broader social goals in its decisions.

Numerous scholars contributed to the development of the concept, but during the 1970s a number of catalysts accelerated the acceptance of CSR. First, in its 1971 publication *Social Responsibilities of Business Corporations*, the Committee for Economic Development (CED), composed of business practitioners and leading scholars, endorsed CSR as reflecting a changing social contract between business-society and business-government relations. Second, in the early 1970s there was a major expansion of U.S. government social regulation including the creation of the Environmental Protection Agency, the Consumer Product Safety Commission, and the Equal Employment Opportunity Commission, which led to a supportive national context for CSR. Third, in the late 1970s Archie B. Carroll proposed a four-part model of CSR that differentiated CSR from corporate social performance (CSP). He maintained that CSP was an extension of the concept of CSR that focuses on actual performance results achieved rather than the general notion of business accountability or responsibility to society. However, in order for managers to engage in CSP they needed to have a basic definition of CSR, identification of stakeholders to whom the firm had a responsibility, and a pattern of responsiveness to CSR issues.

Carroll noted that the traditional view, advocated by the eminent economist Milton Friedman—that the only social responsibility of business was to legally make a profit for its investors—was inadequate to describe the judgment of many business leaders and did not reflect the changing expectations of domestic and global societies. He proposed that CSR encompass economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time. This definition provided individuals with categories with which to quantitatively state the nature or kind of obligation that business had toward society.

First, according to Carroll, business has an economic obligation to society. Business has an economic responsibility to supply goods and services that society demands and to sell them at a profit. Unless a business is financially viable, its other responsibilities cannot be fulfilled. To achieve its capitalistic economic responsibilities, business must be effective, efficient, innovative, and strategically adaptive to changing global conditions.

Second, CSR entails meeting legal obligations at the local, state, federal, and international levels. Society charters and allows the business to function and enacts the laws and regulations under which business is expected to operate. These codified rules are the formal framework within which business is expected to generate prosperity; they represent the public boundaries of acceptable business practice.

Third, CSR also entails ethical responsibilities. Ethical responsibilities refer to those activities and practices that are expected, or prohibited, by societal members even though they may not be codified into law. They embody the range of norms, standards, or expectations about business activity that reflect a concern for what major stakeholders such as consumers, employees, owners, the community, and others regard as fair or just. The ethical responsibility of business includes the dictum to "do no harm" by such activities as polluting the environment, discriminating against workers, producing dangerous products, engaging in misleading advertising, and so on. To be sure, some of these practices are governed by the legal responsibility of business but some are not. The ethical responsibility embraces a response to the "spirit" of laws and regulations and helps guide business actions in those decision areas in which regulations are ill-defined or nonexistent. Some view the law as the ethical minimum or "floor" on business behavior, whereas the ethical manager or firm is often expected to operate above the minimum required by law. Ethical leadership would be a manifestation of this kind of business obligation.

Fourth, CSR entails discretionary responsibility. Society expects business to be a good corporate citizen by contributing to the well-being of the community, through business giving or philanthropy. The discretionary category of responsibility might well be named the philanthropic category, because the best examples of business fulfilling this expectation typically are considered philanthropic: giving money or other resources to charitable causes, initiating adopt-a-school programs, employing executive in-house programs in the community, conducting civic events, and so on. The distinction between ethical and discretionary responsibilities is that the latter are typically "desired" by society and not expected in a moral or ethical sense.

In summary for Carroll, the socially responsible corporation should strive to make a profit, obey the law, be ethical, and be a good corporate citizen. Though the social responsibility concept is normative in that it proposes what business ought to do, it is also descriptive because it captures the essence of what socially responsible business organizations are doing today.

In more recent times, CSR has expanded to explicitly include ecological responsibility, not as a discretionary but an expected performance standard. The subfield of corporate ecology focuses on sustainable development, triple-bottom-line accountability, biodiversity, and intergenerational justice as necessary components of modern corporate strategy.

The Business Case for CSR

The business case for CSR includes the following arguments: (1) corporations that pursue CSR defensively avoid the pressures that create costs for them from litigation and/or increased government regulation; (2) corporations that pursue CSR internalize the full costs of doing business, instead of externalizing them onto society, and thereby have a more accurate accounting of their business processes and the data to improve future performance; (3) corporations that pursue CSR form stakeholder partnerships that enhance their social capital so that economic growth opportunities/issues that impact stakeholders can more likely be cooperatively resolved; and (4) corporations that pursue CSR enhance their global citizenship reputation and find it easier to attract and retain high-quality human capital and to gain access to lucrative financial capital opportunities that serve the long term strategic interest of the firm.

In the 2002 Sustainability Survey Report by PricewaterhouseCoopers, the following were the reported reasons why corporations were deciding to be more socially responsible: (1) enhanced reputation, (2) strategic competitive advantage, (3) cost savings, (4) industry trends, (5) CEO/board commitment, (6) customer demand, (7) SRI demand, (8) top-line growth, (9) investor demand, and (10) access to capital.

Among the 100 Best Corporate Citizens identified by *Business Ethics* magazine are numerous corporations engaging in CSR practices, including Cummins, Inc., of Columbus, Indiana, which has reduced diesel engine emissions by 90 percent (far more than legally required); Xerox Corporation of Stamford, Connecticut, which has implemented its Employee Social Service Leave Program for selected employees to take a year off with full pay to work for a community nonprofit organization; and Green Mountain Coffee Roasters of Waterbury, Vermont, which assists developing countries by paying "fair trade" prices, that exceed regular market prices, and offering microloans to indigenous coffee-growing families.

See Also: Bhopal Disaster; Corporate Codes; Corporate Governance; Corporate Social Responsibility; Downstream; Environmental Standards; Fair Trade; Regulation; Social Contract; Sustainable Development.

Bibliography. Archie B. Carroll and Ann K. Buchholtz, *Business and Society: Ethics and Stakeholder Management,* 7th ed. (Cengage Learning, 2008); William B. Werther, Jr., and David Chandler, *Strategic Corporate Responsibility: Stakeholders in a Global Environment* (Sage, 2005).

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Corporate Social Responsibility and International Business Ethics

Corporate social responsibility (CSR) encompasses the economic, legal, ethical, philanthropic and discretionary expectations that society has of a firm at a given point in time. Until very recently, most firms viewed business ethics only in terms of administrative compliance with legal standards and adherence to internal rules and regulations in international business transactions. In today's environment, it is imperative to pay attention to business ethics around the world and firms must earn the respect and confidence of their customers in order to succeed. Legal and ethical behavior are of paramount importance and companies and individuals alike are being held increasingly accountable for their actions, as demand grows for higher standards of corporate social responsibility.

While business ethics emerged as a field in the mid-19th century, international business ethics did not emerge until three decades ago. Managers and researchers have since then begun focusing on infinitely more complex issues in the international marketplace as value judgments differ widely amongst culturally diverse groups. There are several issues that have become salient such as comparison business ethical transactions from various religious perspectives, varying global standards, e.g., such as the use of child labor, the way multinationals take advantage of international differences, such as outsourcing production and services to low-wage countries, the permissibility of global business transactions with pariah states, and an overall search for universal values as a basis for international business transactions.

The rapid pace of globalization in the last decade has compelled multinational enterprises to leverage their resources to alleviate a wide variety of social problems. The pharmaceutical industries have priced their drugs well below market price in developing nations to avoid negative publicity, whereas those engaged in manufacturing have restricted environmental pollution regardless of the local laws and customs.

Furthermore, multinationals should not adversely disturb the balance of payments or currency exchange rates of the countries in which they do business. They should reinvest some of their profits in the countries in which they operate, and should resolve disputes arising from expropriation by host governments under the domestic laws of those countries. They should also reduce solid waste by incorporating recycling into their manufacturing processes.

Corruption and Bribery

In addition to taking a proactive stance in practicing appropriate business ethics etiquette as described above, businesses should also avoid certain forms of business practices that are a deviation from the sound practices of business policy, such as corruption, bribery, extortion, lubrication, subornation and agent's fees among other undesirable practices.

Corruption involves an illegitimate exchange of power into material remuneration mostly on the part of officeholders who take advantage of their position to grant undeserving favors. Not all forms of corruptions are likely to violate the law, and the semantics of the word can vary considerably around the world. Making profits, individualism, rampant consumerism are considered corruptions in many parts of the world. Transparency International publishes the annual *Corruption Perception Index*, and Nordic countries (e.g., Denmark, Finland, Sweden, Norway, and Iceland), New Zealand and Singapore are typically found to be the least corrupt countries in the world. The organization also publishes the annual *Bribe Payers Index*, and the lowest levels of bribe paying are usually found in Switzerland, Sweden, Australia, Austria, and Canada.

While voluntary offered payment by an individual seeking unlawful advantage is considered bribery, *extortion* refers to payments that are extracted under duress by someone in authority from a person seeking only what he or she is entitled to. Yet another variation of bribery is the difference between *lubrication* and *subornation*. While the former involves a relatively small sum of cash, a gift or a service given to a low-ranking official in a country where such offerings are not prohibited by law, subornation, in contrast, involves offering large sums of money—frequently not properly accounted for—designed to entice an official to commit an illegal act on behalf of the person offering the bribe. A final form of payment, an agent's fee, is paid to an individual to represent the company in that country. This form of payment is not necessarily a bribe, although it may be construed to be one under some circumstances.

Ethical behavior should be the trait of every firm not only in their domestic transactions, but in their international ones as well. Perhaps the best guides to a litmus test of whether or not something is ethical is based on utilitarian ethics, i.e., whether the actions of the company or the individual optimizes the benefits of all constituencies, rights of the parties, i.e., does the action respect the rights of the individuals, and justice or fairness, i.e., does the action respect the principles of justice or fairness to all stakeholders involved? Answers to these questions will shepherd businesses and individuals navigate through challenging international business transactions in the 21st century.

See Also: Biodiversity Convention; Bottom of the Pyramid; Child Labor; Corporate Social Responsibility; International Bank for Reconstruction and Development; Kyoto Protocol; Microfinance; Sustainable Development; U.S. Agency for International Development; World Bank, The.

Bibliography. Stephen Brammer and Andrew Millington, "Does it Pay to Be Different? An Analysis of the Relationship Between Corporate Social and Financial Performance," *Strategic Management Journal* (v.29/12, 2008); Sandro Castaldo, Francesco Perrini, Nicola Misani, and Antonio Tencati, "The Missing Link Between Corporate Social Responsibility and Consumer Trust: The Case of Fair Trade Products," *Journal of Business Ethics* (v.84/1, 2009); Andrew Crane, Abagail McWilliams, Dirk Matten, Jeremy Moon, and Donald S. Siegel, eds., *The Oxford Handbook of Corporate Social Responsibility* (Oxford University Press, 2008); Longinos Marin, Salvador Ruiz, and Alicia Rubio, "The Role of Identity Salience in the Effects of Corporate Social Responsibility on Consumer Behavior," *Journal of Business Ethics* (v.84/1, 2009); Ivan Montiel, "Corporate Social Responsibility and Corporate Sustainability: Separate Pasts, Common Futures," *Organization & Environment* (v.21/3, 2008); Doreen J. McBarnet, Aurota Voiculescu, and Tom Campbell, *The New Corporate Accountability: Corporate Social Responsibility and the Law* (Cambridge University Press, 2008); Terje I. Vaaland, Morten Heide, and Kjell Grønhaug, "Corporate Social Responsibility: Investigating Theory and Research in the Marketing Context," *European Journal of Marketing* (v.42/9–10, 2008).

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Corruption

In general, corrution is defined as the abuse of authority for improper gain. Public corruption refers to the misuse of governmental authority while private corruption indicates a misuse of purely nongovernmental power. Many analysts focus on public corruption. A very standard definition of public corruption, used by the World Bank, is "the abuse of public power for private benefit." A more detailed discussion is offered by Bradhan who notes the violation of an implicit or explicit agreement between a principal and their agent:

> [public] corruption ordinarily refers to the use of public office for private gains where an official (the agent) entrusted with carrying out a task by the public (the principal) engages in some sort of malfeasance for private enrichment which is difficult to monitor for the principal.

A more neutral and legalistic formulation, and one that can apply in both public and private settings is offered by Tanzi; he defines corruption as consisting of "intentional non-compliance with arm's length relationship aimed at deriving some advantage from this behaviour for oneself or for related individuals." There are other types of intentional subversions of processes such as political corruption (e.g., vote-buying in an election) but these meanings will not be considered here.

As to the types of specific actions that may constitute corruption, there are many. A few examples include: bribery and gratuities; influence peddling; offering one's official services for sale; misreporting of financial transactions; fictitious billing and invoicing; fabricating documents, signatures, and approvals; destroying records and evidence; fraud; misrepresentation; and providing special favor to related parties.

However context is critical in judging whether or not any of these actions in a specific instance are, in fact corrupt. For example misreporting may simply be due to negligence and not intentional, therefore not corrupt. Favoring of family members over nonfamily members may be culturally accepted in some cases and therefore not seen as corrupt, especially when the favored party is able to meet a particular obligation, such as a job qualification, even if that party is not the most able available.

Thus two sets of norms help to delimit what might constitute corruption in a given circumstance: morality and legality. Morally, the abuse of authority implies some violation of trust, whether it is the trust of the citizen in their officials or the trust of shareholders in their managers. And abuse that leads to gain is in a general sense doubly immoral, first because it is breaking a commitment (and thus lying to one or more parties, by omission or commission) and second because it implies taking resources that do not belong to the party taking those resources, i.e., stealing. There will be some cultural variation on whether a specific action in a particular context constitutes lying, betrayal, and stealing but these general concepts are in the abstract almost always universally disapproved of.

The law offers a second set of standards by which to judge corruption though these generally will be based on some prior moral precepts, if only loosely. Therefore corruption is not always illegal, nor is illegal behavior always corrupt. For example, gratuities offered by contractors to public agencies are, in most countries, generally legal so long as they are some *de minimus* (i.e., very small) amount. Conversely, misreporting of transactions to protect shareholders from a venal management might be illegal but might be the morally correct thing to do under the circumstances.

International Legal Standards

There are a variety of legal standards pertaining to corrupt behavior, nationally and internationally. National laws generally offer the greatest penalties for corruption and of course the greatest potential enforcement, but they also exhibit the greatest variation across countries. Price-fixing and offering of bribes in particular are not consistently illegal according to national local codes.

Internationally, there is the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions which has been signed by 30 OECD countries and six non-OECD countries. The Convention deals specifically with bribery and requires that peer-country panels review each signatory country's performance in implementing and applying the Convention. There is also the 2003 United Nations (UN) Convention against Corruption, which has now been ratified by the required minimum number of signatory and is therefore technically binding.

Of course the problem with transnational laws is that there is little ability to enforce them and equally little penalty for breach of them. The OECD Convention offers a self-regulating and peer-accrediting approach to legal regulation of corruption which is only as strong as the commitment of the peers involved and which has no formal sanction beyond moral suasion. The UN Convention has no enforcing authority other than the UN itself which obviously has limited enforcement power. More effective are transnational anti-corruption codes such as those established by the World Bank and which are applied to Bank development assistance. The International Monetary Fund (IMF) applies similar conditions to its loans. Even here however, such codes apply only to aid or loan recipients and are often flouted by those recipients.

Costs

Regardless of subtlety in the understanding and interpretation of corruption, there is certainly a material amount of it taking place in business and government worldwide. The estimates of the cost of corruption, while necessarily rough, are substantial. A 2003 UN conference on corruption estimated such costs as representing 5 percent of the world economy, or more than $1.5 trillion a year. In reviewing the literature on gross corruption costs, the Asian Development Bank (ADB) highlighted some particular sets of costs that illustrate both the magnitude and spread of the problem: as much as $30 billion in aid for Africa ending up in foreign bank accounts; one East Asian country over the course of 20 years estimated to have lost $48 billion due to corruption, surpassing its entire foreign debt of $40.6 billion; in one North American city, businesses cutting $330 million from an annual waste disposal bill of $1.5 billion by removing Mafia domination from the garbage industry; studies that indicate that in several Asian countries governments have paid from 20 percent to 100 percent more for goods and services because of corrupt practices by contractors; and estimates that corruption in a European country has inflated this country's total outstanding government debt by as much as 15 percent or $200 billion.

These are direct costs but equally or more important are the costs that corruption imposes on economic development, poverty and competitiveness. The biggest problem is that corrupt practice distorts implicit and explicit pricing, creates deadweight loss and causes misallocation of resources. Thus investment may be driven to uneconomical projects because of payoffs, and legitimate entrepreneurial activity might be supplanted by higher 'return' sham enterprises. Individuals who might otherwise engage in honest business might decide they have no alternative but to participate in a culture of economic subversion. The poor often suffer the most because they are not well-connected or able to pay bribes. Worst case there might be an undermining of legitimacy of the entire public sector.

Within a purely private setting, a corrupt company will likely become less competitive for the same reasons of resource misallocation and in extreme cases may fail due to malfeasance. There are a significant number of large corporate failures that can be traced at least indirectly to corrupt practices and compromised internal governance. In the United States the failure of Enron was in large part due to a business model that relied on an ever-increasing firm share price which became collateral to finance reckless expansion using accounting irregularities, earnings misreporting, market rigging (as was the case with its energy trading and its abuse of company-owned electricity generating assets in California), and blatantly unethical and illegal structured-finance and derivatives transactions. In Europe, Parmalat collapsed for somewhat similar reasons, namely a rapid expansion that temporarily hid structural financial problems which were covered up by managers through the use of fraud. Even when failure is not the end result, misuse of shareholder resources for the enrichment of specific managers is all too common.

Research bears out the existence and ultimate costs of these processes. In a study of over 70 countries during the late 1970s and early 1980s, Mauro found that corruption is negatively associated with investment rates; according to his model a one standard deviation improvement in the "corruption index" will translate into an increase of 2.9 percent of GDP in the investment rate and a 1.3 percent increase in the annual per capita rate of GDP growth. Research published in the World Bank *1997 World Development Report* found that countries that were perceived to have relatively low levels of corruption were always able to attract significantly more investment than those perceived to be more prone to corrupt or illicit activity. Of course these financial and economic measures such as these do not fully capture the range of deleterious public consequences that corruption can engender, such as a building collapse due to building codes that were unenforced because of bribes or consumer deaths due to tainted food that was not properly inspected.

From a private shareholder perspective corruption is no less costly. Taylor, in reviewing a particularly bad year for US corporate scandals (2002) in which there were failures or soon-to-be failures of Enron, WorldCom, Adelphia and Global Crossing, and scandals at blue chip companies like Xerox and AOL Time Warner estimated that in a total of 23 firms under investigation that year, the CEOs of these firms collectively earned $1.4 billion from 1999 to 2001, laid off 162,000 employees, and saw the reduction in the value of their shares fall by $530 billion, about 73 percent of their market value. While these consequences cannot be completely attributed to corrupt practice, it is nonetheless indicative of what such practices can held lead to.

Prevalence

More general evidence finds that the prevalence of corruption varies both geographically and sectorally although there is little doubt that the problem occurs in some form almost everywhere. Transparency International (TI), the largest international NGO dedicated to monitoring and reporting on global corruption, publishes a Corruption Perceptions Index (CPI), which ranks countries according to the perceived level of their corruption in demanding bribes. The 1999 CPI, to take but one example, ranked Denmark, Finland, New Zealand, Sweden, and Canada in the top five as far as having the least perceived corruption and Uzbekistan, Azerbaijan, Indonesia, Nigeria, and Cameroon as in the bottom five as having the most. Countries such as the United States, UK, Chile, and Australia were included in the top 20 and Kenya, Russia, and Pakistan were in the bottom 20. While there is some shifting across the geography from year to year, the TI rankings are overall generally stable. TI estimates that some US$100 billion annually is paid out worldwide in the form of bribes or some other pay-off.

Another measure of the incidence and cost of corruption is offered by the World Economic Forum Global (WEF), a Europe-based consortium with a large membership of firms, and designed by the Harvard Institute for International Development (HIID). The WEF issues an annual Competitiveness Report which surveys responding firms about various aspects of "competitiveness" in the host countries where they invest. The questions on corruption asks the respondent to rate the level of corruption on a one-to-seven scale according to the extent of "irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection or loan applications." The corruption index for a particular country is the average of all respondents' ratings for that country, with 7 being the best score. In the 2006/7 survey Iceland, Singapore, Finland, Norway, Sweden, and Denmark all had numerous rankings within the top 10 positions in terms of low corruption. Venezuela is ranked near the bottom with very high corruption. The United States has a somewhat middling rate: the worst rankings for the United States were 111 on the cost of terrorism to business and 102 on the impact of legal contributions to political parties.

There are some criticisms of measures such as these. In particular, these instruments are survey-based and so only indicate perceptions of corruption, not direct observational metrics of it. There can be biases and gaps in such surveys. Survey results may not always be comparable across different instruments that are conducted by different organisations or even across the same instrument across given years given changes in survey questions. However there is a high correlation of national rankings across surveys and relative stability within a given survey from year to year, indicating a basic core stability of the measures.

Besides national variations, some industrial sectors are well known to be more corrupt than others, like oil and gas, construction and armaments. A firm negotiating a deal in one of these sectors, in a country with a generally high corruption level is likely to be doubly hit and there may still be significant corruption in problematic sectors even in relatively 'clean' countries. The scale of sectoral corruption is indicated by the example of such costs in the construction sector, estimated globally at some US$3,200 billion per year according to TI. TI's Global Corruption Report of 2005 presents case studies of large-scale infrastructure projects that have been plagued by corruption, such as bribes paid to secure contracts for the Lesotho Dam in Africa, and the implication of politicians in corruption concerning the purchase of a waste incinerator in Cologne, Germany. Stories such as these are repeated in various reports and studies year after year. It is notable that they take place in both the developed and developing world.

Cause and Effect

A big focus of discussion in the corruption literature revolves around cause and effect. For example, an academic study by Treisman found that countries with Protestant traditions, histories of British rule, more developed economies, and higher imports to be less corrupt; with federal states, more corrupt; and the current degree of democracy not significant, although long exposure to democracy predicted lower corruption.

This broad finding, while by no means incontrovertible, is broadly consistent with other research that focuses on the relationship between governance institutions and corruption. A governance-corruption model generally asserts that corruption affects overall productivity and efficiency by reducing governmental capacity, weakening political institutions and citizen participation, offering more opportunities for rent taking by well-connected parties, reducing overall trust in government and thus leading to a sort of vicious cycle. Conversely transparent and efficient government in a context of well-educated, empowered, and actively participating citizenry will enjoy a virtuous circle of low corruption.

Of course any theory of particular causes of corruption will yield corresponding theories as to how to combat it. To the extent that fundamental social values are important (e.g., "Protestant traditions" as noted by Treisman) corruption will be harder, though not impossible, to change. However, evidence on the role of social and cultural factors is inconclusive. The relatively stable corruption rankings of individual countries on various surveys suggest some role for cultural factors but closer examination of the effect of specific cultural norms on corruption does not seem to carry significant explanatory effect and as Wei notes the costs of corruption do not vary by culture. Since corruption in general is costly it would seem to be undesirable from that standpoint alone, regardless of cultural and social context.

Governance and management can be more readily changed and many proposals to limit corruption focus on these elements. There are a number of common themes across such proposals. Transparency is key since open information about who gets what and who is paying who at least make the participants in the problem apparent and may provide disincentives to corrupt behavior through the threat of prosecution and public disapproval. Accountability is also mentioned frequently, in this context meaning that there are clear lines of authority and responsibility for consequences of actions. Legality is a final plank in which there are clear laws, regulations and codes defining what corruption is and what it is not and spelling out clear and strong penalties for noncompliance. Education underlies all of this since people must be trained in both the values and workings of any anti-corruption system.

The ADB follows these general principles in guidelines that it has developed and which are consonant with much of the anti-corruption literature. The ADB framework focuses on processes for hiring and promotion and remuneration of responsible authorities; regulations on conflicts of interest and conduct in office; regulations concerning gifts and hospitality; guidance and training on ethical conduct; enforcement of codes of conduct; duties to report; e-government and other methods of information dissemination; rotation of officials and division of duties; strong, independent and proper auditing procedures and institutions; criminalization of corrupt activities such as bribery and illicit enrichment; well-funded and well-trained enforcement authority; and public education and building of public support.

Although the ADB framework is focused on public agencies, private corruption will have a set of parallel issues. Thus in private corporations it is generally recommended that there be clear corporate policies governing conduct with clear sanctions spelled out for noncompliance; proper external and internal audit authority; appropriate division between different levels of management and between the board of directors and management; and free flow of information. Classic problems in corporate corruption include boards that are compromised or captured by management (for example through the offer of lucrative company contracts by managers to board members) and internal processes where there is a lack of genuine oversight for critical decisions (for example having a manager responsible for setting an underling's pay and promotion also overseeing that underling's performance as an internal auditor).

There is a school of thought that sees public information and education as primary in effecting a shift towards values that are antithetical to corruption. Once values are changed, so the thinking goes, behavior will follow. Examples of such an approach are offered by TI which compiles a Bribe Payers Index that evaluates the perceived propensity of firms from industrialized countries to bribe in the places where they do business and the Integrity Pact, in which the host government and all would-be bidders for a public contract agree beforehand that no party to the negotiations will offer or accept bribes. TI claims to have achieved success with Integrity Pacts in some of the world's most chronically corrupt countries. Whether such an approach is universally effective remains to be seen.

Of course an alternative approach is creation and enforcement of laws in which acts are clearly criminalized and vigorously prosecuted. Clearly there are many public and private officials who have been heavily fined, jailed and, in some cases, such as China, even executed and such disincentives and penalties no doubt have limited the extent of overall corruption. Nonetheless there are at least as many officials who escape without penalty and the costs of enforcement are very high. Whether worldwide public and private corruption is being reduced, increased, or staying level, there is no question that it remains a significant and costly problem with no one single solution.

See Also: Agents; Black Market; Compliance; Corporate Social Responsibility; Corporate Codes; Enron Corporation; Smuggling.

Bibliography. Asian Development Bank (ADB), *Anti-Corruption Policies in Asia and the Pacific* (2004); Stewart Hamilton and Alicia Mickelthwait, *Greed and Corporate Failure: The Lessons from Recent Disasters* (Palgrave MacMillan, 2006); Seymour M. Lipset and Salman Lenz, "Corruption, Culture, and Markets," in Lawrence Harrison and Samuel Huntington, eds., *Culture Matters: How Values Shape Human Progress* (Basic Books, 2001); Transparency International, *Transparency International Press Release Global Corruption Report 2005* (March 2005); Daniel Treisman, "The Causes of Corruption: A Cross-national Study," *Journal of Public Economics* (v.76, 2000); Shang-Jin Wei, *Corruption in Economic Development: Beneficial Grease, Minor Annoyance, or Major Obstacle?* Harvard University and National Bureau of Economic Research Working Paper (1998); World Bank, *World Development Report: Helping Countries Combat Corruption: The Role of the World Bank* (1997).

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Cost, Insurance, and Freight

Cost, insurance, and freight, or CIF, is one of the most frequently used terms in international business. It is a basis on which the exporter or seller quotes the price to the buyer or importer. When the seller quotes the price on a CIF basis, the total price includes the cost of the merchandise for the buyer, the premium for the insurance coverage for the merchandise from the seller's premises to the destination, and the transportation costs from the seller's premises to the destination.

As the distance between the buyer and the seller grows, transportation costs of the merchandise become important. Similarly, both the buyer and the seller need to protect themselves against accidents, loss of property, damages, or other unpredictable events such as the sinking of the ship carrying the merchandise or natural calamities such as cyclones and the consequent damage to the merchandise. For these reasons, quoting a price that includes insurance coverage and freight charges becomes very important.

In a CIF quotation, cost does not refer to the cost incurred by the seller or exporter in acquiring or producing the merchandise. From the seller's perspective, it is the price (without insurance and freight) at which the seller or exporter is willing to sell to the buyer. Obviously, how this price is derived remains entirely at the seller's discretion. Based on the seller's pricing strategies, the seller may choose to charge the full cost or below the full cost of the merchandise plus some markup.

Other terms that are also used in sales contracts include free on board (FOB) and cost and freight only (C&F). FOB quotations imply that the seller is responsible for all the costs up to the point where the merchandise will be boarded on a vessel or airplane and the buyer is responsible for paying the freight and insurance for the merchandise while being transported. C&F excludes insurance coverage and includes only cost of the merchandise and the freight charges. In this case, the responsibility for taking insurance lies with the buyer.

See Also: Freight Forwarder; International Commercial Terms (Incoterms); Landed Cost; Transportation.

Bibliography. V. J. Geraci and W. Prewo, "Bilateral Trade Flows and Transport Costs," *The Review of Economics and Statistics* (1977); Richard Gilbert and Anthony Perl, *Transport Revolutions: Moving People and Freight Without Oil* (Earthscan, 2007); C. Moneta, "The Estimation of Transportation Costs in International Trade," *The Journal of Political Economy* (1959); D. M. Sassoon, *C.I.F. and F.O.B. Contracts* (Sweet & Maxwell, 1995).

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Cost Accounting

Cost accounting is a process that involves accumulating, measuring, analyzing, interpreting, and reporting cost information for the purpose of internal and external decision making. It determines the cost of something through direct measurement, systematic and rational allocation, or arbitrary assignment. Cost accounting is often discussed in the accounting literature as a distinct branch of accounting—however, it should best be thought of as a bridge or overlap between financial and management accounting, since it addresses the demands of both branches of accounting.

The origins of modern cost accounting can be traced to the industrial revolution. During that time, managers recognized that the complexities of managing large-scale operations necessitated that systems be developed to record and track costs to facilitate better decision making. At the beginning of the industrial era, variable costs tended to dominate the interest of managers. However, with the passage of time, managers began to recognize that fixed costs were equally important in decision making. Today, modern cost accounting is no longer considered as mere numbers—rather, cost accounting has become a major player in business decision making.

In theory, accounting is generally classified under three main branches: financial accounting, management accounting, and cost accounting. Financial accounting is concerned with measuring and recording business transactions to produce financial statements for external decision making, while management accounting is concerned with measuring and reporting financial and nonfinancial information for the purpose of internal decision making. In contrast, cost accounting provides information for both internal and external decision making. It provides information to external parties to make investment and credit decisions and for internal parties to manage and control current operations and plan for the future.

Cost accounting is divided into three broad areas: (1) the measurement of cost (e.g., historical cost vs. market value vs. present value, standard cost vs. actual cost); (2) the assignment of cost to the accounting period (e.g., accrual accounting vs. cash basis accounting); and (3) the allocation of cost to cost objectives (e.g., determination of whether costs should be classified as direct or indirect, determination of cost pools and their allocation bases). Cost accounting can therefore be considered as the part of financial and management accounting that collects and analyzes cost information.

In the accounting literature, cost accounting principles, procedures, and practices are generally discussed within the context of manufacturing firms. However, cost accounting is essential for the efficient operations of all business entities: large and small, public and private, profit and nonprofit, and manufacturing, merchandising, and services. In today's dynamic global environment, reliable and timely cost information is the key to business success. Business entities therefore rely heavily on cost accounting to generate knowledge and wisdom about an entity's operations. Cost accounting can provide information for various types of decision making such as: assessing operational performance, reducing costs, determining the price of goods/services, determining the effect of an increase in one or more cost elements on sales revenue, and analyzing the reasons for variances between actual and standards costs, to name a few.

Regardless of size, industry or trade, all business entities need good cost accounting information systems to manage, track and improve their business processes. The traditional cost accounting system—absorption costing—is still used by many manufacturing entities. Under this approach, all manufacturing costs are included in the cost of a product. However, in recent times, a wide variety of service, manufacturing and nonprofit organizations have embraced the use of activity based costing. This approach assigns costs to specific activities (e.g., manufacturing, engineering). Other innovative approaches that have emerged to manage and improve business processes include approaches such as lean production, theory of constraints and six sigma. Lean production is based on the logic that production should be in response to customer orders and that perfection should be continuously pursued. The theory of constraints is based on the observation that every organization has at least one constraint, which should be effectively managed for success. Finally, six sigma relies on customer feedback and fact-based data gathering to drive process improvement.

Today, businesses have an array of cost accounting approaches that they can utilize. However, it is important to note that when information is being provided for financial accounting purposes, it must be developed in compliance with Generally Accepted Accounting Polices (GAAP). In contrast, information provided for management accounting need not be in compliance with GAAP. Notwithstanding, two important bodies, namely the Institute of Management Accountants and the Society of Management Accountants of Canada do issue cost accounting guidelines. Although these guidelines are neither mandatory nor legally binding, they are nonetheless useful to ensure that high-quality accounting practices are followed. A third body—the Cost Accounting Standards Board—has also produced a set of standards to help ensure uniformity and consistency in government contracting. This body was established by the U.S. Congress in 1970. The standards produced by this board are legally binding on companies bidding on cost-related contracts to the federal government.

See Also: Accounting Information Systems; Cost Structure; Fixed Costs; International Accounting Standards Board; Managerial Accounting.

Bibliography. Ray H. Garrison, Eric W. Noreen, and Peter C. Brewer, *Managerial Accounting,* 12th ed. (McGraw-Hill, 2008); Charles T. Horngren, Srikant M. Datar, and George Foster, *Cost Accounting: A Managerial Emphasis,* 11th ed. (Prentice Hall, 2003); Michael R. Kinney, Jenice Prather-Kinsey, and Cecily A. Raiborn, *Cost Accounting: Foundations and Evolutions* (Thomson South-Western, 2006); Edward J. VanDerbeck, *Principles of Cost Accounting* (Thomson South-Western, 2005).

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Cost Analysis

Cost analysis refers to a specific methodology that can be used to analyze financial decisions. This methodology includes several distinct, but related tools that are useful for calculating costs, particularly of something that is being appraised, assessed, or evaluated. Cost analysis is used by decision makers in both the public and private sectors, and is useful for both for-profit and not-for-profit decision making. It is primarily discussed in the literature as a methodology for optimizing the use of resources in light of economic constraints and limited resources; however, this methodology should be employed to make decisions even if resources are not an issue.

Cost analysis methodologies became popular in the 19th century with the use of cost benefit analysis by the U.S. Corps of Engineers when it began to evaluate federal expenditures on navigation in 1902. Over the next 60 years, this methodology gathered momentum in the United States with the enactment of the Flood Control Act of 1936, use by the U.S. Department of Defense in the 1960s, and promotion by the Office of Management and Budget. In 1981 cost benefit analysis became an official appraisal tool of the U.S. federal government with the signing of Order 12291 by President Reagan.

The term *cost analysis* is often used interchangeably with terms such as *cost benefit analysis, cost effectiveness analysis, cost utility analysis,* and *cost feasibility analysis.* However, each of the aforementioned methodologies has unique characteristics that make each appropriate to specific applications. In cost benefit analysis, costs and benefits are both translated into monetary terms. This methodology can therefore facilitate comparison of alternatives with widely disparate objectives (e.g., health, education, national security) to determine which provides the highest ratio of benefits to costs in order to facilitate overall social analysis for public investment decisions. Cost effectiveness analysis is useful for comparing the costs of different programs that are designed to achieve the same or similar outcomes. It is an appropriate tool for cost appraisals when it is difficult to assess benefits in pecuniary terms, when controversy arises over the valuation of certain types of benefits (e.g., reduced mortality), or where the effort of calibrating benefits into monetary units is unjustifiably great. In cost effectiveness analysis, only costs are translated into monetary units—benefits are expressed in outcome units such as lives saved, percentage of alcoholics abstaining for one year, and so forth. In other words, efficiency is expressed in terms of the costs of achieving a given result.

Cost utility analysis assesses alternatives by comparing costs and utility (satisfaction derived by someone from some outcome) as perceived by users, to determine which option yields the highest level of utility for a given cost. Cost feasibility analysis compares the cost of an investment with the available budget to determine if the investment would be feasible. Other methodologies classified under cost analysis include: net present value, which measures wealth maximization; the internal rate of return, which measures the return on capital; and the payback period, which is the time required to recover the original investment.

Cost analysis methodologies can yield invaluable information for decision making—however, these methodologies can be quite complex and complicated. Cost analysis can be complicated by the following issues, among others: choice of discount rate, selection of the correct costs/benefits for the analysis, duplication/double counting of costs/benefits, measurement of intangible (e.g., reduced stress, cleaner environment) or controversial (e.g., value of lives saved) costs/benefits, and valuation of nonmonetary costs/benefits, indirect costs/benefits, and opportunity costs.

See Also: Cost Structure; Make-or-Buy Decision.

Bibliography. Anthony E. Boardman, David H. Greenberg, Aidan R. Vining, and David L. Weimer, *Cost-Benefit Analysis: Concepts and Practice* 2nd ed. (Prentice Hall, 2001); Henry M. Levin and Patrick J. McEwan, *Cost-Effectiveness Analysis* 2nd ed. (Sage, 2001); Tevfik F. Nas, *Cost-Benefit Analysis: Theory and Application* (Sage, 1996).

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Costa Rica

A Central American nation located between Nicaragua and Panama, Costa Rica had a 2008 population of approximately 4.47 million people. By Central American standards, it is a relatively prosperous nation with a 2008 gross domestic product (GDP) of US$30.5 billion. In per capita terms, at US$6,830, it ranks ahead of all Central American economies except Panama. Costa Rica has one of the most stable democracies in the Western Hemisphere. That, in combination with a relatively well-trained labor force, mild climate, and beautiful countryside, has made the country a popular destination for both direct foreign investment and wealthy retirees.

Macroeconomic trends have been largely favorable in recent years. Between 2000 and 2007, real GDP expanded at an annual rate of 5 percent. That figure implies an impressive seven-year growth rate of 3.1 percent in per capita terms. Monetary policy has allowed liquidity to expand at an even faster clip, however, causing inflation to persist at double-digit rates throughout the new millennium. That circumstance is more manageable than might be expected. Central bank policies have generally kept real interest rates in positive territory and avoided excessively easy credit stances. Similarly, the Finance Ministry has also held the central government fiscal deficit in check during this period.

Foreign Trade

Foreign trade patterns resemble those of many tropical economies wherein the service account takes on added importance via tourism as a key generator of commerce. Traditional exports include bananas, coffee, sugar, pineapples, timber, and beef. Newer important merchandise exports include electronic equipment, medical equipment, and pharmaceuticals. Service sector exports encompass tourism, software development, and financial outsourcing. The latter play critical roles in largely offsetting an annual $3 billion plus merchandise trade deficit. Costa Rica further exports substantial volumes of energy produced by its extensive system of hydroelectric dams. It also imports all of its oil-related energy products, contributing to larger than normal merchandise trade deficits since 2002. Other merchandise import categories include capital goods and food.

Although the current account has tallied negative balances in recent years, the colon has remained remarkably strong against the dollar. That reflects the large volumes of foreign direct investment that have occurred during this period in each of the manufacturing and service export sectors mentioned above. Those sectors have attracted an impressive list of multinational corporations drawn in part by strategic fiscal incentives. A growing number of European and North American expatriates have also invested in a variety of residential real estate projects throughout the country, also strengthening the capital account.

Infrastructure

From a regional perspective, the economy of Costa Rica is centered around San Jose, the capital and largest city. Beyond metropolitan San Jose, other important metropolitan economies include Liberia, Puerto Limon, and Puntarenas. All three are regional public administrative, agricultural, and tourism centers. As seaports, international commerce plays an important role in the economies of Puerto Limon and Puntarenas. Although not directly located on the Pacific coast, Liberia has an international airport that helps increase its overseas business linkages.

Among the various policy issues facing Costa Rica, one of the most important is physical infrastructure development. The road system has not been maintained very well and also has failed to keep pace with economic growth in recent decades. Public utility systems and municipal street grids suffer from similar difficulties. Information technology also lags behind modern economies elsewhere in the world. Operational efficiencies for in-country business endeavors inevitably suffer as a consequence of these shortcomings. Services trade issues facing Costa Rica include intellectual property rights, telecommunications competition, and insurance competition. Some of those problems are expected to be addressed as the government moves toward implementation of the Central American Free Trade Agreement. As is the case with most Latin American countries, labor market rigidities continue to hamper Costa Rican economic performance. The labor market is also affected by illegal immigration from Nicaragua. Regulatory burdens facing businesses are also relatively heavy.

Future prospects for Costa Rica remain positive. As a very popular tourist and off-shore residential destination, it has met the trend toward increased service sector globalization very effectively. Its growing industrial sector exports are also helping to modernize an economy characterized by one of the best labor forces in Latin America. Overall productivity in this country can also accelerate as the national government addresses the policy areas currently slowing development.

See Also: Central America; Central American Common Market; Company Profiles: Central America and the Caribbean; El Salvador; Guatemala; Panama

Bibliography. Banco Central de Costa Rica, *Informe Mensual de la Situación Económica de Costa Rica* (BCCR División Económica, April 2008); Douglas Belt, Robert Birnbaum, and Lowell Gudmundson, *Some Aspects of Costa Rican Political Economy: Balance of Payments and Foreign Investment* (ACM Central American Field Program, 1972); Thomas Grennes, *Role of Coffee Exports in the Costa Rican Economy—APAP II*, Collaborative Research Report Number 330 (Abt Associates, 1992); International Monetary Fund, *International Financial Statistics* (IMF Publication Services, April 2008); S. Mosquera, "Costa Rica," *Latin America and Caribbean Quarterly Review and Outlook* (Global Insight, First Quarter 2008); Deborah Sick, "Coping with Crisis: Costa Rican Households and the International Coffee Market," *Ethnology* (v.36/3, 1997); World Bank, *Doing Business 2008* (International Bank for Reconstruction and Development, 2007).

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Costco Wholesale

A big-box, no-frills, minimally stocked operation that requires a membership fee to offset low margins on goods and services, Costco was founded in 1983 by James Sinegal and Jeffrey Brotman with a mandate to provide a minimal selection in an extensive range of products that excel in their class and at the same time provide good bargains. The lack of advertising and its associated costs, the low overhead, the negligible markup, the high sales volumes, a respected high-quality signature brand and co-branding with well-known high-end manufacturers, the infrequent and unexpected availability of highly valued and desired goods, and road shows of premium specialty items at affordable prices contribute to Costco's success. How-

One of Costco's 76 Canadian stores; it has other international outlets in Great Britain, Taiwan, Korea, Japan, and Mexico.

ever, Costco's respect and care for its employees as well as its customers has also helped its success.

Costco relies on word of mouth from satisfied customers rather than costly advertising to secure business and loyalty. The use of skylights and reduced lighting on sunny days, the use of shipping pallets to act as displays on the barren concrete retail floor, the lack of shopping bags and other forms of packaging materials contribute to their cost savings. Only one credit card company, American Express, is used exclusively and in return, no fee is charged to Costco on transactions, which magnifies savings to both the consumer and the seller.

Great attention is paid to providing high quality goods that are also sought after by consumers. There is little choice available in the 4,000 core goods that are stocked, only 25 percent of which continually change, but those goods chosen are purchased in large lots to minimize costs and prices. Even in its food court where a limited number of items are available for an extremely reasonable price, a family of five can be fed for less than $10. Costco guarantees a full refund at any time for the products that it sells. Electronic products must be returned within 90 days to secure a full refund; however, to further entice customers, Costco offers a free two-year warranty. Kirkland, its signature brand, is well priced, of good quality, and upgraded frequently. Costco has been innovative in its packaging of goods, its merchandising mixture, and limits its overall markup to 14 percent.

There are also great values in higher-priced merchandise that appears occasionally for a short period of time. Whether the product is diamonds, boutique wines, leather sofas, or exotic cheeses, they are of high quality with never more than a 14 percent markup. These special lots pique shoppers' interest and drive repeated visits. The periodic rotations of unusual goods such as oriental rugs further induce customers to shop frequently.

According to analysts, Costco's unskilled employees in the United States receive an average wage of $17.25 per hour, which is 42 percent higher than the wage paid by its major rival. Costco also covers 92 percent of the cost of the healthcare benefits that are provided to all employees, including part-time workers. High profits result from the respect shown to employees and in return there is low turnover and a higher rate of productivity. The accompanying low rates of theft help propel Costco above its poorly paying rivals. Costco has proven that healthy profits and well-paid employees are not mutually exclusive.

See Also: Retail Sector; Wal-Mart Stores.

Bibliography. Costco Wholesale, www.costco.com (cited March 2009); M. Duff, *A Private Label Success Story* (DSN Retailing Today, 2005); David W. Fuller, Anita Thompson, and Mary-Jane Butters, *Costco Wholesale Household Almanac* (Costco Wholesale, 2007); "Discounters: Costco's Battle to Change Beer and Wine Distribution," *BusinessWeek* (n.4065, December 31, 2007); Euromonitor PLC, *Costco Wholesale Corp.* (Euromonitor, 2003); Institute of Grocery Distribution, *Costco Wholesale* (Institute of Grocery Distribution, 1992); Duane E. Knapp, *The BrandPromise: How Costco, Ketel One, Make-a-Wish, Tourism Vancouver, and Other Leading Brands Make and Keep the Promise That Guarantees Success* (McGraw-Hill, 2008.

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Cost of Living Allowance

A cost of living allowance (COLA) is an adjustment in wages to make up for a change in purchasing power, in order to keep an employee at a certain standard of living or lifestyle. A change in purchasing power is determined with a measure of inflation, or rising prices, facing consumers over time or in different geographic areas, such as the U.S. Consumer Price Index (CPI). Employment contracts, pension benefits, and government entitlements, such as Social Security, often contain annual COLAs. Alternatively, COLAs may also be tied to a cost-of-living index that varies by geographic location if an employee temporarily relocates to a higher cost area within a particular country or to another country, including military personnel stationed overseas.

One controversy surrounding the COLA is that it often does not take into account the effect of higher taxes that must be paid if the recipient is pushed into a higher tax bracket. In that case, the COLA is not enough to keep the person "whole" or at the same after-tax salary level. In addition, the COLA is usually retroactive, or based on the inflation rate of the prior year, meaning recipients have difficulty keeping up with a higher cost of living. However, if the COLA is based on a measure of inflation that overestimates price increases facing consumers, then the recipient's purchasing power is increased rather than just maintained. Because the CPI did not take into account consumer substitution into cheaper goods or stores with better bargains, the U.S. Bureau of Labor Statistics created the Chained CPI to better reflect consumer adjustments and thus the cost of living.

COLAs were under scrutiny during the inflationary 1970s as a possible cause of cost-push inflation, a situation where the cost of production suddenly rises but the demand for the product or service remains the same. This additional cost must be passed on to the consumer in the form of price increases. Wage increases, along with increased costs of inputs, such as oil, were considered the primary culprits. However, further research indicates that sustained cost-push inflation can only occur with an increase in the money supply.

See Also: Compensation; Pension Systems.

Bibliography. C. Burdick and L. Fisher, "Social Security Cost-of-Living Adjustments and the Consumer Price Index," *Social Security Bulletin* (v.67/3, 2007); Shaohua Chen and Martin Ravallion, "Absolute Poverty Measures for the Developing World," *Proceedings of the National Academy* *of Sciences of the United States of America* (v.104/43, 2007); U.S. Bureau of Labor Statistics, "Overview of BLS Statistics on Inflation and Prices," www.bls.gov (cited March 2009); U.S. Social Security Administration, "Latest Cost of Living Adjustment," www.ssa.gov (cited March 2009).

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Cost Structure

Cost structure has traditionally been defined as the relative proportion of fixed and variable costs in an organization and how these costs behave in response to changes in production or sales volume. Additionally, cost structure is generally discussed in the context of long-run and short-run production, with an emphasis on a particular function. Modern definitions of cost structure, however, encompass a much more holistic definition, namely, rethinking business models to reduce costs across entire processes in order for organizations to remain competitive in the globalized business environment.

In economics, cost structure is defined as the relationship between costs and quantity. Embedded in this definition, firms have at least one fixed factor of production in the short run—all other costs are assumed to be variable. In the short run, fixed factors of production are assumed to have no impact on the firm's decisions since they cannot be changed over a short time period. For example, most products require raw materials, labor, machinery, and factory space. If demand increases for a particular product, it is generally quite easy to increase raw materials and labor in proportion to the increased demand. However, adding new machinery and a factory is not as easy since these are capital investments that generally require large financial outlays and a certain amount of time for completion.

In contrast to the short run, the long run is the period over which firms are assumed to be able to vary all factors of production. The implications therefore of the short run/long run at the industry level are that in the short run, firms can increase/decrease production in response to demand, while over the long run, firms can enter/exit the market.

A proper understanding of cost structure hinges on the fundamental distinction between fixed costs and variable costs. Fixed costs can be classified into two categories: (1) committed fixed costs, and (2) discretionary fixed costs. Committed fixed costs are costs associated with investments in basic organizational assets and structure (e.g., depreciation, insurance expenses, property taxes, and administrative salaries). Such costs are long term in nature (several years) and cannot be significantly reduced in the short term even during periods of diminished activity. In contrast, discretionary fixed costs (e.g., advertising, repairs and maintenance, research and development) are short term in nature (one year). Such costs can be altered by current managerial decisions with minimal damage to an organization's long-term goals. As a result, these costs are generally the first to be cut during bad times.

In terms of per unit and total comparisons, fixed costs that are expressed on a per-unit basis will vary inversely with the level of activity. In other words, unitized fixed costs will decrease as volume increases and vice versa. However, in total, fixed costs remain constant within the relevant range. For example, rent will not increase if a factory is working at full capacity or at minimum capacity, or if an outpatient clinic serves one patient or 20 patients daily. The relevant range is the range within which a factory, business, hospital, school, etc. can operate without increasing the size of its operations in the short run. Within this range, assumptions about variable and fixed cost behavior are reasonably valid.

In contrast to fixed costs, variable costs are expenses that vary in total according to the size of the program or in direct proportion to the level of business activity, but which remain constant on a per unit basis within the relevant range. For example, the number of latex gloves used in a hospital will increase with the number of patients; however, the cost per latex glove will not generally change if one glove or 100 gloves are used. Typical variable costs include direct materials, sales commissions, and supplies. Note that variable costs will be zero when business activity is zero. In order for a cost to be variable, it must be variable with respect to some activity base or cost driver. Business activity can be expressed in many ways such as beds occupied, units sold or produced, miles driven, customers served, or products serviced. Knowing what drives cost is crucial in order for cost reduction to be targeted in the right areas. Notwithstanding, it is important to recognize that no cost driver is a perfect prediction of cost. For example, although machine hours may be used as a cost driver to predict electricity consumed in a factory, it has no relationship to the actual price charged per kilowatt hour.

A question that may frequently be asked is "which cost structure is better?" This answer depends on numerous factors including type of industry, long-run sales trend, and flexibility to risk. Firms with higher proportions of variable to fixed costs tend to enjoy greater profit stability and are better protected against losses. In contrast, firms which are characterized by high levels of fixed costs (e.g., the airline industry) experience greater profits in good years. However, the downside to this type of cost structure is that greater losses are experienced in bad years. If demand falls, profits decline swiftly and turn into losses. For example, United Airlines' fixed costs for pilots and flight attendants was so high in comparison to its competitors that the company could not cover its higher operating costs—the airline was forced to file for bankruptcy in 2002. Cost structures with high proportions of fixed costs are therefore quite risky when demand is uncertain and fluctuating.

One option that can help to minimize risk in high-fixed-costs industries is to lease rather than purchase, since leases can be cancelled. In general, decision makers have some flexibility in trade-offs between fixed and variable costs. For example, variable labor costs can often be replaced with automation. However, organizations will not move toward automation unless the long-run sales trend suggests that this may be a viable alternative. These types of decisions can generally be facilitated through the use of cost analytical techniques.

Closely aligned with the term *cost structure* is the concept of operating leverage, that is, a measure of the sensitivity of net operating income to a given percentage change in sales dollars. Operating leverage is computed as contribution margin (sales minus variable expenses) divided by net income. If two firms have identical revenues and expenses but different cost structures, the firm with the higher fixed expenses will have greater operating leverage. The effects of operating leverage can be quite dramatic when a company's sales are near the break-even point. However, as sales and profits rise, operating leverage declines.

Given the dynamics of the 21st century, it is important that organizations recognize that proactive strategic vision on cost structure is the key to business success and survival. Such vision requires that organizations take a holistic view of cost structure, rather than a strictly departmental/functional view. Moreover, this holistic view needs to encompass not only internal issues/factors but also external issues/factors, since the external environment can greatly affect an organization's success. For example, inflation/deflation, that is, fluctuations in money value that cause the price of goods and services to change, and supply/demand conditions that circularly influence price, are all factors beyond the control of management. Nonetheless, these factors can greatly affect profitability.

Profitability can also be affected by external factors that can be controlled to some extent by management. For example, higher oil prices may necessitate using a different transportation route, sourcing from a different vendor, or purchasing in bulk in order to reduce transportation costs. Generally, bulk purchasing is adopted in order to reduce unit costs of either raw materials or products. However, a more holistic vision considers not only the discounts that could result from buying in bulk, but also the savings that could be realized on transportation and handling costs.

Proactive strategic vision may, however, frequently necessitate that organizations make difficult strategic choices about the business model itself, for example, removing organizational or supply-chain layers, embracing outsourcing, or sharing service centers. Nonetheless, today, the key to success hinges on an organization's ability to expeditiously redesign its business model to respond rapidly to changing dynamic economic conditions. Continuous review of cost structures is therefore critical for organizations to maintain a competitive edge and avoid bankruptcy or hostile takeovers.

See Also: Cost Accounting; Cost Analysis; Fixed Costs; Managerial Accounting.

Bibliography. Ray H. Garrison, Eric W. Noreen, and Peter C. Brewer, *Managerial Accounting*, 12th ed. (McGraw-Hill, 2008); Michael R. Kinney, Jenice Prather-Kinsey, and Cecily A. Raiborn, *Cost Accounting: Foundations and Evolutions*, 6th ed. (Thompson, 2006); KPMG International, *Rethink-*

ing Cost Structures: Creating a Sustainable Cost Advantage (KPMG, 2007); Henry M. Levin and Patrick J. McEwan, *Cost-Effectiveness Analysis*, 2nd ed. (Sage, 2001); Nadini Persaud, *Conceptual and Practical Analysis of Costs and Benefits in Evaluation: Developing a Cost Analysis Tool for Practical Program Evaluation* (Unpublished doctoral dissertation, Western Michigan University, 2007).

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Côte d'Ivoire

This West African country became a protectorate of France in 1843–44, and then a French colony in 1893, gaining its independence in 1960. In spite of its name, "Ivory Coast" in English, the country has depended heavily on the sale of agricultural produce, and about 70 percent of the population still relies on agriculture. The country is one of the largest producers and exporters of cocoa beans, coffee, and palm oil.

Because of its colonial history, French companies tend to have a major role in the country's economy, developing the countryside to establish plantations for cash crops. After World War I, the French imposed a more centralized administration and also started expanding the country's infrastructure. Tropical hardwood was harvested, and the plantations—largely run by French companies—produced cocoa and coffee, but there were also some locals who established their own plantations. To help with the building of roads and railways, the French relied on a system of forced labor by which the locals worked in lieu of payment of taxes.

During World War II, the colony was controlled by the French loyal to the pro-German Vichy regime, After the war the French administration introduced a large number of economic and political reforms including the abolition of forced labor, which had become very unpopular because the system was subject to abuse. Agitation also started for independence and much of this was led by Félix Houphouët-Boigny, a local activist who owned plantations and who had established the Syndicat Agricole Africain (SAA), a union that helped protests for independence. Houphouët-Boigny was able to get elected to the French national assembly, spending two years as a French cabinet minister.

In 1958 protests in Côte d'Ivoire led to French president Charles de Gaulle holding a referendum in which the colony voted against a federation being established, and in 1960 Houphouët-Boigny declared independence. He introduced a socialist economy with central planning in an attempt to build up the country. Politically, the country was stable and this helped encourage foreign investment, especially in the cocoa and coffee industries. In the late 1970s, after the oil crisis pushed up the price of gasoline, Côte d'Ivoire started exploiting its own offshore oilfields that provided a degree of wealth for the country. The Abidjan Stock Exchange (Bourse de Valeurs d'Abidjan) was created in 1976 and was one of only four stock exchanges operating in Africa during the 1990s. This helped encourage investment—both local

A man runs a conveyor belt at an Ivoirian cooking oil bottling plant. Palm oil is one of the country's top exports after cocoa.

and foreign—in Ivoirian companies, and by 1986 some 30 percent of the shares were owned by Ivoirians. In the early and mid-1990s, Côte d'Ivoire went through a period of austerity and hardship, resulting in a rescheduling of loans in November 1996—it had previously stopped repayments in 1987.

In spite of the discovery of oil, cocoa remains the country's largest export, making up about a third of Côte d'Ivoire's export income. Other exports include coffee, petroleum, tropical hardwoods, cotton, bananas, palm oil, pineapple, and fish. Consumer goods and manufactured items make up much of the imports, with 23 percent coming from France; Nigeria and the United Kingdom are Côte d'Ivoire's other two major trading partners.

See Also: Africa; Company Profiles: Africa.

Bibliography. "Cote D'Ivoire: The Real Rulers," *New African* (n.471, 2008); John Rapley, *Ivoirian Capitalism: African Entrepreneurs in Côte d'Ivoire* (Lynne Rienner, 1993); Michelle Riboud, *The Ivory Coast 1960–1985* (International Center for Economic Growth, 1987); Douglas Rimmer, *The Economies of West Africa* (Weidenfeld & Nicolson, 1984); Francis Teal, "The Foreign Exchange Regime and Growth: A Comparison of Ghana and the Ivory Coast," *African Affairs* (v.85/339, 1986); I. William Zartman and Christopher Delgado, eds., *The Political Economy of Ivory Coast* (Praeger, 1984).

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Cotonou Agreement

The Cotonou Agreement was signed in Cotonou, Benin, on June 23, 2000, and revised in 2005. It is a cooperation agreement between the European Community and its member states and the 78 African, Caribbean, and Pacific countries (the ACP), most of whom are former European colonies. The Cotonou Agreement builds on a series of similar agreements and includes five interdependent pillars: an enhanced political dimension, increased participation, a more strategic approach to cooperation focusing on poverty reduction, new economic and trade partnerships, and improved financial cooperation. Recent controversy has mainly focused on the trade provisions, which granted the ACP unilateral preferential access to European Union (EU) markets until the end of 2007, after which these had to be replaced by new trading arrangements called Economic Partnership Agreements or EPAs.

Much of the driver for this change in trade policy came from the increasing difficulties the ACP and EU had in justifying to other World Trade Organization (WTO) members the special EU market access in previous agreements. Favoring one group of developing countries over others is incompatible with the principle of Most Favored Nation (MFN) treatment set out in Article I of the General Agreement on Tariffs and Trade (GATT) and the subsequent agreement in 1974 to enable the provision of greater market access for developing countries—the "Enabling Clause." As a result, the EU was forced to seek a series of waivers from other WTO members to enable its special trade regime for the ACP to continue. At the same time a series of complaints was brought to GATT/WTO on the EU-ACP banana regime—in a dispute dubbed the Banana Wars. It was consistently found that the special access for ACP bananas was incompatible with the rules of the international trading system. A final waiver was agreed in 2001 that allowed preferences to continue until EPAs were negotiated in 2007.

Moreover, the special access to the EU market which ACP countries enjoyed did not seem to have been effective in stimulating growth and economic diversification. In spite of the privileged market access, ACP shares of EU trade declined from 6.7 percent in 1976 to 3 percent in 2007, while about 55 percent of their total exports became concentrated in only 5 products. There was broad consensus among the ACP and EU that a more comprehensive approach was required. This led to the decision to create EPAs between the EU and regional groupings of ACP countries. Negotiations at the regional level finally began in 2003 with six regions that broadly speaking cover the Caribbean, the Pacific, eastern Africa, west Africa, central Africa, and southern Africa.

Negotiations on EPAs between the EU and ACP subregions have been long and complex. As negotiations advanced, it became clear that a key issue was the interpretation of requirements to establish reciprocal market access under WTO-compatible free trade areas (FTAs). Fears were widespread among the ACP and many development-oriented nongovernmental organizations (NGOs) that opening ACP markets to EU products would damage domestic industry. This motivated an intense discussion on the extent and timing of ACP liberalization that was complicated by the fact that the requirements for WTO-compatible FTAs are not clearly defined. The rules state that "substantially all trade" be liberalized within "a reasonable period of time." A subsequent understanding by WTO members stated that "a reasonable period of time" could exceed 10 years only in "exceptional circumstances" but there is no clear definition of "substantially all trade." This led to claims that EU exports to the ACP could be liberalized at levels as low as 50–60 percent over periods as long as 20 years, while still qualifying as FTAs under WTO rules. Further controversy surrounded the extent to which services trade and measures covering issues like investment and intellectual property were in the ACP interest.

As the 2007 deadline loomed, several NGOs and academics suggested that the EPAs would be bad for the ACP and that there were other potential means of ensuring WTO-compatible market access. In this context it became difficult to secure an agreement, and by the end of 2007, only the Caribbean region of 15 CARIFORUM countries had reached agreement on a fully fledged EPA with the EU, including a high level of liberalization of goods and services.

Faced with the prospect of increasing tariffs on some of its poorest trading partners, the EU proposed a series of interim agreements with individual countries or subregions (e.g., the East African Community) including WTO-compatible reciprocal goods trade arrangements. These were initialled by 20 countries in late 2007, securing market access in a manner which the EU and ACP hoped would build the foundations for full EPAs. The 10 remaining countries (Nigeria, Gabon, Congo-Brazzaville, and seven small Pacific islands) had no significant preferential trade and declined to sign agreements; 32 are classified as Least Developed by the United Nations and have duty free access to EU markets, and South Africa already has a WTO-compatible free trade agreement with the EU. At the time of writing, negotiations for full EPAs continue with the remaining five ACP regions.

See Also: Africa; Banana Wars; Caribbean Community; Pacific Rim.

Bibliography. S. Bilal and F. Rampa, *Alternative (to) EPAs Possible Scenarios for The Future ACP Trade Relations With the EU* (ECDPM, 2006); Petersmann Ernst-Ulrich, "The European Union and the Developing Countries: The Cotonou Agreement," *Common Market Law Review* (v.44/2, 2007); Adrian Flint, "Marrying Poverty Alleviation and Sustainable Development? An Analysis of the EU-ACP Cotonou Agreement," *Journal of International Relations and Development* (v.11/1, 2008); Commission of the European Communities, "The Cotonou Agreement" (2000); C. Stevens and J. Kennan, Agricultural Reciprocity Under Economic Partnership Agreements, *IIIS Discussion Paper* (n.111, IIIS, Trinity College, Dublin, 2006).

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Countertrade

Countertrade is a system of trading that was developed to enable governments to minimize the economic imbalance of international transactions. Countertrade is not barter trade, although barter may provide an element of countertrade.

A single major international purchase contract may have a negative effect upon a country's balance of trade, particularly for small nations or those with restricted access to hard currencies. To counter this imbalance, governments seek to moderate any trade bias by insisting upon a reciprocal mechanism that balances it, either immediately or in the future.

There are several scenarios that encourage the application of countertrade. The prime motivation appears to be trade facilitation, in that it enables trade that might otherwise be barred by a lack of convertible currency or foreign exchange, or other problems with international commercial credit.

Countertrade may be categorized into several forms that may be applied either discretely or in combination (the use of the term *product* in this article includes primary materials and manufactured goods as well as services):

1. Direct offset: The seller agrees to purchase components or materials used in the manufacture or assembly of the actual products that they will

be selling. This effectively reduces the cost to the buyer. This is commonly used in high-value markets such as military or aerospace. A good example of this was when McDonnell Douglas sold helicopters to the British government, but had to equip them with British Rolls-Royce engines.

2. Indirect offset: This is used in similar market sectors to direct offset, but in this case, the importer requires the exporter to make a long-term investment or other commitment to the benefit of the importer's economic infrastructure.
3. Switch trading: Switch trading, sometimes known as swap, is when a third country uses its position as a trading partner with two other countries whose reciprocal trade is not in equilibrium. For example, the third country C purchases a product from A and sells another product to B to help balance the trade between A and B.
4. Counterpurchase: In this form, the exporter contracts to purchase goods, materials, or services that are not required to be incorporated in their products, thus reducing the effective cost of the products to the importer. This is seldom a direct value for value exchange and may also be for a longer period than that required for the execution of the primary contract.
5. Barter trading: Barter is the straightforward trading of one product against another. The obvious drawback to this is that a product of sufficient commercial value to fulfill a barter contract probably already has a viable export market. Similarly, a product that does not have an export market is unlikely to be of sufficient interest for barter.

It must be remembered that barter trade is seldom in equilibrium, thus a broker will be involved to ensure that there is a terminal market for bartered products. A product that does not have a potential market is of little interest to a broker. The balancing of barter trade usually requires a complex series or "string" of trades. Note two terms that often cause confusion: *agio,* the broker's premium paid by an exporter; and *disagio*, the commission paid by the exporter to the broker to recompense the broker for assuming the countertrade transaction risk. (In effect, the same payment from different points of view.)

Product Tolling

Tolling is the production of goods from raw materials supplied by the eventual buyer. This occurs when raw materials are not available to a production company or state, usually due to financial constraints. This usually comprises the entire content of the finished product, all of which remains the property of the supplier, although the cost of production may be paid in part by the product.

An example would be a fertilizer factory, where the buyer of the finished product supplied raw materials, corrosion inhibitor, and bags to the operator of a factory that was operating below economic output in another country. They would then pay for the processing in either cash or bagged fertilizer, or a combination of both.

This is closely related to buyback. Buyback is when either the whole or part payment is made with products manufactured either by machinery or equipment supplied by the seller, where the buyer of the machinery pays for it through product that is produced by the equipment. Examples might be the supply of agricultural equipment paid for by part of the harvest over a period of time, or a transport facility such as a pipeline, where some of the transported product will be used to pay.

Risks of Countertrade

Countertrade transactions seldom match in terms of value or timing. Obligations acquired by either the importer or the exporter from such transactions are usually outside the scope of their commercial expertise. Thus the successful conclusion of a countertrade contract often depends upon a skilled countertrade broker, who will add cost or decrease the value of the transaction.

Specific risks may include the following:

1. Offset: Risk is low due to this form of countertrade normally being limited to governments and multinational enterprises (MNEs).
2. Switch: Also being at governmental or MNE level, the risk is relatively low.
3. Counterpurchase: Balancing of the trade may not occur until a considerable time after the initial transaction, increasing risk of execution.
4. Barter: Needs brokers with expertise in handling a string of contracts or turning a range of prod-

ucts into cash. They expect a substantial *disagio* for facilitating the deal and taking risk.

5. Tolling: Has the risk that an already underfinanced producer may collapse or divert materials and products to meet conflicting needs.
6. Buyback: Has the risk that the equipment may fail to produce sufficient product for payment in either the agreed or a viable time frame, or else the primary source may fail. However, these risks are to some extent moderated, since the quality of the end product should be improved by better production machinery, thus increasing its value.

See Also: Barter; Swap.

Bibliography. C. G. Bowers and B. Bowers, "The American Way to Countertrade," *Countertrade and Barter Quarterly* (February/March 1988); Barter News, issue 17, www.barternews.com (cited March 2009); Chong Ju Choi, Soo Hee Lee, and Jai Boem Kim, "A Note on Countertrade: Contractual Uncertainty and Transaction Governance in Emerging Economies," *Journal of International Business Studies* (v.30/1, 1999); Global Offset & Countertrade Association, www.globaloffset.org (cited March 2009); London Countertrade Roundtable, www.londoncountertrade.org (cited March 2009); Dorothy A. Paun, Larry D. Compeau, and Dhruv Grewal, "A Model of the Influence of Marketing Objectives on Pricing Strategies in International Countertrade," *Journal of Public Policy and Marketing* (v.16/1, 1997); UNCITRAL, *Legal Guide to International Countertrade Transactions* (United Nations, 1993).

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Countervailing Duties

A countervailing duty is intended to neutralize the competitive advantage that a firm gains when exporting to a foreign market due to the receipt of subsidies from its home government. It is an additional duty that removes the advantage gained by the receipt of the subsidy. Countervailing duties, like their counterpart anti-dumping duties, are intended to correct for unfair trade practices that create advantages for overseas firms that export products to the domestic market. While anti-dumping duties address unfair trade practices that are caused by dumping, i.e., selling goods in the domestic market below costs, countervailing duties, also known as anti-subsidy measures, are intended to address unfair trade practices that are caused by payment of subsidies to foreign firms. Under World Trade Organization (WTO) rules, subsidies may be countervailed if they cause material injury to the domestic industry.

To better understand what it means to countervail a subsidy, consider the following example with two symmetric firms, one domestic and one foreign, each of which produces goods in its home market. Both firms sell in the domestic market and each earns an operating profit of $25,000. Now suppose that the foreign firm receives a subsidy from its home government, and this subsidy enables it to undercut its competitor's price. With the subsidy, the foreign firm earns a profit of $37,000 while the domestic firm suffers a loss of $8,000. The domestic firm has been materially injured by the subsidy received by the foreign firm as reflected by the change in its profitability. Under these circumstances, a countervailing subsidy may be imposed as the material injury test has been met. Suppose further that the subsidy to the foreign producer is the form of an export subsidy of $1.30 per unit. To countervail this subsidy, the importing country imposes a specific duty of $1.30 per unit. This returns the foreign firm to the position it was in prior to receipt of the subsidy. It also returns the market to its pre-subsidy position with both firms earning an operating profit of $25,000. As a result of the countervailing duties, the material injury suffered by the domestic firm has been eliminated.

The export subsidy used in the example above is a prohibited subsidy under WTO rules because it is specifically designed to distort international trade flows and in the process create winners and losers. Export subsidies and other forms of prohibited subsidies can be countervailed. Actionable subsidies, unlike prohibited subsidies, are not designed to distort international trade flows but may nonetheless cause material injury to the domestic industry. Most subsidies fall into this category. Given that the trade distortion and hence material injury effect of actionable subsidies is no longer definitive, the WTO rules require a detailed investigation prior to the implementation of countervailing duties in these circumstances. Investigations must be conducted in accordance with the procedural requirements set forth in the WTO's Agreement on Subsidies and Countervailing Measures. National legislation in member countries, when adopted, is consistent with these requirements.

Typically, countervailing duty investigations must establish that a subsidy was received, that the domestic industry was materially injured, and that this material injury was a result of the subsidy. The WTO procedures allow for a preliminary determination of material injury. If the preliminary determination is positive, the foreign firm is generally required to post a bond that is equivalent to the estimated subsidy margin on all relevant imports pending final determination. If the final determination is positive, countervailing duties are imposed. Normally, countervailing duties are imposed for five years.

Countervailing duty investigations are normally initiated when companies submit a petition to the relevant national agency. Some critics have argued that although countervailing duty rules are intended to discipline the use of subsidies, the ease with which such investigations can be initiated has led to abuse. Such abuse is a result of companies using the countervailing duty laws to seek administered trade protection.

See Also: Dumping; Subsidies; World Trade Organization.

Bibliography. United States International Trade Commission, *Antidumping and Countervailing Duty Handbook*, 12th ed., April 2007, www.usitc.gov (cited March 2009); World Trade Organization (WTO), "Agreement on Subsidies and Countervailing Measures," www.wto.org (cited March 2009); WTO, "Understanding the WTO," www.wto.org (cited March 2009).

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Country of Origin

Country of origin is the country of manufacture, production, or growth from which an article or product originates. Designation of the country of origin is implemented for two reasons. The first is that such information is sought by consumers and traders who regard such designations favorably: For example, the engineering products of a particular country may be renowned for their reliability and technical specification; similarly, clothes produced in another country may be especially prized because of their sophistication. Within this category may also be mentioned the administration of "buy national policies." The second reason is administrative. Designation of country of origin is required for the imposition of duties, import restrictions, and for the compilation of national trade accounts. This second category could be extended to include measures to protect local or "infant" industries, and as an extension of political policy where sanctions are applied.

Rules governing country of origin have been longstanding, especially where the imposition of tariffs has been concerned. Examples include the Australian Customs Tariff Act, 1908, which accorded preference to United Kingdom exports; section 304 of the United States Tariff Act, 1930, which required imported products to be marked with the country of origin, and the British Import Duties Act, 1932, by which duties were levied on non–British Empire products. Since 1945, rules of origin marking have become important as a consequence of the spread of regional trading agreements: Between 1947 and 1995, 98 regional trading agreements were notified to GATT (General Agreement on Trade and Tariffs). This meant that accurate designation of country of origin was important if the exports of particular countries were to avoid tariffs.

Global-level awareness of the issues generated by country of origin were raised during the formation of GATT in 1947, but no specific regulation was effected on origin matters and the countries that acceded to this agreement were free to determine their own rules of origin. A GATT proposal required that the nationality of goods resulting from materials and labor of two or more countries would be that of the country in which such goods last underwent a substantial transformation, but it was left to individual countries to determine the processes which would satisfy this condition.

The International Convention on the Simplification and Harmonization of Customs Procedures (Kyoto Convention) was agreed in 1973. This Convention stipulated that the origin of goods should be determined by the last country in which a "substantial transformation" occurred. But the rules determining "country" of origin were nonbinding. Much of the Convention's work was limited to clarifying different criteria to apply in the determination of origin. In fact, the first binding multilateral agreement on country of origin did not occur until the Uruguay Round Agreement on Rules of Origin. This agreement established a three-year program to harmonize rules of origin among GATT (subsequently World Trade Organization) members. This program was not completed by the set deadline of 1998, and currently there is still no global harmonization of country of origin requirements.

Increasing globalization has affected the accuracy of country of origin designations. For example, when all stages of production, from raw material to ready-for-sale product occur in one country, the origin of an import is completely unambiguous. But when the various stages of production occur in different countries (for example, by trade in intermediate products) determining country of origin becomes more complicated. In this case, a single country of origin designation becomes meaningless. A further factor has been the rapid growth in foreign direct investment (FDI): Multinational companies transfer semi-processed products within their global supply chain networks.

Other economic distortions that have arisen from country of origin marking schemes are that they create a bias toward the concentration of final-stage production (usually the highest value-added stage) in particular countries. This issue becomes more intractable in cases where the final production stage is no more than a simple assembly stage and does not, therefore, represent substantial transformation. Where origin rules are predicated on specific components, production according to comparative advantage may be undermined. Restrictive origin regulations can distort investment flows toward major importing countries. These flows can, in turn, undermine indigenous manufacturers.

These economic distortions can also influence the tariff policy adopted by particular countries or countries belonging to a free trade area. For example, it may be more appropriate that a tariff structure should not depend on the price of the imported article but the value outside the free trade area. Alternatively, because vertically related processing occurs in a number of different countries, it may be more accurate to implement multicountry tariffs: In this case the tariff rate to be imposed on a particular product would be the sum of the tariff rates levied on each country component of the value added.

Until there is a binding global agreement on country of origin designations, especially with respect to preferential origin rules (those that determine the duty to be imposed on imported goods from specific countries), the pattern of global trade and the location of production may be distorted. This is further complicated by the fact that different bilateral free trade agreements use different criteria to set rules of origin: Goods processed partly or fully in a third country may obtain duty-free access under a bilateral agreement by being reexported with just enough processing to satisfy rules of origin requirements.

In late 2008 supermarkets in the United States became required to label the country of origin for meat, produce, and certain kinds of nuts. However, it was uncertain what effects that might have.

See Also: Country of Origin Requirements; Export; General Agreement on Tariffs and Trade; Import.

Bibliography. Sadrudin A. Ahmed and Alain d'Astous, "Antecedents, Moderators, and Dimensions of Country-of-Origin Evaluations," *International Marketing Review* (v.25/1, 2008); Greg R. Bell, Curt B. Moore, and Hussam A. Al-Shammari, "Country of Origin and Foreign IPO Legitimacy: Understanding the Role of Geographic Scope and Insider Ownership," *Entrepreneurship Theory and Practice* (v.32/1, 2008); Christian Bluemelhuber, Larry L. Carter, and C. Jay Lambe, "Extending the View of Brand Alliance Effects: An Integrative Examination of the Role of Country of Origin," *International Marketing Review* (v.24/4, 2007); Michael Chattalas, Thomas Kramer, and Hirokazu Takada, "The Impact of National Stereotypes on the Country of Origin Effect: A Conceptual Framework," *International Marketing Review* (v.25/1, 2008); David Kesmodel and Julie Jargon, "Labels Will Say If Your Beef Was Born in the USA," *Wall Street Journal* (September 23, 2008); Hina Khan and David Bamber, "Country of Origin Effects, Brand Image, and Social Status in an Emerging Market," *Human Factors in Ergonomics in Manufacturing* (v.18/5, 2008); E. Vermulst, P. Waer, and J. Bourgeois, eds., *Rules of Origin in International Trade: A Comparative Study* (University of Michigan Press, 1994).

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Country of Origin Requirements

At the global level there are no uniform or enforceable guidelines governing country of origin requirements. Apart from treaty obligations, which may be bilateral or multilateral, and excluding any obligations arising as a member of a customs union, for example, the European Community (EC), individual countries have considerable freedom in the following: the way in which a product acquires origin (for example, whether it is wholly, or partly processed); limits on the extent to which value is added in non-preference countries; and documentary requirements to establish origin. Additionally, further restrictions may be imposed on country-of-origin marking in the case of specific products that are being exported (for example, "Swiss" watches and watch movements).

In the EC there exist two broad rules determining rules of origin: preferential rules and non-preferential rules. The former allow most products originating in a preferential-partner country to be imported to the EC after little, if any, common external tariff. Such preferences apply to Norway, Iceland, Switzerland, and Turkey (pan-European partners) as well as to Egypt, Israel, Jordan, and Lebanon (pan-Mediterranean partners). These arrangements have been supplemented by a pan-Euro-Med cumulation agreement that helps manufacturers satisfy relevant origin rules provided they originate within the EC's preferential trading arrangements.

Non-preferential rules apply to imported products originating from countries for which the EC does not extend preferential arrangements. This includes Australia, Japan, and the United States. Products covered by non-preferential rules include those "wholly obtained or produced" in a single country (for example, extracted mineral products), and those whose production involved more than one country (for example, electrical and electronic goods). Where more than one country was involved in the production of a good, the originating country is defined as that in which the final major process was effected.

In the United States, it is a legal requirement that U.S. content must be disclosed on certain types of products, for example, motor cars, textiles, and woollen and fur products. The relevant legislation governing the description to be applied to each of these products is, respectively, the American Automobile Labeling Act, the American Textile Fiber Products Identification Act, the Wool Products Labeling Act, and the Fur Products Labeling Act.

However, in certain cases, North American Free Trade Agreement (NAFTA) override rules can be used if a NAFTA preference is claimed. For example, China is a producer of comforter shells and the down used to fill these shells. Both of these textile products are sent to Canada, where the down is inserted into the shells. Although China is the country of origin of the finished comforter, Canada, which is a NAFTA member, can claim duty preference and if this is successful, the country of origin of the finished comforter is recognized as Canada. However, a product comprising foreign components may be labeled "Assembled in the USA" when its assembly has occurred in the United States and this assembly represents a "substantial transformation." It is also the case that certain qualified "Made in the USA" claims can be made. For example, "Made in the USA of U.S. and imported parts." Such qualified statements are considered appropriate when the products that include U.S. content don't satisfy the criteria for making unqualified "Made in the USA" claims.

Outside of the European Union and North America, countries are free to impose such restrictions as they wish on country of origin requirements, especially when country designations apply to particular products. In the case of watches, for example, Swiss law defines a watch as Swiss made when its movement is Swiss, its movement is cased in Switzerland, and the final inspection of the watch occurs in Switzerland.

A final category of origin requirement to which reference should be made concerns regional appellations that belong to particular countries. For example, "Stilton" cheese (England) and wines from the French regions of Burgundy and Champagne. Misuse of a regional appellation (for example, labeling wine "Burgundy" when it was not made there), can mislead consumers and it can lead to unfair competition (producers who do not have the right to the appellation nonetheless use it to try to capture some of the goodwill attached to genuine appellation products). Rules governing these appellations were promulgated by the International Convention for the Protection of Industrial Property dating back to the later 19th century (for example, Paris, 1883, and Brussels, 1900), and have more recently been covered by the Agreement on Trade-Related Aspects of International Property Rights (TRIPS), which set out the rules governing the registration of these appellations and the methods required to ensure their protection. In the case of wines and spirits, the TRIPS agreement contains special clauses that afford these products even higher levels of protection.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Country of Origin.

Bibliography. Australian Competition and Consumer Commission, *Country of Origin Claims and the Trade Practices Act* (Australian Competition and Consumer Commission, 2002); Australian Competition and Consumer Commission, *Electrical Goods: Country of Origin Guidelines to the Trade Practices Act* (Australian Competition and Consumer Commission, 2003); Australian Competition and Consumer Commission, *Food and Beverage Industry: Country of Origin Guidelines to the Trade Practices Act* (Australian Competition and Consumer Commission, 2005); United States Congress: House Committee on Agriculture: Subcommittee on Domestic Marketing, *Consumer Relations, and Nutrition, Implementation of Country-of-Origin Labeling Requirements under Florida Produce Labeling Act of 1979: Hearing Before the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the Committee on Agriculture* (House of Representatives, One Hundredth Congress, second session, April 15, 1988); United States Congress, House Committee on Ways and Means, Subcommittee on Trade, *Country-of-Origin Labeling Requirements for Imported Meat and Other Food Products: Hearing Before the Subcommittee on Trade of the Committee on Ways and Means* (House of Representatives, One Hundredth Congress, second session, September 27, 1988); United States General Accounting Office, *Country-of-Origin Labeling Opportunities for USDA and Industry to Implement Challenging Aspects of the New Law: Report to Congressional Requesters* (United States General Accounting Office, 2003); E. Vermulst, P. Waer, and J. Bourgeois, eds., *Rules of Origin in International Trade: A Comparative Study* (University of Michigan Press, 1994).

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Country Screening

Country screening is the process of scanning international markets, with the intention of identifying and assessing opportunities for expansion. This process can be carried out through both primary and secondary research. Its main purpose is to answer three questions: Should we enter the country or not? Is there sales potential for our products or services? Where can we best leverage our core competencies? The country screening stage normally precedes the country selection stage and is the first step in the international planning process.

There are around 200 countries in the world. Even large multinational corporations will have problems entering all and every one of these countries. Thus, international markets will have to be screened to remove those that do not offer adequate potential. The criteria used in preliminary and secondary screening are relatively broad and include mainly economic and social data (e.g., income per capita or population) that should be available for most countries and allow for intercountry comparisons. In order to decide if further research may be worthwhile, potential markets have to fulfill three criteria: accessibility, profitability, and market size/growth potential. If a company is unable to enter a market, due to tariffs and non-tariff barriers or legal restrictions, or to reach the customers by means of communication or distribution, if the market is unable to return a profit, sometimes due to exchange regulations, or if its actual and future size is small, then there is no point for the company to pursue this venture.

When information regarding one specific country is sparse, mainly in latent and incipient markets, a company may have to rely on comparative research, between the target country and some other country, normally one that is at a more advanced economic level or that belongs to the same geoeconomic group. Some of the key techniques used are demand pattern analysis, multiple factor indexes, analogy estimation, regression analysis, and macro-surveys.

When screening a country, uncertainty and risk factors are the most pertinent ones and cannot be ignored. Risks can be political, commercial, industrial, or financial, can be evident or latent, and can be spread along a risk scale. Over the past years a range of risk indexes have been developed. The largest country and political risk consultancies are Business Environment Risk Intelligence (BERI), Business Monitor International, The Economist Intelligence Unit, Global Insight/World Markets Research, and Political Risk Services/International Country Risk Guide. These indexes cover different environment factors such as political stability, taxation, infrastructure, and security. They normally come to a score, indicating how the country ranks regarding risk type and level. For example in BERI's operation risk index a score of 55–41 points means "high risk, bad business climate for foreign investors." In their Business Environment Ratings Report for 2006, Switzerland, Singapore, Netherlands, Japan, and Norway were the five least risky countries in the world. The Economist Intelligence Unit's Country Risk service assesses credit risk (based on currency risk, sovereign debt risk, and banking risk) across 120 countries. The latest findings (May 2007) ranked Singapore, Hong Kong, and Chile as the least risky, and Iraq, Zimbabwe, and Myanmar as the riskiest countries.

To facilitate a proper screening process, companies need to follow a methodical approach. One of the most widely used frameworks is the 12C environmental analysis. The twelve Cs are country, concentration, culture/consumer behavior, choices, consumption, contractual obligations, commitment, channels, communication, capacity to pay, currency, and caveats. Some of the elements analyzed comprise SCLEPTE (social, cultural, legal, economical, political, technological, and environmental) factors, structure of the market segments, characteristics of competitors, growth patterns, business practices, trade barriers and incentives, logistics and media infrastructures, and currency stability, among others. The information obtained will help to design a profile for each considered country, including major threats and opportunities, degree of country attractiveness and company competitive advantage, and the most suitable entry mode.

In order to obtain country-related information there are a variety of secondary sources that can be used such as international chambers of commerce, trade organizations, embassies, export councils, or trading companies. With the advent of the internet, online databases have become a good source of information, for example Kompass, Textline, Comtrade, Eurostat, Euromonitor, or Mintel. Web sites of the United Nations, European Union, World Bank, or the World Trade Organization are also very useful sources.

When using secondary data to screen a country, companies must be aware of some of its pitfalls: availability, accessibility, quality, and recency. However, and despite these problems, secondary data may be the only kind available for small and medium-sized companies or even for larger companies in very distant markets. When all secondary data has been collected, companies may need to gather primary data to attain the information considered necessary. Unknown cultures and countries make international data collection a difficult task and key decisions when undergoing it are linked to organizational factors: Should we do it with our own resources (in-house) or through a market research company and, in this case, should it be a domestic agency (from our own country), a local agency (from the host country), or a major global agency? Availability of resources, market/country characteristics, budget, and urgency of the data will determine the final choice.

See Also: BERI; Economic Indicators; Host Country; International Chamber of Commerce; Nontariff Barrier; Risk; Risk Management.

Bibliography. John Daniels, Lee Radebaugh, and Daniel Sullivan, *International Business*, 12th ed. (Pearson, 2009); Isobel Doole and Robin Lowe, *International Marketing Strategy* (South Western, 2008); Office of Fossil Energy/Argonne National Laboratory, *Potential Markets for Small Coal-Fired Combustors in OECD Countries Country Screening/United States* (U.S. Department of Energy, Office of Fossil Energy, 1988).

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Craft Production

Craft production refers to work carried out by a skilled worker. Its aim is to produce not just a commodity but to do something well for its own sake. In craft production, work can be an end in itself, an expression of the individual's talents. It is not simply a means to an end. Craftsmanship means quality. Craft production is often said to be a less-alienated form of production than the machine-based mass production of the factory or office. The ideal of craft production is used as a standard against which other forms of labor are judged and measured. Critics of modern capitalism, from writers like John Ruskin, William Morris, and John Dewey onward, have looked back to craft production as part of a world that is being lost and looked forward to an age yet to come when its principles could be recovered. The acquisition of the output of craft production could then be, not the privilege of the few, but the basis of the life of the many.

All human labor involves some degree of explicit and tacit skill. Historically this has been so important that people have been named after their "craft"—smith, thatcher, fletcher, mason, potter, carpenter, etc. Early craft production is most associated with the urban labor of artisans in medieval cities where production was organized in small workshops and (though not invariably) guilds. Although goods were produced for sale, craft production, in principle, involved strict codes. Craft workers served apprenticeships in which they were introduced to the "mysteries" of their craft. An apprenticeship (often six to seven years) might involve 5,000–10,000 hours of supervised work before it was considered that the craft worker had been trained. The apprentice would then demonstrate his proficiency as journeyman by producing his "masterpiece." The journeymen might hope to progress to be a "master craftsman" in their own workshops, joining the craft guild on their basis of their established "mastership." So powerful was this idea of craft production that what we today consider the artifacts of high culture from this time—art, jewelry, furniture, sculpture—were actually the results of craft workshops under the control of artists, instrument makers, etc. as master craftsmen.

The craft guilds, often supported by legislation and local regulation, negotiated with powerful merchants and helped to set prices to avoid exploitation. They policed the quality of goods, fines for offenses against "honor and solidarity" being a significant element in their disciplinary actions. They oversaw skill development, provided a mechanism for the mobility of labor, and acted as a source of credit. They also formed the social and political basis of the life of the worker in craft production.

A 16th-century Swiss woodcut illustrates the traditional craft process of a small group of shoemakers and assistants.

But the social function of craft production went beyond the workplace. Craft work was seen as the basis of self-respect for the individual. People spoke of "craft pride" and "artisan independence." Craft was also an important source of civic pride. It could even be the basis of political rights. Craft work was also seen as a quasi-religious vocation—craft was a gift from God and its support a celebration of God's gifts. Craft can be analyzed using conventional economics as a form of social capital. But to explain the role of craft production through a narrow economic calculus is to miss the way that craft production developed historically. It cannot explain its wider social resonance nor the way that today the output of earlier generations of craft workers still embodies our ideas of accomplishment and beauty.

In England in the 16th century concern about the impact of economic change, enclosures, vagabondage, and masterless men led to the passing in 1563 of the Statute of Artificers. This supported craft work by requiring apprentices to serve for seven years, terminating at 24 (reduced to 21 in 1778). This created a framework that lasted in England, although unevenly enforced, until the early 19th century. Elements of this were also applied piecemeal in the American colonies.

Measuring the scale of earlier craft production is not easy. In pre-industrial society, peasants and farmworkers predominated and there were many unskilled workers. But one minimum estimate suggests that in England, around 1700, some 11,000–12,000 males completed apprenticeships each year, which would total between 290,000 and 460,000 workmen trained as apprentices at that time in a population of some 5 million.

By this time some urban craft production was already feeling the challenge of the rise of proto-industrialization in the more advanced parts of Europe. Proto-industrialization was the spread of unregulated forms of craft production into the countryside to take advantage of labor surpluses. Methods of production might be formally similar but conditions of work deteriorated as networks of merchant capital became ever more sophisticated. Nevertheless, if skill levels were inferior and the market more pressing in proto-industrial craft production, workers still retained a greater degree of control over the labor process than would be possible in the factories that came with the Industrial Revolution.

Capitalism Changes Production

The development of capitalism, and especially industrial capitalism, led to a change in the nature of craft production and a profound long-term challenge to it. One aspect of this was ideological. As the potential of the division of labor and mass production began to develop, some writers began to attack guilds and craft production as economically irrational and a brake on technical progress. Guilds, they suggested, acted as rent-seeking coalitions that thrived on monopoly rents to the disadvantage of unskilled workers and customers. Craft production would and should give way to not only to industrial production but "freer" market relations.

State action also played a role in the weakening of craft production, if only at the level of removing earlier protections. Artisans saw the defense of the regulation of craft production against "illegal men," whether masters or journeymen, as part of their birthright and a protection of the rights of labor. But in late-18th-century Britain, laissez-faire pressures led to a consolidation of the rights of property while encouraging an ever freer market for hired labor. Not only were workers' combinations banned but the old legislation protecting craft apprenticeship and conditions came under attack. The Statute of Apprentices was repealed in 1814 despite a significant artisan campaign to defend and even extend it. One craft petition numbered 300,000 signatures.

In this shift, our understanding of the past also changed. "Art" began to be separated from "skill" as a higher-order activity and even divided internally into different levels. The artist became in the popular mind a lonely individual with a unique sensibility and an intuitive talent, producing for rich patrons or themselves. The skills of the craft worker were separated and diminished. Since labor was seen as repugnant, the labor in the production of art, and the tools necessary for it, became marginalized when people spoke of art. Even the term "masterpiece" was appropriated to higher art.

These changes also had an impact on our understanding of science and its development as a separate and specialized function. Much early science was rooted in craft production, which has been described as a repository of scientific production technique. The inquiring mind of the artisan craftsman as watchmaker, instrument maker, millwright, or spinner was behind many decisive steps forward. Craft work could sustain a tradition of self-education that could be undertaken to surprisingly high levels—not merely the literacy but the knowledge of other languages of the printer or the mathematical skills of the mechanic.

The effect could also be seen in education. When formal education systems began to develop, they were defined by a tension between education in its broadest sense and the narrower tasks of fitting people, groups, and classes for particular positions. This produced a divided and segmented system where the pressure lower down was to create an impoverished vocationalism which, if it referred to an early tradition of craftsmanship, did so only in name.

More radical accounts attack this diminution of the idea of craft and craft production and the analysis used it support it. Some historians argue that craft guilds survived much later into the 18th and 19th centuries than was previously suggested. The longevity of guilds suggests a rationality that critics missed. Productivity in guild-based craft production may, for example, have been higher than in the equivalent nonguild production. Nor is it clear that invention and innovation was hindered. Even Adam Smith recognized the possible stultifying impact of the division of labor on human ingenuity.

The pressures that new forms of production put on craft production were not, according to this view, a simple product of technical change. Rather, capitalism needed to find a form of work organization in which the employer could dominate and exploit the work. The factory was therefore a socially determined form of technology designed in part to overcome the fact that craft production left too much power in the hands of the craftsman. The skill of the worker had to be appropriated by the system, divided up, reduced, and embodied in organizations and equipment controlled by the employer or their agent. The extreme of this was represented by Frederick Taylor's desire for a system of scientific work control, "in the past the man has been first; in the future the system must be first ..." Sometimes craftwork directly succumbed to this after a struggle. In other cases, craft work degenerated into forms of outwork labor. Both involved a continual process of deskilling.

But formal apprenticeship as the basis of craft production in particular and work more generally had a longer life, albeit to significantly different degrees in different national contexts. In the United States it was difficult to get masters and men to keep to indentures. Here craft work quickly became more open to market influences. There was limited incentive for employers to commit to long-term training of their employees when workers could easily leave and when legal enforcement was costly and difficult. By 1850 there were less than two apprentices per 1,000 employees in the United States. But forms of craft work (in the widest sense) remained widespread; Walt Whitman's poem "Song of the Occupations" is a lyrical invocation of some of them.

In Britain and Europe apprenticeship as an underpinning for craft work survived on a wider basis and became incorporated into trades like engineering. Sometimes this was based on formal indentures, but in Britain the respect attached to a worker's "lines" was so significant as to enable much apprenticeship to be based on informal agreements. In Europe, formal agreements were often supported by the state, and in Germany modernized craft-style apprenticeships became and still are part of the training system. At the end of the 1970s, apprenticeship accounted for only 0.3 percent of civilian employment in the United States compared to 2–3 percent in the United Kingdom and Commonwealth countries and 5–6 percent in West Germany, Austria, and Switzerland.

Post–Industrial Revolution

Several different trajectories for craft work can be identified since the development of the Industrial Revolution. Some craft production simply succumbed to the challenge of factory-based mass production and was eliminated. In other industries, craft production continued to survive but market pressures caused a deterioration of conditions and intensified and impoverished the division of labor, with craft work perhaps degenerating into forms of sweated workshop labor. In a third and smaller group of industries, craft production survived, often based on the production for high-quality and high-cost markets (although beneath the surface conditions might worsen). A fourth trajectory was where "crafts" were able to turn themselves into "professions" through the development of higher-status images and controls. But there was and is a fifth element. Sometimes technical change can generate areas of craft like "responsible autonomy" where within the most advanced elements of the system, elements of craft-like production can survive. This was apparent in the past, for example, in the engineering industry. Today a popular example is the way in which in the computer industry and the development of information technology, supporters of open source software and "the creative commons" collectively work for the common good, sharing their developments. What drives them is less a concern for financial gain or corporate service than the expression of enthusiasm, joy, and creativity in work.

When this happens there is a struggle for control that to some degree parallels earlier struggles that might otherwise be thought of only out of historical interest. Major companies seek to establish property rights in intellectual creativity and to control and discipline what is seen as an unruly and even potentially subversive movement. In this view such a craft ethic has no place in modern capitalism, even though it is to be found in the most modern sector (or perhaps it should be said to have no place unless the results of it can be privately appropriated).

The fate of craft production is not therefore one of straight-line decline. Strong pressures exist in this direction and the best analysis of them remains that of Harry Braverman (1920–76) in his *Labor and Monopoly Capital*, where he described the tendency since the Industrial Revolution for work to be divided up in its component jobs, each of which might require less skill and training, and thus be paid less. However, automation and computerization of a plethora of low skill tasks has led others to observe an upgrading of the skill levels of jobs in developed economies.

Craft production was also the basis of the development of the early labor movement in most countries; the skill of the craft workers and the demand for their labor gave them a stronger bargaining position and made them better able to resist employers than early factory workers. Early unions therefore were associated with better-paid craft workers, were largely male, and a product of the labor aristocracy. Mass industrial unionism was often counterposed to the craft base of traditional unions. But under pressure, craft unions had to look beyond sectionalism. Even Samuel Gompers, the archetypical American craft unionist, warned his members that today's artisan was the unskilled laborer of tomorrow as pressures toward deskilling developed.

But just as there is the reproduction of some elements of craft production in capitalism as a whole, so too can this provide the basis for ongoing craft-like labor organization. However, most such modern craft unions tend to link their fate much more closely to the labor movement as a whole. In these terms the fate of craft production should not be seen as a battle fought and lost. Rather, change in work relationships under capitalism involves a continuing tension over the nature and purpose of production and a continual struggle over its meaning.

See Also: Capitalism; Empowerment; Management Science; Salaries and Wages; Technology.

Bibliography. C. Bina and B. Finzel, "Skill Formation, Outsourcing and Craft Unionism in Air Transport," *Global Economy Journal* (2005); H. Braverman, "Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century," *Monthly Review* (1974); Carl Bridenbaugh, *The Colonial Craftsman* (New York University Press, 1950); A. Briggs, ed., *William Morris: Selected Writings and Designs* (Penguin, 1962); B. Elbaum, "Why Apprenticeship Persisted in Britain but Not in the United States," *The Journal of Economic History* (1989); S. Marglin, "What Do Bosses Do?" *Review of Radical Political Economics* (1974); R. Sennett, *The Craftsman* (Allen Lane, 2008); Izumi Shimada, *Craft Production in Complex Societies: Multicraft and Producer Perspectives* (University of Utah Press, 2007); Carla M. Sinopoli, *The Political Economy of Craft Production: Crafting Empire in South India, c. 1350–1650* (Cambridge University Press, 2003); Anne P. Underhill, *Craft Production and Social Change in Northern China* (Kluwer Academic/Plenum Publishers, 2002); D. Woodward, "The Background to the Statute of Artificers: The Genesis of Labor Policy, 1558–63," The Economic History Review (1980).

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Credit Ratings

A credit rating is an assessment of the creditworthiness of a debt issuer or a specific debt obligation, together with any additional security attached to it. The rating represents an opinion on the ability and willingness of an obligor to deliver payments due to investors. This opinion usually has a form of a letter-based rating, which corresponds to a certain relative (not absolute) probability of default. The rating is often accompanied by an extensive commentary.

Credit ratings can be assigned to countries, municipalities, various types of organizations, or particular debt issues. Sovereign ratings assess the credit risk of national governments and depend on both political and economic factors. These ratings serve as a benchmark for the ratings of other issuers who operate within the same sovereign jurisdiction and represent a so-called ceiling—normally the ratings of other issuers in the same country cannot be higher than the sovereign rating.

Ratings are assigned by specialized organizations—credit rating agencies. There exist many of them worldwide (roughly 130 to 150 as of 2000), and they vary in terms of size, geographical and industry focus, and the methodology that they employ. However, most of these agencies are rather small, and the field is dominated by two major players: Moody's Investors Service Inc. (Moody's) and Standard & Poor's (S&P). The large credit agencies play an important role in capital markets. First, they provide valuation by disseminating timely and supposedly valuable information to the market participants. Second, they indirectly participate in financial regulation: In some countries letter ratings are viewed as useful credit quality benchmarks, and capital requirements are directly linked to credit ratings. For example, the quasi-regulatory role of the major credit agencies has been increased by the Basel II Framework.

There are two main types of ratings: solicited and unsolicited. A solicited rating means that a company itself expressed a wish to be rated and asked an agency to issue it a rating, usually for a fee. An unsolicited rating implies that it was an agency's own decision to rate a company. In the case of unsolicited ratings, an agency usually has to rely on publicly available information only to come up with an assessment. The rationale for the practice of assigning unsolicited ratings is that it discourages a self-selection process in which only low-risk issuers are rated and all others avoid obtaining a credit rating by not requesting it. Rating agencies also use unsolicited ratings to establish their reputation or expand their business into new markets. When a rating is solicited, an agency relies not only on public information, but also makes extensive use of internal data such as company documents, interviews with the company's executives, etc.

There are several reasons why issuers are interested in acquiring a credit rating. The main one is the access to capital markets—in some countries, having a rating is a de-facto prerequisite. Other reasons include building up market reputation, lowering the cost of funding (an unrated entity usually has to pay a larger risk premium), and distinguishing oneself from competitors.

The rating processes used by different agencies can vary significantly. Large agencies use both quantitative and qualitative criteria to assess an issuer, whereas smaller agencies tend to focus on quantitative criteria only. The rating process consists of the assessment of various factors. One of them is the environment, which can vary considerably depending on the nature of the entity under assessment. Meetings with the issuer constitute an important part of the rating process. During these meetings, comprehensive in-depth information is collected and any questions that came up in previous phases are clarified. The rating process also often includes the analysis of a peer group (a group of comparable entities).

Several points of criticism have been expressed about the credit-rating agencies. They have apparently failed to predict large-scale crises such as the 1997 Asian crisis or notorious corporate scandals such as Enron and WorldCom. Another source of criticism is the secretive nature of the rating process—rating agencies disclose their rating methodologies only partially. Some have expressed concerns about the fact that rating agencies have conflicting incentives connected with their two functions of information dissemination and facilitation of contracts. Another point of criticism has to do with the so-called rating triggers. A rating trigger is a contractual provision that gives lenders certain rights in case a borrower's rating falls below a predefined level. Rating triggers can lead to the loss of investor confidence and the bankruptcy of an issuer.

See Also: Bankruptcy; Capital Adequacy; Regulation; Risk.

Bibliography. A. Duff and S. Einig, *Credit Rating Agencies: Meeting the Needs of the Market?* (Institute of Chartered Accountants of Scotland, 2007); A. Fight, *The Ratings Game* (John Wiley & Sons, 2001); Lita Epstein, *The Complete Idiot's Guide to Improving Your Credit Score* (Alpha Books, 2007); C. Frost, "Credit Rating Agencies in Capital Markets: A Review of Research Evidence on Selected Criticisms of the Agencies," *Journal of Accounting, Auditing and Finance* (2007); Gudrun M. Nickel, *The Credit Repair Answer Book: Your Answer for Raising Your Credit Score* (Sphinx Publishers, 2007); Timothy J. Sinclair, *The New Masters of Capital: American Bond Rating Agencies and the Politics of Creditworthiness* (Cornell University Press, 2005); John Ventura, *The Credit Repair Kit*, 4th ed. (Dearborn Trade, 2004); Steve Weisman, *50 Ways to Protect Your Identity and Your Credit: Everything You Need to Know about Identity Theft, Credit Cards, Credit Repair, and Credit Reports* (Pearson Prentice Hall, 2005); Liz Pulliam Weston, *Your Credit Score: How to Fix, Improve, and Protect the 3-Digit Number that Shapes Your Financial Future* (Pearson Prentice Hall, 2005).

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Credit Suisse

The Credit Suisse Group is a Zurich-based financial services corporation offering investment banking, private banking, and asset management through its three divisions. The Credit Suisse Shared Services division provides services in support of the other three divisions, principally legal and IT service.

Alfred Escher (1819–82) founded the company, then called Schweizerische Kreditanstalt, in 1856. An adept politician from Zurich, Escher had made a nationwide name for himself with his support of railways as the solution to Switzerland's malaise following the brief civil war of the 1840s, a solution that would end the country's economic and geographic isolation. In particular, Escher was instrumental in keeping the railroads in the private sector—benefiting Zurich, since state-supported railroads would centralize the industry and its earnings in Bern, the capital of the new federal government (established in 1848). While continuing his political service, Escher also acted as the Managing Director of the Northeastern Railway Company, and founded the Kreditanstalt to finance transalpine railway lines. He helped develop Swiss Life, now Switzerland's largest insurance company, the following year.

The Credit Suisse offices in Hong Kong. In 2007 the company employed 50,000 people worldwide.

Three million francs of Kreditanstalt stock were issued, valued at over 200 million francs within days. The Swiss Confederation, at risk of falling behind western Europe and its Industrial Revolution, was hungry for industrialization and the railways helped make that possible while the Kreditanstalt helped finance it—and helped Zurich become and remain Switzerland's financial center. As Switzerland industrialized, it entered—until World War I—a golden age that helped it become the banking capital of the world. The first foreign office of Credit Suisse was opened in 1870 (in New York City), and by the end of the 19th century the company had become the principal player in the Swiss underwriting business. Branch offices outside of Zurich began opening in 1905 (the first in Basel), and its underwriting business expanded overseas.

The impact of the Great Depression increased tensions and nationalist sentiment across Europe, and Credit Suisse looked overseas for safer sources of capital. The Swiss American Corporation was founded in 1939 in New York City, as a subsidiary of Credit Suisse's underwriting business and investment consultancy. Years later, it would be discovered that during the war years, Credit Suisse was one of several banks guilty of improper dealings with Nazi Germany, and mishandling of the "dormant accounts issue" (accounts opened before the end of the war by account holders who became victims of the Holocaust). Like the other banks, Credit Suisse eventually settled by paying money into a pool for reparations as well as to establish a humanitarian fund. In 1964 Credit Suisse was granted a license as a full-service bank in the United States, and in 1982 the bank became the first Swiss bank with a listing on the New York Stock Exchange (via its subsidiary Swiss American Securities).

The American bank First Boston was taken over by Credit Suisse in 1990, becoming Credit Suisse First Boston—now the bank's investment banking division. The acquisition came in fits and starts. Credit Suisse First Boston had been the name of a joint CS/FB venture in 1978, and unhappiness with the terms of the venture along with an unsuccessful stretch of a few years led to the departure of several CSFB executives, some of them leaving for Merrill Lynch.

Credit Suisse's acquisition of First Boston, folding it into CSFB, was part of its response to the change in investment banking in the 80s as Goldman Sachs and Salomon Brothers began to compete with them in the Eurobond market, along with the perception that CSFB and Credit Suisse were in competition with one another for certain services. The 1987 stock market crash and mid-1980s allegations that the bank participated in laundering eastern European drug money had hit Credit Suisse hard, while First Boston suffered from bad loans made for mergers and acquisitions. The acquisition and restructuring was meant to strengthen and redefine both companies.

The 1990s saw more acquisitions and alliances, and the array of banks and services were reorganized in 2002 as the Credit Suisse Group. Several restructurings followed in rapid succession as the company maneuvered to recover from the record losses it had posted in 2002. The current form of the bank, with its three main divisions and shared services division, originated in 2006, in commemoration of the original bank's 150th anniversary. Credit Suisse First Boston provides debt and equity underwriting, securities services, and mergers and acquisitions management. The group is the second largest financial services firm in Switzerland, behind UBS, and operates in 60 countries, with over 200 retail branches in its homeland.

See Also: Gnomes of Zurich; Merrill Lynch; Switzerland; SWX; Transportation.

Bibliography. Edmund L. Andrews, "When the Sure-Footed Stumble: Swiss Banks Stagger After Several Investing Missteps," *New York Times* (October 23, 1998); Paul Beckett, "Credit Suisse and UBS Agree to Open 2.1 Million Holocaust-Era Accounts," *Wall Street Journal* (May 4, 2000); Dieter Fahrni, *An Outline History of Switzerland: From The Origins To The Present Day* (Pro Helvetia, 2003); David Fairlamb, "On the Edge: Will a Radical New Strategy Save the Day for Credit Suisse's CEO?," *BusinessWeek* (July 15, 2002); Joseph Jung, *From Schweizerische Kreditanstalt to Credit Suisse Group: The History of a Bank*, trans. by James Knight (Neue Zürcher Zeitung, 2000); Ian Rodger, "The Enfant Terrible of Swiss Banking," *Financial Times* (January 9, 1993).

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Croatia

At the beginning of the 20th century, Croatia was part of the Austro-Hungarian Empire. Following the empire's demise in 1918, a kingdom of Slovenes, Croats, and Serbs was established. Croat opposition to the new structure gradually increased, but any attempts to promote democratic change were stifled, and Yugoslavia was established in 1929. An independence movement, led by the Ustase Croatian Liberation Movement, gradually grew. Force was used in an attempt to establish an independent state. However, it was not until the German invasion of Yugoslavia on April 6, 1941, that Ustase leader Ante Pavelic was installed as the leader of an independent state of Croatia. However, by 1943 partisan opposition forces, under Josip Broz (Tito), controlled much of Croatia. On October 20, 1944, Tito became prime minister of Yugoslavia; Croatia became one of six constituent republics of a federal, independent communist state.

The further concentration of power in Belgrade produced further unrest in Croatia, culminating in the Croatian Spring of 1971—a call for greater autonomy and constitutional reform. When Tito died in 1980, Croatia was still a long way from independence. However, 1989 saw political change sweeping across Eastern Europe. Following elections, constitutional changes, and a referendum, Croatia declared independence on June 25, 1991. Fighting broke out. Amid ethnic rivalries thousands were killed and hundreds of thousands were forced to leave their homes. In January 1992 the United Nations negotiated a cease-fire and Croatia was recognized by the European Union (EU), and in April by the United States.

January 1993 saw further fighting in the Krajina region. In June 1993, the Krajinian Serbs voted to join Greater Serbia. Fighting continued, with widespread atrocities on both sides, until the Dayton Accord, recognizing Croatia's traditional boundaries, was signed in Paris in December 1995, establishing the Republic of Croatia as a presidential/parliamentary democracy, with Zagreb as its capital. The last Serb-held enclave in eastern Slavonia was returned to Croatia in 1998. Croatia's bid for membership of the EU received a boost in March 2008 when the European Commission said that it should be possible to complete accession negotiations by the end of 2009.

Croatia is now divided into 20 counties, and in 2008 the population is estimated to be approximately 4.5 million. The president is the head of state, elected to a five-year term. The leader of the majority party or the leader of the majority coalition is usually appointed prime minister by the president and then approved by the unicameral Assembly or Sabor. The Assembly comprises 153 seats; members are elected from party lists, by popular vote, to serve a four-year term. In the elections of November 25, 2007, the center-right Croatian Democratic Union or HDZ was the biggest party, with 66 seats; although not a majority, they were able to hold power through deals with smaller coalition partners that gave them an 83-seat total.

Croatia's economy suffered badly during the 1991–95 war as output collapsed. Since 2000, however, economic fortunes have improved steadily. gross domestic product (GDP) growth has been between 4 and 6 percent (5.6 percent in 2007). This has largely been on the back of a rebound in tourism and credit-driven consumer spending. Croatia registered 53 million tourist nights in 2006, up 36 percent from 2000. Total annual visitors could top 12 million by 2012. Inflation over the same period has remained low, 2.2 percent in 2007, and the currency has been generally stable. The government has also reduced the budget deficit to 2.6 percent of GDP in 2007. On the downside, the unemployment rate remains high at 11.8 percent in 2007, though economic growth should bring this down. There is also a growing trade deficit and uneven regional development.

Incremental reforms have helped the investment climate, as reflected in improved ratings in 2007 from Transparency International, the World Bank, and the World Economic Forum (WEF). The WEF's Global Competitiveness Index for 2006–07, published at the end of October 2007, ranks Croatia 57th out of 122 countries, with strong scores for education and technological readiness, along with weak scores for state administration and corruption.

See Also: Candidate Countries; European Union; Slovenia.

Bibliography. Central Intelligence Agency, "Croatia," *The World Factbook*, www.cia.gov (cited March 2009); Marcus Tanner, *Croatia: A Nation Forged in War* (Yale University Press, 1997); United States, *Croatia. Foreign Labor Trends* (U.S. Department of Labor, Bureau of International Labor Affairs and U.S. Embassy, Zagreb, 2004); Susan Woodward, *Balkan Tragedy: Chaos and Dissolution after the Cold War* (Brookings Institution, 1995).

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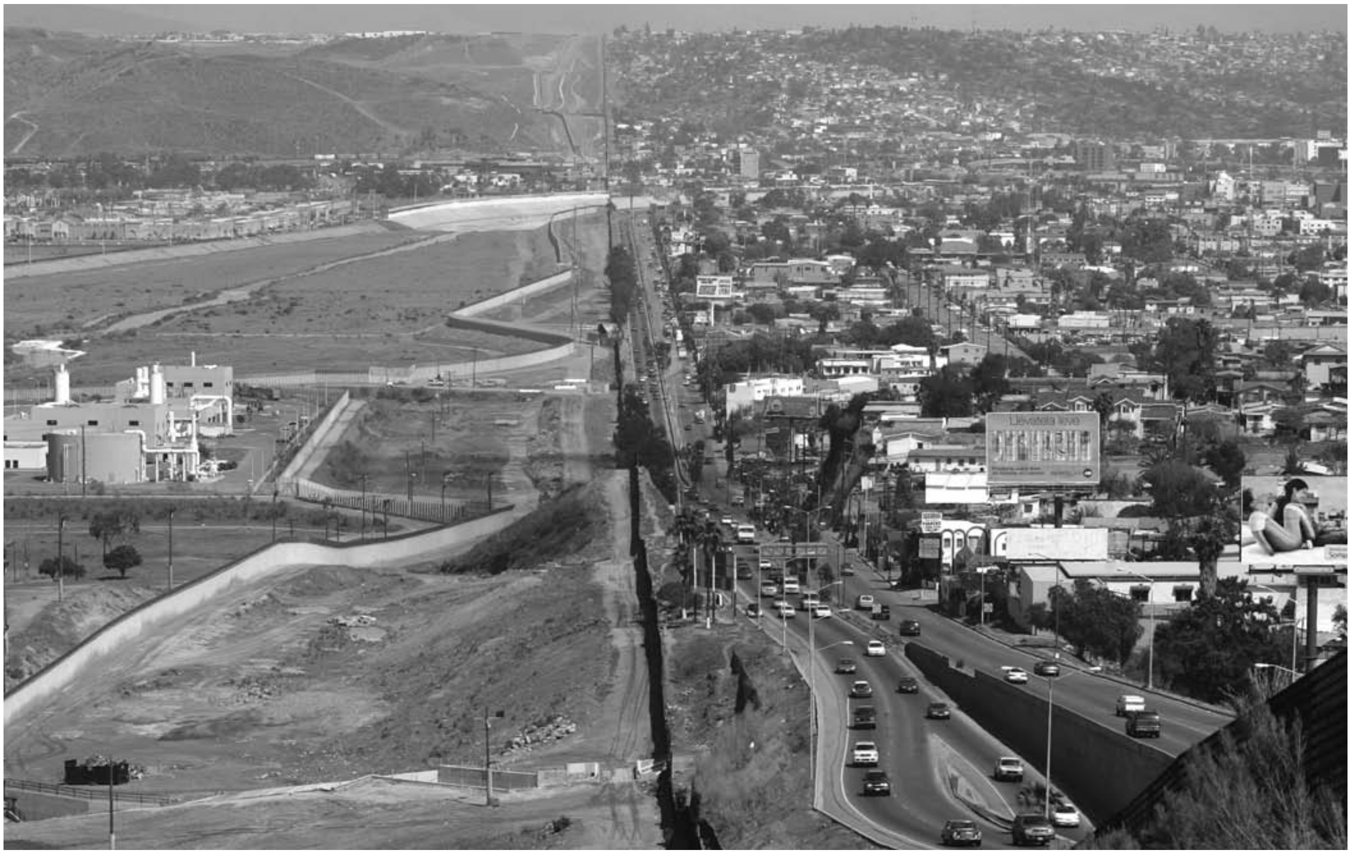
Cross-Border Migrations

The human species has a long nomadic history. The more recent concept of "cross-border migration" emerged from the formation of powerful territorially-based states in Europe. It gained practical importance after developments in transportation, communication, and industrialization enabled Europeans to colonize large parts of the rest of the world, and to relocate both within Europe and overseas in large numbers. By the early 20th century, with the general adoption of passports and border controls, cross-border migration had become a widespread political concern, and foreign workers a major source of labor used by businesses large and small.

In 2007 about 200 million people, or 3 percent of the world's population, lived outside the country of their birth. Likewise, the roughly 100 million migrant workers globally amounted to about 3 percent of the world's workforce. In certain regions, especially Western Europe and North America, and in certain occupations, such as computer programming, nursing, restaurants, and crop harvesting, these percentages have been much higher. International migrant remittances to developing countries totaled about $250 billion in 2005.

Most modern cross-border migration is associated with economic differences between countries. In 1975 per capita gross domestic product was about 40 times greater in high-income countries than in low-income countries; by 2000 this ratio had risen to over 60. Other "pushes" and "pulls" motivating international migration are noneconomic, notably family reunification and mass flight from disaster. Refugees with a "well-founded fear of persecution" have protected status under international conventions and within many national jurisdictions. In practice, however,



A densely populated Mexican city, at right, juts up against the heavily fortified border with the United States. In 2000 per capita gross domestic product was over 60 times greater in high-income countries than in low-income countries.

"economic migrants" and "political refugees" are overlapping categories. Similarly, although a cross-border migrant is generally one who moves internationally and stays at least a year in the new "host" country, it is often difficult to distinguish between "temporary" and "permanent" migrants. A more recent concern is the potential for cross-border refugee flows provoked by natural disasters, particularly catastrophic floods and droughts associated with global climate change.

A considerable fraction of cross-border migration moves without documentation and illegally into receiving countries. This causes practical problems along migratory routes and political problems for governments of sending countries (whose people want to leave) and of receiving countries (which cannot "control" their borders). Undocumented migrants also face the risk of exploitation by smugglers and difficulties of social integration while working "underground." How to deal with illegal immigration has recently been a major political issue in the United States.

Government Policies

Government policies on cross-border migration have been inconsistent. There are far fewer border restrictions on leaving than on entering. Official policies also partly reflect popular ambivalence. Voters in receiving countries are often apprehensive about large numbers of foreigners in their midst, but not opposed to readily available low-cost labor. Migrant workers are usually more productive than they would be at home, but the resulting net benefits of cross-border migration are unevenly distributed. At times, low-skilled workers in richer countries may suffer wage declines due to migration. Movements of migrants, however, are significantly influenced by economic cycles, not just by public policies or popular attitudes.

A "guest worker" program bringing foreigners temporarily to the United States was a key component of the comprehensive "compromise" immigration bill rejected by the U.S. Congress in 2006. Past guest worker programs, such as the "bracero program" of the 1940s and 1950s in North America, and the imports of labor to Western Europe during the 1960s boom, did provide economic benefits. "Temporary" guest workers, however, have often become permanent residents, bringing in relatives through the family network links that have long been central to self-replicating migration. Such networks are also prevalent within the growing migration between developing countries.

Large corporate employers in developed countries have been particularly interested in hiring more high-skilled foreigners. With cross-border flows of goods and finance much less restricted in recent decades than movements of workers, it has been more cost effective to tap the low-skilled labor of poorer countries by "outsourcing" production, assembly, and clerical functions there. Movements of professional workers, especially in science, engineering, and higher education, are a smaller but important form of cross-border migration. The extent and incidence of benefits and costs resulting from this "brain drain" are a matter of considerable interest to scholars and policy makers on which no general consensus has yet emerged.

See Also: Brain Drain; Expatriate; Globalization; Near Shoring; Off-Shoring; Outsourcing; Visa.

Bibliography. Georg Berkemer and Dietmar Rothermund, *Explorations in the History of South Asia: Essays in Honour of Dietmar Rothermund* (Manohar, 2001); Phillip Martin, Manolo Abella, and Christiane Kuptsch, *Managing Labor Migration in the Twenty-first Century* (Yale University Press, 2006); "Senators Back Guest Workers", *Washington Post* (March 28, 2006); Stalker's Guide to International Migration, www.pstalker.com/migration (cited March 2009); "A Turning Tide?" *The Economist* (June 28, 2008).

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Cross-Border Trading

The role and importance of international financial markets and the traders who work in the industry has grown during the past decades. Professional traders are highly visible, especially in the media. They tend to be in a position to exploit market imperfections and have access to privileged information, critical mass, or proprietary knowledge and models.

Financial markets can be defined in two ways. The term can refer to organizations that facilitate the trade of financial products or it can refer to the interaction between buyers and sellers to trade financial products. Many who study the field of finance use both definitions, but economics scholars tend to use the second meaning. Financial markets can be both domestic and international.

Financial markets can be seen as an economics term because it highlights how individuals buy and sell financial securities, commodities, and other items at low transaction costs and prices that reflect efficient markets. The overall objective of the process is to gather all of the sellers and put them in one place so that they can meet and interact with potential buyers. The goal is to create a process that will make it easy for the two groups to conduct business.

When looking at the concept of "financial markets" from a finance perspective, one could view financial markets as a way to facilitate the process of raising capital, transferring risk, and conducting international trade. The overall objective is to provide an opportunity for those who want capital to interact with those who have capital. In most cases, a borrower will issue a receipt to the lender promising to pay back the capital. These receipts are called securities and can be bought or sold. Lenders expect to be compensated for lending the money. Their compensation tends to be in the form of interest or dividends.

Traders

Trader activities can be divided into three categories, which are trading on behalf of the customer, market making, and propriety trading. Traders with the least amount of risk are the ones who act on behalf of the customer. At the other end of the spectrum are proprietary traders, who take on the greatest risk. Regardless of the category, traders must utilize a set of strategies and approaches in order to make a profit. Four of the main strategies include the following:

1. Insider strategy: The trader achieves the advantage by exploiting privileged access to information. However, the trader must be cautious because some techniques may be illegal. For example, information about company earnings

and potential takeovers could be considered illegally obtained information. Insider strategies give the trader an opportunity to anticipate market movements.

2. Technical strategy: Some traders attempt to exploit market imperfections by analyzing past price information. One form of technical strategy involves the use of patterns in price data in order to identify potential turning points in price trends. This is referred to as charting. Traders attempt to identify trends early, buy into those trends, and exit before the trend breaks. There are a number of traders who use the technical strategy to complement other techniques.
3. Fundamental strategy: Fundamental strategies focus on the fundamental relationship between the economic value of the underlying asset and the market price. Traders use this strategy to seek expertise and information in order to obtain an accurate valuation of securities. There is an assumption that market values will converge to theoretical values.
4. Flow strategy: This strategy predicts prices as a function of demand and supply for securities in the market.

Swaps

In the world of finance, a swap can be defined as an agreement between two parties, who are referred to as counterparties. The counterparties exchange cash flows over a period of time in the future. The cash flows are calculated based on a notional principal amount, which is not exchanged between the counterparties. As a result, the swaps can be used to create unfunded exposures to an underlying asset. The value of a swap is the net present value (NPV) of all the future cash flows. Most swaps are traded over the counter (OTC) for the counterparties. There are five basic types of swaps: interest rate swaps, currency swaps, credit swaps, commodity swaps, and equity swaps.

An interest rate swap is one in which the counterparties exchange cash flows of a floating rate for cash flows of a fixed rate or vice versa. Although notional principal does not change hands, it is based on a referenced amount against which interest is calculated. Interest rate swaps can be international or domestic. Counterparties may participate in an interest rate swap if (1) there are changes in financial markets that may cause interest rates to change, (2) borrowers have different credit ratings in different countries, or (3) borrowers have different preferences for debt service payment schedules. Interest rate swaps tend to be organized by international banks acting as swap brokers. These transactions allow borrowers to receive a lower cost of debt service payments and lenders can obtain profit guarantees.

A currency swap is one in which one party provides a certain principal in one currency to its counterparty in exchange for an equivalent amount in a different currency. Principal exchange is not redundant with currency swaps. The exchange of principal on the notional amounts is done at market rates, and tends to use the same rate for the transfer at inception as is used at maturity. Currency swaps allow organizations to have extra flexibility in order to take advantage of their comparative advantage in their respective borrowing markets. These swaps start with a net present value of zero. However, over the life of the instrument, the currency swap can go in-the-money, out-of-the-money, or stay at-the-money.

A credit swap occurs when two parties enter into an agreement and one counterparty pays the other a fixed periodic coupon for the specified life of the agreement. The other party does not make any payments unless a specified credit event occurs. Examples of credit events include a material default, bankruptcy, or debt restructuring for a specified reference asset. If one of these types of credit events occurs, the counterparty is required to make a payment to the first party, and the swap is terminated. As a rule, the size of the payment tends to be linked to the decline in the reference asset's market value following the credit event.

A commodity swap is where exchanged cash flows are dependent on the price of an underlying commodity. This is usually used to hedge against the price of the commodity. There are two types of commodity swaps, which are fixed-floating swaps and commodity for interest swaps. Fixed-floating swaps are similar to the fixed-floating swaps in the interest rate swap market. However, both indices are commodity based indices. Two popular market indices in the commodities market are the Goldman Sachs Commodities Index and the Commodities Research Board Index. These two indices place different emphasis on the various commodities in order to meet the swap agent's requirements.

Commodity for interest swaps are similar to equity swaps in which a total return on the commodity in question is exchanged for a designated money market rate. Swap agents using this type of swap must take into consideration (1) the cost of hedging, (2) the institutional structure of the particular commodity market in question, (3) the liquidity of the underlying commodity market, (4) seasonality and its effects on the underlying commodity market, (5) the variability of the futures bid/offer spread, (6) brokerage fees, and (7) credit risk, as well as capital costs and administrative costs.

The last type is the equity swap, exchanges of cash flows in which at least one of the indices is an equity index. An equity index is a measure of the performance of an individual stock or a basket of stocks. Common equity indices include Standard & Poor's 500 Index, the Dow Jones Industrial Average, and the Toronto Stock Exchange Index. Equity swaps makes the index trading strategy easy, especially for the passive investment manager and emerging markets fund managers.

See Also: Custodians; International Capital Flows; Market Maker; Securities Financing; Stock Exchanges.

Bibliography. Sebastian Auguste, *Cross-Border Trading as a Mechanism for Capital Flight: ADRs and the Argentine Crisis* (National Bureau of Economic Research, 2002); Alex Chambers and Jethro Wookey, "Crunch Wakes US to CDS E-trading," *Euromoney* (February 2008); Dennis Davitt, "Handicapping Bank Payouts," *Barron's* (December 2007); Steven Dellaportas, Barry J. Cooper, and Peter Braica, "Leadership, Culture and Employee Deceit: The Case of the National Australia Bank," *Corporate Governance: An International Review* (v.15/6, 2007); Danielle Goldfarb, *Is Just-in-Case Replacing Just-in-Time? How Cross-Border Trading Behaviour Has Changed Since 9/11* (Conference Board of Canada, 2007); Lina Saigol, "Keep Them on Their Toes," *Financial Times* (December 4, 2007); Steven M. Sears, "Traders Tiptoe Back to Banks," *Barron's* (October 2007); "Traders Glimpse Daylight as Fed Rescue of Bear Sinks In," *Euroweek* (March, 2008).

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Cross-Cultural Research

Culture shapes the values, attitudes, and behavior of human beings. In a managerial context cultural differences lead to diverse management activities and processes, which may present barriers to effective decision making and profit orientation in international management. Information and knowledge on cultural differences and their effects on modern management can help overcome these differences and improve and ease business processes.

Cross-cultural research therefore investigates managerial research questions in two or more cultural settings. Cross-cultural management research focuses on comparing management processes in corporations located in different cultures. Its overall aim is to make these differences understandable and allow managers to develop solutions to overcome and bridge cultural differences and challenges in an international business environment.

Cross-cultural research methods can be divided into qualitative and quantitative research methods. Data can either be gathered by getting hold of secondary data sources, which is information that has been collected before, or by collecting primary data, which refers to the researcher conducting his or her own cross-cultural research project to receive the necessary information to answer a specific research question. The main challenges when conducting research in a cross-cultural context are conceptual and functional equivalences of data collected in different cultures.

Culture in International Management Research

Culture is a critical factor in a global economy. While internationalizing, multinational corporations enter markets that differ in economic, legal, political, social, and cultural levels. But whereas economic, legal, and political differences between countries and their citizens can be observed easily, cultural differences between countries are often not so obvious.

Culture can be defined as a set of common values within a certain group or system, which is communicated from older members of the group to younger ones. According to Nancy Adler, culture becomes evident through common values, attitudes, and actions within a group or system. Cultural differences present challenges to perform management processes effectively. In a corporate context, they lead to different managerial actions, different consumer attitudes and buying behavior as well as particular expectations of international negotiation partners, all of which subsequently may lead to misunderstandings or conflict between employees of multinational corporations.

From an international manager's perspective, culture and differences between cultures therefore play an increasingly important role. To avoid mistakes and promote goal-oriented decision making, gaining information on cultural differences and their effect on international management is vital. Cross-cultural research provides this information and refers to any kind of research in which a research question is investigated in two or more different cultures.

The idea of investigating exotic cultures is not new and was originally a research topic of cultural anthropology, a research field that concentrates on culture and involves the investigation of different societies, their cultures and norms. Management studies, on the other hand, has so far not developed a research stream investigating cultures and their particularities from within, but focuses on comparisons between cultures or groups of cultures. This is done through a number of theoretical frameworks on cultural diversity that have been developed.

The most prominent classifications are Hall and Hall's, Kluckhohn and Strodtbeck's, Hofstede's, and Trompenaar's cultural dimensions. All of these authors distinguish culture across several dimensions. E. T. Hall and M. R. Hall identify cultural differences among the following dimensions: structure of space, structure of time, speed of messages, and context orientation (low-context or high-context). F. Kluckhohn and F. L. Strodtbeck defined six different dimensions and classify cultural differences along time orientation, relation to nature, relations with other people, mode of human activity, space, and belief about basic human nature. The most cited author in this area is Geert Hofstede, who developed the following categories to classify cultures: individualism versus collectivism, power distance, masculinity versus feminity, and uncertainty avoidance.

The final classification presented here was developed by Fons Trompenaars and Charles Hampden-Turner. In this classification, cultures are grouped along these dimensions: universalism versus particularism, individualism versus communitarism, neutral culture versus affective culture, specific culture versus diffuse culture, achievement culture versus ascription culture, sequential time orientation versus synchronic time orientation, and inner-directed culture versus outer-directed culture. All these frameworks present the base of cross-cultural research and aim to provide an overview on the complex topic of culture. They also allow cultural comparisons that support managers in understanding differences in managerial practices.

Aims

Cross-cultural research is important at every stage of a corporation's internationalization process. The first stage of entering a foreign market is dominated by the question of which market is the most suitable for the corporation. Researchers need to compare economic, legal, and political information on different countries to assess the business opportunities of each market. Once the host market is decided upon, the conditions of this particular market need to be investigated in greater detail. In this area, cross-cultural research often focuses on the examination of international consumers, their attitudes, behavior, and preferences. Information on consumers helps multinational corporations to adapt their marketing activities and improve profits in international markets.

Cross-cultural management research further examines processes inside the firm. Cultural differences among employees may lead to complications in reaching company goals or to manage efficiently. The overall goal of cross-cultural management research is to compare management processes in different national cultures. Areas investigated include differences in corporate culture, attitudes, values, and behavior of organizational members, as well as culture-related management processes, such as differences in leadership styles, human resources management styles, decision making, and process development. Based on cross-cultural research results, managers can develop effective solutions to overcome these differences and to create effective management processes for multinational corporations.

Cross-Cultural Research Methods

Cross-cultural research can be conducted via collecting secondary or primary data. Secondary sources refer to data that was collected beforehand and is readily available. Primary sources, on the other hand, are data that are collected by the researchers personally to answer a specific research question. Cross-cultural secondary sources can be found at governmental or government-related organizations, trade associations, universities, or market research institutes. Primary sources are collected by the researcher himself and find answers to specific questions that have not been previously investigated. Primary cross-cultural research can be conducted via qualitative and quantitative research methods. Qualitative cross-cultural research methods include observations, experiments, focus groups, and qualitative interviews. Quantitative cross-cultural research methods refer to standardized surveys conducted in two or more countries.

Challenges

The differences in national cultures between corporations, managers, and employees also create challenges for researchers of international management. Researchers engaged in cross-cultural research face problems and research conditions that differ from their traditional research setting. Not only is the research project conducted on more than one market, it is also conducted in environments that have very unique characteristics.

Using secondary sources in cross-cultural research can save on cost and effort. However, secondary data sources may not always be reliable, and may lack in accuracy, comparability, and timeliness. Secondary data must be carefully selected and examined for its usability in a cross-cultural research project.

When conducting primary research in a cross-cultural setting, researchers need to think about how to avoid inequivalence between data collected in different countries or in different cultural settings. Information and data may not be available or comparable to data from other cultures. Jean-Claude Usunier divides equivalence into conceptual and functional equivalence. The researcher must first assure that concepts investigated have an equivalent meaning in each country's setting. Survey translation must be carefully conducted to confirm that all respondents are not only asked the same questions, but also understand these questions in the same way. Sample equivalence, which refers to finding a comparable sample in every culture investigated, is another aspect that ensures that data collected is comparable.

Functional equivalence, on the other hand, refers to similar standards applied when developing measurement and collecting data. Respondents of cross-cultural surveys may show biases and may answer according to their national culture. Accuracy, reliability, precision of measurement, and survey supervision may differ from one country to another and need to be constantly administered and supervised by cross-cultural researchers in order to gain data that can be compared across cultures.

See Also: Context; Culture Shock; Culture-Specific Values; Hofstede's Five Dimensions of Culture; Individualism/Collectivism; Market Research; Monochronic/Polychronic; Silent Language of Hall (Nonverbal Communication); Space.

Bibliography. Nancy J. Adler and Allison Gundersen, *International Dimensions of Organizational Behavior*, 5th ed. (Thomson/South-Western, 2008); E. T. Hall, *Beyond Culture* (Anchor Press, 1976); E. T. Hall and M. R. Hall, *Understanding Cultural Differences* (Intercultural Press, 1990); G. Hofstede, *Culture's Consequences: International Differences in Work-Related Values* (Sage, 1980); Lenard C. Huff and Scott M. Smith, "Cross-Cultural Business Research: Introduction to the Special Issue," *Journal of Business Research* (v.61/3, 2008); Karin Ikas, and Gerhard Wagner, *Communicating in the Third Space* (Routledge, 2009); F. Kluckhohn and F.L. Strodtbeck, *Variations in Value Orientations* (Peterson, 1961); Peter Bevington Smith, Mark F. Peterson, and David C. Thomas, *The Handbook of Cross-Cultural Management Research* (Sage, 2008); J.-C. Usunier, *Marketing Across Cultures* (Prentice Hall, 1996); Jan Pieter Van Oudenhoven and Kenneth Cushner, "Convergence of Cross-Cultural and Intercultural Research," *International Journal of Intercultural Relations* (v.32/2, 2008); Jingyun Zhang, Sharon E. Zhang, and Gianfranco Walsh, "Review and Future Directions of Cross-Cultural Consumer Services Research," *Journal of Business Research* (v.61/3, 2008).

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Cross-Hauling

Generically speaking, cross-hauling is the concurrent trade of the same product or service in reverse directions over the same route. For instance, the import and export of an identical product or service by a specific country at the same time is a type of cross-hauling. However, it should be noted that there are different sorts of cross-hauling. There may be cross-hauling of foreign direct investment (FDI) or capital, normally resulting from technological differences or differences in governments' tax and tariff policies; suburb-to-suburb cross-hauling, when residents of the suburbs cross the city in the opposite direction every morning on their way to work; duty-free cross-hauling, when duty-free goods purchased on the outbound journey are brought back for consumption at home; and even cross-hauling of polluting factors. Here we will discuss cross-hauling from a trade perspective.

Cross-hauling of goods can occur for a variety of reasons. For instance, some goods, such as vegetables and fruit, are both imported and exported. Some of this cross-hauling can be explained easily by proximity to a border. For example, it may be cheaper for retailers in the south of France to obtain their vegetables and fruit from Spain, at the same time that producers in the north are sending some of their output to Belgian consumers.

Product differentiation is another reason. While some consumers may prefer Gala apples, others may have a preference for Fuji apples, and because these two varieties have different geographic origins, cross-hauling will occur. If each product were completely homogeneous there would be no reason for cross-hauling to exist. For example, if automobiles were homogeneous, consumers in the United States would buy only Ford and GM cars and consumers in Germany would buy only Mercedes and BMW. In reality, however, automobiles are quite heterogeneous. Mercedes are shipped into the United States and Fords are shipped in the other direction.

In countries where vertical differentiation greatly exceeds horizontal, such as India, China, and Brazil, it is not surprising that these countries are likely to export low-quality apparel and import high quality, for example, or to be part of globally or regionally integrated supply chains. Products with strong brand image and consumer loyalty are implausible candidates for substitution, explaining much of the existing cross-hauling.

Where there are a large number of competing manufacturers serving a small geographic area, each one using a different carrier operating less than truckloads, on a single road segment containing several stops, the possibility of cross-hauling increases. In the case of a retailer, poor sales forecast per store may imply the removal of surplus stock back to the distribution center. Finally, there are industries in which the range of products is so large that an individual manufacturer or even a cluster of local producers cannot compete effectively in all segments of the industry.

If we accept that cross-hauling is the act of shipping the same good in opposite directions at the same time, then it seems clear that much of it is stimulated by low trade barriers, public policy to promote competition, consumer acceptance, and the interest of transport companies (railroads, haulers) to boost their traffic. Trade between different regions and countries is generally beneficial because it allows for scale economies and makes markets more competitive. An increase in trade of similar products, driven by profit margins perceived by each firm in external markets, is hence expected and cross-hauling is therefore unavoidable in facilitating the permanent adjustment of supply and demand.

On the other hand, the effect of the present-day fight among large manufacturers for the conquest of the global market is no more than a mere exchange of accounts, leading to the increase of unnecessary marketing and transportation costs, as they work farther and farther away from their home territory where they can market their product most economically. Yet we are so amazed by the impressive economies of mass production that we refuse to face the fact that marketing and transportation cross-hauling is eating up all that mass production saves and may also be socially costly because it makes use of real resources, for two-way trade of similar goods and marketing campaigns, and no longer transfers revenues to society.

With computers and centralized buying, it appears the cross-hauling problem should have been reduced. Yet trains today meet other trains loaded with the same products, and empty trucks meet other matching empties. These motorway encounters might be acceptable for perfumes and designer clothes, but it is hardly justified for more commoditized goods. The most unnecessary and wasteful elements of cross-hauling should therefore be discouraged.

See Also: International Capital Flows; Nontariff Barrier; Procurement; Trade Barriers; Transportation.

Bibliography. Benjamin Eden, "Inefficient Trade Patterns: Excessive Trade, Cross-Hauling and Dumping," *Journal of International Economics* (v.23/1, 2007); H. Huizinga, "Foreign-Investment Incentives and International Cross-hauling of Capital," *Canadian Journal of Economics* (v.24/3, 1991); Ronald W. Jones, J. Peter Neary, and Frances Ruane, "Two-Way Capital Flows: Cross-Hauling in a Model of Foreign Investment," *Journal of International Economics* (v.14/3–4, 1983); Carol McAusland, "Cross-Hauling of Polluting Factors," *Journal of Environmental Economics and Management* (v.44, 2002); M. H. Robison and J. R. Miller, "Cross-hauling and Nonsurvey Input Output Models: Some Lessons from Small-Area Timber Economies," *Environment and Planning* (v.20/11, 1988).

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Cross-Licensing

A cross-licensing agreement is a contractual arrangement that allows a group of companies to make use of one another's patents. All firms involved agree to refrain from suing one another for patent infringement, usually for both currently held and future patents. These agreements are sometimes referred to as "patent pools."

Cross-licensing allows the participating firms to design and manufacture new products without fear of being sued for patent infringement. Certain complexities, such as excluding specific patents from the pooled arrangement, are often part of the contract. The concept of cross-licensing has deep roots in certain industries, such as high technology, that rely heavily on patents. While there is some debate, on balance cross-licensing agreements are usually thought to be good for competition and good for the economy.

The key benefit of a cross-licensing agreement is "freedom to design." Consider the situation of an established firm in a rapidly evolving industry where much of the competition is based upon the use of patented technology. Examples would include pharmaceuticals, consumer electronics, and almost any aspect of high technology. Such a firm may hold thousands of patents, and annually apply for hundreds more. Each of its major competitors also holds thousands of patents. Any one of these patents may apply to dozens or even hundreds of individual products, thousands in the case of a particularly important patent.

Thus, each firm in the industry faces enormous risk. With so many patents outstanding, it is not possible to be completely certain that a newly designed product will not infringe on any patent held by any competitor. Even if this new product avoids infringing on an existing patent, it could still infringe upon an applied-for, but not-yet-issued patent. Any patent—currently held or pending—held by any direct competitor represents a potential disaster for the new product. A patent infringement suit could delay the new product, drain the profits out of it, or kill it completely.

This situation makes any research and development (R&D) investment quite risky—unless competitors develop cross-licensing agreements. The arrangement reduces the risk of lawsuits for any participating firm. Thus, the participating firms have greater freedom to design; there is less need to filter each new design element to ensure that it will not violate someone else's patent.

Concept Development

The concept of cross-licensing is not new. Early in the 20th century, new competitors moving into the rapidly evolving field of radio quickly realized that they were at constant risk of infringing on one or another of their competitor's patents. The key competitors in the field formed a company to hold all major patents and license the use of those patents to all founding companies. This newly formed company, the Radio Corporation of America, or RCA, is still a major force in the field of entertainment today.

In the 1950s an antitrust ruling affecting IBM helped create a cross-licensing culture in the computer industry. Under the ruling, IBM was required to enter into a cross-licensing agreement with any firm wishing to enter such an arrangement. As part of the arrangement, the applicant agreed to allow IBM reciprocal patent access and agreed to pay reasonable royalties, similar to a modern cross-licensing contract. This open approach characterizes behavior in much of the computer industry to this day: IBM recently announced that it will allow free access to some 500 software patents considered key to software interoperability. Similar traditions in the communications industry may be traced to a 1950s antitrust ruling concerning AT&T/Bell Labs that mandated behaviors parallel to those required of IBM.

More recently, some firms have taken the entire concept of cross-licensing a step further and made patent licensing their core business. For example, Acacia Technologies Group is in the business of acquiring and licensing pools of patents. They design no products and manufacture no products. They are one of a new wave of patent clearing houses building an entire business on intellectual property (IP) alone. The largest of these firms is Intellectual Ventures (IV), founded by several Microsoft alumni. Some reports indicate that IV garners hundreds of millions in royalties and is seeking an additional investment of $2 billion to continue expansion of its patent portfolio.

Not all cross-licensing agreements are as straightforward as two firms agreeing to refrain from suing one another. First, the agreement would normally be limited to specific portions of either firm's patent portfolio. For example, a diversified firm operating in both the chemical industry and in aviation may not wish to include all patents in any single agreement. If this hypothetical firm made an agreement involving chemical patents only, it might wish to further limit the agreement based on field of application. Such a limitation might allow a partner firm to make use of the patents for fertilizers but not for paints or other industrial applications.

Most important, the agreement will probably recognize that all patent portfolios are not of equal value. A firm with a more valuable portfolio will likely receive royalty payments from a firm with a less valuable portfolio. A valuable portfolio will include patents that enjoy broad application and are not yet nearing the end of their legal viability.

Is cross-licensing good or bad for the economy? While this is a hotly debated topic, there is little doubt that cross-licensing agreements, properly implemented, can facilitate the health of an industry and benefit consumers. By lowering the risk of investing in R&D and providing freedom to design, cross-licensing speeds innovation, accelerates the release of new products, and lowers operating costs.

See Also: Intellectual Property Theft; Licensing; Patents; Risk Management.

Bibliography. T. R. Beard and D. L. Kaserman, "Patent Thickets, Cross-licensing and Antitrust," *Antitrust Bulletin* (2002); V. W. Bratic, S. Webster, S. Matthews, R. S. Harrell, "How Patent Pools Can Avoid Competition Concerns," *Managing Intellectual Property* (2005); R. Buckman, "Patent Firm Lays Global Plans," *Wall Street Journal* (2007); Mark E. Crain, *Intellectual Property Cross Licensing Agreements: Are They Taxable?* (University of Houston Law Center, 2006); P. C. Grindley and D. J. Teece, "Managing Intellectual Capital: Licensing and Cross-licensing in Semiconductors and Electronics," *California Management Review* (1997); J. I. Klein, *Cross-Licensing and Antitrust Law* (U.S. Department of Justice, 1997); Josh Lerner, Marcin Strojwas, and Jean Tirole, "The Design of Patent Pools: The Determinants of Licensing Rules," *Rand Journal of Economics* (v.38/3, 2007); R. J. Mann, "Do Patents Facilitate Financing in the Software Industry?" *Texas Law Revie*w (2005); R. McMillan, "Developers Voice Mixed Reactions to IBM Patent Policy," *InfoWorld* (2005); Sadao Nagaoka and Hyeong Ug, "The Incidence of Cross-Licensing: A Theory and New Evidence on the Firm and Contract Level Determinants," *Research Policy* (v.35/9, 2006).

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Cross Rate

A cross rate reflects the exchange rate between a foreign currency and another foreign currency. It shows the relationship between two foreign currencies with neither currency being the domestic currency. If the exchange rate between U.S. currency and country X's currency is known, and the exchange rate between U.S. currency and currency of county Y is also known, it is possible to determine the implied exchange rate between the currencies of countries X and Y. The implied exchange rate is what is referred to as a cross rate.

Foreign exchange rates can be quoted in two ways: direct quote and indirect quote. A direct quote is stated in the form of domestic currency per foreign currency. An indirect quote is expressed as the number of foreign currency units needed to acquire one unit of domestic currency. A direct quote is also referred to as a normal quote, while an indirect quote is called a reciprocal quote. An example of a direct quote between the U.S. dollar (USD) and the British pound (GBP) is USD/GBP = 1.90. This means that \$1.90 of U.S. currency is needed to purchase a unit (£1) of British currency. The direct quote can be converted into an indirect quote of the form, GBP/USD = 0.53. Again, this means that £0.53 British currency is needed to purchase a unit (\$1.00) of U.S. currency.

The cross rate is usually calculated from two other foreign exchange rates. Let the exchange rate between U.S. dollar (USD) and South African rand (ZAR) be stated as USD/ZAR = 7.5. Again, let the exchange rate between U.S. dollar (USD) and Mexican peso (MXP) be stated as USD/MXP = 10.5. From these two quotes, it is easy to determine the implied cross rate between ZAR and MXP. The cross rate is MXP/ZAR = 0.71 (calculated as 7.5/10.5).

In order to understand the rationale for its use, it is important to examine the concept of vehicle currencies. Vehicle currencies are currencies that are actively traded in the foreign exchange market. Examples of vehicle currencies are U.S. dollar (USD), euro (EUR), Japanese yen (JPY), and the British pound (GBP). International transactions are conducted in a few vehicle currencies. The logic for using a few currencies for international transactions is to promote efficiency. If the number of currencies used in international transactions is denoted as N, then there are N(N-1)/2 possible exchange rates. The larger the value of N, the larger is the number of exchange rates to be determined. Therefore, it makes sense to use a few currencies for international transactions and then infer the cross rates from existing relationships among trading currencies of the world. The *Wall Street Journal* publishes a table of cross rates daily.

The foreign exchange market is an integrated market that is made up of a network of large commercial banks in the major financial centers of the world. The existence of modern communication technology means that information is quickly transmitted in the market. Thus, all the markets are linked together. This is the reason why quoted exchange rates are consistent. For example, the USD/GBP rate quoted in New York is not significantly different from the USD/GBP rate quoted by a London bank.

See Also: Arbitrage; Currency Speculators; Exchange Rate; Foreign Exchange Market.

Bibliography. D. Ball and W. McCulloch, *International Business* (Irwin McGraw-Hill, 1999); G. Bekaert and R. J. Hodrick, *International Financial Management* (Pearson Prentice-Hall, 2009); M. Livingston, *Money and Capital Markets* (Kolb, 1993); M. Melvin, *International Money & Finance* (Pearson Addison-Wesley, 2004); T. J. O'Brien, *International Financial Economics* (Oxford, 2005).

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Cultural Norms and Scripts

Cultural norms are sometimes defined as "the way we do things around here," but that merely describes the custom and practice processes or interactions within a particular environment. It does not explain *why* things are done in that way, how those norms gain authority, or what mechanisms ensure that relative compliance occurs. Cultural norms are important because they are the generally accepted way that a society or culture guides and regulates the behaviors of its members. Without them, a societal group would be wholly subject to the self-interest of each individual member.

Many societies share commonalities in respect of the types of behavior that are subject to governance by social standards, but this is by no means universal. Cultural norms are often divided into four main categories with differing degrees of importance: "conventions" or "folkways" are codes of social conduct or a standard of etiquette that is expected but is not morally significant, for example, not taking food from another person's plate; "mores" are more strongly held and breaches carry greater sanctions, for example, one does not walk down the street naked; "taboos" are behaviors that are actually forbidden by a culture, like murder or incest in many societies, and are often enshrined in legislation; "laws" are formalized norms backed by the power of government, containing virtually all taboos, but only the more significant mores. What falls into each category and the prescribed penalties for breaches varies between countries or even within the same country, an example being state variance in U.S. legislation.

For a society or group to function, the majority of participant members must agree upon what is "normal" and desire to conform to the rules. These are invariably internalized through the socialization processes taught to children and reinforced through the educational system. Where an individual or group fails to conform, social control mechanisms are utilized in order to encourage conformity, enforce adherence to rules, and in extreme cases, exclude or segregate those who have broken laws or serious taboos. Social control ranges from disapproval at one end of the spectrum to imprisonment or even execution at the other.

Interestingly, there often tends to be more social acceptance of certain infringements than others: While theft and exceeding the driving speed limit are both illegal in many countries, the former usually carries significantly more disapproval than the latter, in the same way that imbibing too much alcohol (an addictive substance) or smoking cigarettes is often deemed by many people to be more acceptable than using certain drugs.

Within a culture may exist "countercultures," wherein the norms of a group or subgroup differ or run counter to those of the prevailing social group. These often, but not always, manifest themselves in the espoused values, behaviors, dress, and musical preferences of younger members of society, or the norms of those with orientations "other" than those of the societal majority. Examples in Western society from the 1960s onward include Beatniks, hippies, and punks. Norms exist within these groups, but they may not be aligned with recognized and ratified societal norms. This is different from an absence of norms, sometimes referred to as "anomie." It is suggested that a state of anomie is categorized by societal breakdown and psychological dissonance.

Cultural norms are by no means universally similar within the global context. Variance is evidenced not only in external manifestations such as art and music, but in behaviors, nonverbal communication, and eye contact. This is also said to influence how individuals from different countries interact with others and with their environment. Theories exist that explore national cultural dimensions. Some suggest that people may have a "national" tendency, possibly embedded through socializing processes, toward certain orientations and preferences; for example, adherence to rules, respect for authority, assigning of power, emotionality, collectivism, and individuality. These dimensions may be seen in folkways, mores, taboos, and laws, in varying degrees.

Organizations can be deemed to have cultures, influenced by factors including age, type, leaders, demographics, sector, and size. Although few would attempt to change or merge all aspects of national cultures, this is frequently attempted at the organizational level. Culture change strategies should focus upon creating norms that support desired behaviors and allow for individual choice; therefore, culture change efforts should be directed at making those behaviors norms.

Cultural Scripts

It is generally accepted that speech communities have different ways of speaking, not just in respect to the specifics of language, but also in the form of the interactions. These differences reflect the assumptions that people have about social interaction in that particular environment or the contextual "nuancing" that people bring with them to the interaction. These assumptions influence the form but not the content of the interaction, for example, the degree of formality, directness, and cooperation. While most languages have "universal" words in common, including words for *I*, *there*, and *and*, other aspects of the language are context-specific or culturally nuanced conventions, which may reflect the cultural norms of a country. "Cultural scripts" can be viewed as rules of interpretation and evaluation that indicate more than just the semantic meaning of the actual words. Cultural scripts are not intended to provide an account of real-life social interactions, but are descriptions of commonly held, societal assumptions regarding how members of a particular group think about social interaction, the "norm," and how this transfers into communication.

Changes in speech patterns can often reflect shifts in cultural values or norms. An example of this would be where a country has a language with an informal and formal address: *tu* and *vous* in French; *du* and *Sie* in German. Should there be a decline in the use of the formal address and an increase in the use of the informal, this may indicate within that particular society, a change in how individuals interact with each other, reflecting a move toward a more classless informality.

See Also: Communication Styles; Culture-Specific Values; Culture Shock; Enculturation.

Bibliography. Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviours, Institutions, and Organisations Across Nations* (Sage, 2003); Richard D. Lewis, *The Cultural Imperative: Global Trends in the 21st Century* (Intercultural Press, 2003); Pallab Paul, Abhijit Roy, and Kausiki Mukhopadhyay, "The Impact of Cultural Values on Marketing Ethical Norms: A Study in India and the United States," *Journal of International Marketing* (v.14/4, 2006); David C. Thomas and Kerr Inkson, *Cultural Intelligence: People Skills for Global Business* (Berrett-Koehler, 2004).

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Culture Shock

The term *culture shock* was first introduced in the 1950s to describe the anxiety a person can frequently experience when moving to a different environment, and encompasses feelings of disorientation and not knowing what to do or quite how to do it and, ultimately, what is acceptable or appropriate within the new culture. The discomfort experienced can be physical as well as emotional, and while the term might be used in different contexts (and where it might then have different meanings) *culture shock* is generally interpreted as the process of coming to terms with differences in culture, as these occur through daily interaction in the new context.

The term may be traced to two sources. First of these is Schumann's Theory of Acculturation, which attempts to explain the various stages that an immigrant will go through from initial arrival in the foreign country to eventual assimilation. Schumann envisages a continuum of adaptation along which the immigrant will travel, even accepting that many people will not stay in a foreign country long enough for total "conversion" to occur. The second source is represented by the work of the pioneering and world-renowned anthropologist Kalervo Oberg. Born to Finnish parents in British Columbia, Oberg had an early academic career in universities in the United States (Missouri and Montana), the United Kingdom (London School of Economics), and Brazil (São Paulo). He then worked for various U.S. government agencies as an applied anthropologist with postings to South America, before late in his career returning to academe (then at the universities of Cornell, Southern California, and Oregon State).

The basis of Oberg's developed theory of culture shock was his now famous address to the Women's Club of Rio de Janeiro on August 3, 1954, which outlined the feelings common to people when face-to-face with a cross-cultural situation. The model he developed was a four-stage one, although more recently this appears to have been expanded to five elements; nor is there total acceptance of the relevant nomenclature.

It is important to recognize that while psychology is the study of individual personality, it is the alternative discipline of sociology that is the study of groups and the behaviors they exhibit. Thus the study of culture is not about the study of individuals per se since the development of a particular culture is not something to which the individual can contribute. Culture is developed within a nation over a period of many years and through processes that are largely beyond the awareness of the individual. Culture imbues a country with national characteristics: The concept of "living the American dream" (anything is possible) familiar to a U.S. citizen or the British obsession with the weather are obvious examples. Other frequently cited aspects of culture are the acceptability (or otherwise) of smoking, semi-nudity, drinking or kissing in public (perhaps particularly by women). More specific examples might be, for example, not showing the soles of one's feet in public, or demonstrating appreciation of a meal by belching, or leaving one's shoes outside one's host's house.

Oberg considered that culture shock is precipitated by the anxiety that results from losing all familiar signs of social intercourse. This leads to feelings of frustration and anxiety; the home environment suddenly assumes enhanced significance; and ridicule may be poked at everything that is now encountered that is found strange or unfamiliar. The stages of culture shock that have been identified are as follows:

1. The first stage is generally known as the "honeymoon" stage (although also variously as "incubation" or "stimulation"). The recent arrival is full of hope and excited by everything new that is encountered and this positive (even euphoric) outlook keeps negative feelings at bay.

2. The second stage is the culture shock (or "hostile") stage, when the need to settle into the new culture (probably through now starting work as either a businessperson or student) means coping with day-to-day situations that are different from "back home." Dislike and/or criticism of the host culture surfaces, to be frequently accompanied by homesickness, lethargy, irritability, and even outright hostility to the host culture.
3. The third or "acceptance" stage is when a period of adjustment is gone through, during which the individual begins to perceive value in their new environment. A favorable comparison of "new" and "old" environments may even occur as the new arrival gains understanding. Pleasure and good humor return as empathy with the new environment develops.
4. In the fourth or "enthusiasm" stage, the host country begins to appear more and more like "home" and certain aspects of the adopted culture may well be perceived to be preferable to the native culture. Integration is accompanied by an enhanced sense of belonging.
5. The fifth (and final) stage occurs following return to the native culture (hence "re-entry" or "reverse culture" shock). Things may not be the same as they were upon leaving, so a readjustment process must be gone through all over again.

It is important to recognize that not everyone will be affected to the same extent by culture shock. The state of an individual's physical and mental health, their personality, language familiarity, level of education, and previous travel experience can make the necessary adjustment process easier or more difficult.

See Also: Acculturation; Cross-Border Migrations; Cultural Norms and Scripts; Culture-Specific Values; Expatriate.

Bibliography. Bonnie S. Guy and W. E. "Pat" Patton, "Managing the Effects of Culture Shock on Sojourner Adjustment on the Expatriate Industrial Sales Force," *Industrial Marketing Management* (v.25/5, 1996); John R. Hanson, "Culture Shock and Direct Investment in Poor Countries," *Journal of Economic History* (v.59/1, 1999); M. R. McComb and G. M. Foster, "Kalvero Oberg, 1901–1973," *American Anthropologist* (1974); Jean McEnery and Gaston DesHarnais, "Culture Shock," *Training and Developmental Journal* (v.44/4, 1990).

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Culture-Specific Values

For American companies to conduct successful business globally, cultural values must not be ignored. The attitude of "if it works in America, it will work anywhere" should not prevail. If cultural values are ignored, a businessperson's effort to forge a relationship will be met with resistance, for even though some cultural values are elective and are not deal-killers, some are cultural exclusives and must be honored. Americans conducting business in other countries must be aware of all cultural values, for any disrespect could be a deal-breaker. Singapore and India present two contrasting examples of the role of culture-specific values in business.

Singapore is the smallest country in southeast Asia. The ethnic makeup of Singapore is diverse, with Chinese as the majority, followed by Malay and Indian. When conducting business, English is the preferred language. Singapore is a group-oriented culture; therefore, a businessperson must form personal relationships. Just like in the United States, in Singapore, businesspeople can take their time and work their way into cliques or get in through being introduced.

In comparison to the United States, conducting business in Singapore is more formal; therefore, protocol is valued. Appointments must be made in advance, with writing a letter the number one preferred choice. Punctuality is essential, for being late for appointments is viewed negatively.

Conducting business in Singapore is also more slowly paced than in the United States. Singaporeans frown upon being rushed; therefore, a businessperson must allot adequate time to conduct business. Business is not discussed immediately; small talk always comes prior to the business discussion. Therefore, businesspeople eagerly wanting to make a connection must be cognizant of being too aggressive. In Singapore, upon entering a business meeting, one must never take a seat immediately. One must wait until being told where to sit. This is in sharp contrast to the United States, for in many cases upon entering a business meeting, the businessperson will sit in any available seat.

Singapore, dubbed one of the safest countries in the world, deals with crime differently from the United States. A businessperson must be cognizant of the differences, for Singapore's laws are as applicable to noncitizens as to citizens. For example, crimes such as first-degree murder carry an automatic death sentence; minor offenses are dealt with harshly. A violator on public transit can be fined up to $500 for eating or drinking. Chewing gum is prohibited unless for medical or dental reasons, as is spitting in public.

In contrast, the U.S. legal atmosphere is more lenient than in Singapore. Even though penalized in Singapore, Americans can eat and drink on public transit, chew gum, and spit virtually anywhere. A businessperson must be aware that commercial disputes that may be handled as civil suits in the United States can escalate to criminal cases in Singapore and result in heavy fines and prison sentences.

India, a country in south Asia, has more than 1 billion people. Even though India has a large population of English-speaking people, at times, confusion can arise over words' meanings. Unlike Singaporeans, Indians value punctuality, yet may not be punctual themselves. Even though it is advisable for appointments to be made at least one month in advance, a businessperson should confirm the appointment upon arrival. Business appointments should ideally be made for late morning or early afternoon, between the hours of 11 and four.

Like Singaporeans, Indians do not like to be rushed when making decisions; therefore, a mild, relaxed demeanor is valued, whereas impatience is frowned upon and viewed as being rude and disrespectful to their culture. Unlike the United States, where the purpose of the meeting is stated almost immediately, in India a meeting usually begins with friendly small talk. The talk normally involves questions about the family unit, for in India, the family is highly valued; therefore, discussing the family unit shows respect.

American businesspeople must be aware that even though in the United States disagreements are usually directly expressed, in India disagreements are rarely expressed directly due to the value placed on well-established honest business relationships. Therefore, to avoid hurt feelings, Indians use indirect communication and nonverbal cues. Because of the value placed on structure and hierarchy in Indian companies, senior colleagues are highly respected and obeyed. Therefore, Americans must be sensitive by showing the needed respect.

Even though it may be a company's dream to expand overseas, it is important that cultural values not be ignored. Familiarity with business customs specific to a culture can determine the success or demise of a venture.

See Also: Achieved Status/Ascribed Status; Communication Styles; Cultural Norms and Scripts; Culture Shock; Multicultural Work Groups and Teams.

Bibliography. J. M. Brett, *Negotiating Globally: How to Negotiate Deals, Resolve Disputes, and Make Decisions Across Cultures* (Jossey-Bass, 2001); C. Cellich and S. Jain, *Global Business Negotiations: A Practical Guide* (South-Western Educational Publishing, 2003); L. Chaney and J. Martin, *Intercultural Business Communication* (Prentice Hall, 2005); N. Dresser, *Multicultural Manners: Essential Rules of Etiquette for the 21st Century* (Wiley, 2005); A. Milligan, *Culture Smart!* (Kuperard, 2006); Carlos Noronha, *The Theory of Culture-Specific Total Quality Management: Quality Management in Chinese Regions* (Palgrave, 2002); J. Salacuse, *The Global Negotiator: Making, Managing and Mending Deals Around the World in the Twenty-First Century* (Palgrave Macmillan, 2003).

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Currency

The term *currency* generally refers to the official means and regulations of payment of a country or region, which have been legally introduced and which are accepted (by law) as a compensation for goods and services. Currency includes banknotes and coins and represents a sub-category of money. Money refers to all means of exchange, also gold, whiskey, tobacco, and other commodities. Currencies, however, are means of payment that are produced and regulated by the government and do not represent goods on their own. Their intrinsic value (i.e., the physical value of a currency) does not coincide with its traded value.

The production and issuance of currencies is, in most cases, incumbent on national central banks or a single central bank for a certain currency zone, such as the European Central Bank, which is responsible for the European Monetary Union. Such institutions regulate the money supply in order to guarantee price stability and, thus, avoid inflation.

Today, about 160 different currencies exist which have, according to their name, an ISO 4217 currency code consisting of three alphabetical letters. They are used in international trade, e.g., EUR for the euro or USD for U.S. dollar. In order to buy goods from any other society it may be necessary to have foreign currency. Therefore, currencies can also be subject to trade and the value of one currency in terms of another currency is expressed by the exchange rate. For international trade, very often leading currencies (i.e., currencies that are preferably used in cross-border transactions) are chosen. They can be easily traded internationally and are often chosen to lock out the exchange rate risk, because they are considered more stable than other currencies. Such leading currencies include, among others, the U.S. dollar, the euro, the yen, the pound sterling and the Swiss franc.

Functions and Characteristics

A currency fulfills three main functions: medium of exchange, unit of account, and store of value. As a medium of exchange, a currency allows its holder to exchange it for any good or service that he or she requires. That is, the seller of a product is not confined by the products of his clients, as would be the case in barter transactions, where goods and services are exchanged without money. Therefore, currencies give their owners more flexibility. It is necessary that people trust in a currency as a medium of exchange, i.e., that they can reliably exchange it for other goods or services. This is of special importance if the traded value of the currency does not reflect the real value of the material that the currency is made of; for example, banknotes may indicate a higher value (printed on the surface) than their real, physical value (i.e., the value of the paper) represents. In order to guarantee that the nominal value of a banknote equals the real value of goods and services, its issuer has to hold reserves of commodities (such as gold) that guarantee the nominal value. In case of inflation (i.e., a decrease in the value of a currency), market agents may lose their trust in a certain currency and shift to barter transactions to exclude the risk of a devaluing currency.

Currencies, as a unit of account, also facilitate the comparison of unequal goods or services. It may seem difficult to compare a haircut (a service) with a new notebook (a commodity) without having a value of reference. By indicating how much of a currency is needed to buy a haircut and a notebook, it is possible to easily compare these commodities with each other. In addition, this also allows the comparison between countries by using the exchange rate, e.g., how much does a certain notebook cost in country A and how much in country B. Currencies as a unit of account also facilitate the comparison of productivity and success of companies across industries and countries.

Finally, currencies allow their owner to store value for future consumption. In comparison to goods, such as fish or vegetables, currencies are more durable and therefore save value. Historically speaking, however, periods of inflation and deflation have shown that the real value of a currency can considerably be altered, which relativizes this function. Still, the advantages of currencies outweigh other media of exchange or units of account. Currencies also allow the establishment of more complex credit systems, where those who need value to buy certain assets can borrow money from those who have stored it for future consumption. This again improves the efficiency of an economy as money can more optimally be allocated by its participants, in line with their wants and needs.

In order to fulfill all these functions, a currency has to have certain characteristics. A good currency is easy to recognize and can be easily distinguished from other assets. This is definitely true for gold, due to its unique luster, color, and weight. Regarding banknotes and coins, they are unique, because they have special imprints and embossments. Apart from that, they also include several copy protections. It is also important that a currency is divisible and portable. On the one hand, if gold is used as a currency, it can be simply cut into pieces without destroying the value of the broken parts as they reflect their implicit value. As far as banknotes and coins are concerned, there are several subunits of them, indicating different values printed on their surfaces, which do not represent their real

Some of these traditional paper currencies and coins have been supplanted by the euro.

value (see above). On the other hand, the transportation of a currency should be easy, thus increasing the its flexibility and circulation. Finally, it is crucial that a currency is durable. This is necessary to fulfill the function of storage of value as explained above. Today, the use of electronic transactions and electronic credit cards, instead of a physical exchange of currencies for goods or services, makes these characteristics nearly obsolete. Also, bank accounts are denominated in currencies and not in goods or services.

Currency and the Economy

The introduction of a currency facilitates intranational and international trade considerably. David Ricardo's theory of comparative advantage postulates that countries, companies, and individuals should specialize in the production of certain goods or services in order to realize gains from trade. However, this indicates that agents have to buy several other goods or services in order to survive, as they specialize in producing only one particular product and not everything they may need. In simple economies, barter may be eligible, but costs of trade will increase due to higher transportation costs, thus making products more expensive. In more complex economies, trade that is solely based on barter transactions is almost impossible.

Due to the three functions of currencies (see above) it is not necessary to triangulate transactions, i.e., individual A wants to buy goods from individual B, who is only prepared to exchange products for those of individual C, who him/herself needs products from individual A. As a consequence, currencies even speed up trade and reduce the number of transports as the purchase and sale of goods or services can be separated from each other. This increases efficiency in trade and transaction costs can be cut severely.

Currency Crises

The pressure on global financial markets in the 1990s caused several currency crises. Examples include the Czech Republic crisis in 1997 and the Russian crisis in 1998, which harmed their economy severely. It is worth mentioning that both crises had been triggered by different economic variables. On the one hand, the Czech currency crisis was characterized by a deterioration of macroeconomic fundamentals and political instability, appearance of a speculative attack, an effort to defend the koruna, and finally a depreciation and change in the exchange rate regime from a fixed to a floating one. On the other hand, the crisis in Russia can be seen as the consequence of its fragile and vulnerable economic and political fundamentals and massive capital flight.

So far, three different prevailing models aim at explaining how currency crises come into existence and which variables best describe or even predict them. Krugman's model, developed in 1979, is generally known as the traditional approach concerning currency crises. It is based on balance of payments problems, reflected by a steady but slow reduction in international reserves, in a country with a pegged currency. According to this model, the expansion of domestic credits to finance fiscal deficits or improve a weakening banking system and the increase of money demand reduce international reserves and consequently results in a speculative attack that would force authorities to abandon their fixed exchange rate regime. In following years, Krugman's model was extended by other studies and showed that a real appreciation of a currency often precedes a speculative attack. In addition, domestic interest rates increase if a currency crash is at hand. To sum up, the first-generation models focus on expansionary macroeconomic measures undertaken by a country with a fixed exchange rate regime and therefore are said to be predictable.

Second-generation models refer to countercyclical government policies and take into account uncertainties and features of speculative attacks. Currency crises are also defined as changes from one monetary policy equilibrium to another, caused by self-fulfilling speculative attacks. For example, agents believe that currency A will lose its value in the near future and therefore exchange it for a more stable one. Therefore, the demand for currency A decreases and, as a consequence, its value does as well. The interaction of economic policies and economic agents could allow jumps between multiple equilibria without having an impact on fundamentals. Thus, an economy with a fixed exchange rate regime could find itself in equilibrium, but a turn in expectations of economic agents could trigger policy measures, which cause a breakdown of the exchange rate regime. In other words, speculative attacks are independent of the consistency between the currency policy and an exchange rate fixing. In short, second-generation models imply that currency crashes are far more difficult to predict, but economic fundamentals are still of importance, although there is no strong relation between these indicators and a possible crisis.

While second-generation models assume that all speculators know about each others' intentions, third-generation models eliminate this unlikely assumption in arguing that fundamentals can only be monitored with noise. Moreover, the amount of noise in a signal may vary between speculators, but at the same time results in a new equilibrium. Furthermore it is concluded that economic fundamentals might not signal an upcoming crisis, like in second-generation models, but speculators would still attack the currency, due to the uncertainty of expectations of other economic agents. Apart from that, third-generation models are based on structural weaknesses, e.g., foreign currency debt exposure in the corporate and financial sector. Finally, these models are characterized by moral hazard, imperfect information, and the exorbitant up- and downturns in international lending and asset pricing.

In view of the above, currency crises can be considered to be diverse in their nature and, as a consequence, in their origination. Very often currency crises accompany or are accompanied by banking crises.

See Also: Asian Financial Crisis; Barter; Central Banks; Contagion; Currency Speculators; Currency Zone.

Bibliography. Irving Fisher, *The Purchasing Power of Money: Its Determination and Relation to Credit Interest and Crises* (Gardners Books, 2007); International Organization of Standardization, ISO 4217, www.iso.org (cited March 2009); G. L. Kaminsky, "Currency Crises: Are They All the Same?" *Journal of International Money and Finance* (v.25, 2006); G. L. Kaminsky, S. Lizondo, and C. M. Reinhart, "Leading Indicators of Currency Crises," *IMF 79* (1997); P. Krugman, "A Model of Balance-of-Payments Crises," *Journal of Money, Credit, and Banking* (v.11/3, 1979); Allan H. Meltzer, *A History of the Federal Reserve* (University of Chicago Press, 2003); Emilie Rutledge, *Monetary Union in the Gulf: Prospects for a Single Currency in the Arabian Peninsula* (Routledge, 2009); F. Schardax, "An Early Warning Model for Currency Crises in Central and Eastern Europe," *Focus on Transition 1* (OeNB, 2002); P. J. G. Vlaar, "Currency Crisis Models for Emerging Markets," *DNB Research Reports*, Research Memorandum WO&E (n.595/9928, 2000).

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Currency Exposure

Firms doing business in more than one currency (i.e., U.S. dollar, euro, yen, etc.) face currency exposure. This exposure arises from the fact that, in the current global environment of floating exchange rates, the value of a currency relative to other currencies (its exchange rate) is constantly changing—rising or falling based on forces of supply and demand, government activity, even currency speculators. There are three main types of currency exposure—transaction, translation, and economic.

Transaction exposure reflects the exposure of the firm to changes in the value of a foreign-currency-denominated transaction (sale or purchase) between when the price is set and when payment is made. For example, say a U.S. aircraft manufacturer contracts to produce and sell 10 airplanes to a German airline for 100 million euros, to be paid upon delivery in six months. Although the dollar/euro exchange rate when the deal is signed is $1.50/euro, the U.S. manufacturer does not know whether the value of the 100 million euros it will receive in six months will be higher or lower than the current value of $150 million (dollars), and is thus faced with transaction exposure. If the dollar/euro exchange rate drops to $1.25/euro in six months, the 100 million euros will be worth only $125 million, whereas a rise to $1.75/euro would result in a better-than-expected $175 million. If the U.S. firm wishes to eliminate variability in the dollar amount, they may enter into a contract on the forward market, which allows them to lock in a future exchange rate. Alternatively, they may purchase a foreign currency option, insuring them against the downside risk of a decline in the value of the euros they will be receiving, while still allowing them to benefit from potential increase in the euro's value.

Translation exposure arises within the firm's accounting function. The financial statements of the firm's foreign units must be translated into the parent currency, then consolidated into the financial statements of the parent. If there has been a shift in the exchange rate between the subsidiary's and parent's currencies since the last consolidation was performed, unrealized "paper" gains/losses may affect the company's books. If the U.S. aircraft manufacturer had purchased a German factory for 10 million euros when the exchange rate was $1.50/euro, it would appear as an asset on the parent's books, valued at $15 million. If the exchange rate were $1.75/euro the following year, that same factory, with a value of 10 million euros (not accounting for depreciation), would translate into the parent's books valued at $17.5 million, a $2.5 million gain based not on increasing real value, but merely driven by rising exchange rates (alternatively, a drop in the exchange rate to $1.25/euro would create a $2.5 million "paper" loss).

It can be risky for firms to make strategic decisions based on "paper" gains/losses; one technique for minimizing translation exposure is to balance foreign currency assets and liabilities. The aircraft manufacturer could borrow 10 million euros to purchase the German factory, resulting in a 10 million euro asset (the factory) and a 10 million euro liability (the loan), which would effectively cancel each other out—whenever the euro rose/fell against the dollar, asset and liability would rise/fall simultaneously.

Economic exposure reflects the degree to which exchange rate shifts affect a firm's future foreign profitability. This exposure has the greatest potential for long-term impact on firm performance, and thus requires greater strategic planning and decision making on the part of the firm. Once the U.S. aircraft manufacturer owns a factory in Germany, economic exposure could be triggered by a large rise in the value of the euro, say from $1.50/euro to $2.00/euro. Such a shift may hurt the firm (reduced export performance from Germany, as their products will now look pricier on international markets) and/or may have a positive impact on the firm (profits made in euros will translate into more dollars than before). One way firms can manage economic exposure is to diversify production locations internationally, so that large shifts in one currency will not affect their entire business.

See Also: Currency; Currency Speculators; Devaluation; Exchange Rate; Exchange Rate Risk; Floating Exchange Rate; Forward Market.

Bibliography. Saleh Alharbi, *Three Essays on Currency Exposure* (University of Wisconsin, 2004); Naohiko Baba, Kyoji Fukao, Nihon Ginko, and Kin'yu Kenkyujo, *Currency Risk Exposure of Japanese Firms with Overseas Production Bases: Theory and Evidence* (Tokyo Institute for Monetary and Economic Studies, Bank of Japan, 2000); Soehnke M. Bartram, "What Lies Beneath: Foreign Exchange Rate Exposure, Hedging and Cash Flows," *Journal of Banking and Finance* (v.32/8, 2008); David K. Eiteman, Michael H. Moffett, and Arthur I. Stonehill, *Multinational Business Finance*, 11th ed. (Addison-Wesley, 2007); Sanjoy Ghosh, *Hedging Currency Exposure* (University of Pennsylvania, 2000); Philip R. Lane and Jay C. Shambaugh, *The Long or Short of It: Determinants of Foreign Currency Exposure in External Balance Sheets* (Centre for Economic Policy Research, 2008); E. B. Lubach, *Currency Exposure in Mutual Funds: To Hedge or Not to Hedge* (Erasmus Universiteit, 2006).

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Currency Speculators

A currency speculator is an individual who trades in the foreign exchange market with the sole purpose of making a profit. For example, if the British pound is falling relative to the U.S. dollar, currency speculators will sell pounds, expecting to buy them back again sometime in the near future at a lower price.

This implies that speculators will have an uncovered "open position," which can be difficult to cover if the pound does not fall relative to the U.S. dollar. Currency speculators are willing to take this exchange rate risk when they believe that exchange rates will move to their benefit.

In general, currency speculators trade either on the spot market and/or on the derivatives market. In the first case, a speculator will sell on the spot price if he believes that the asset is overvalued and then wait to buy back the asset in the future when he thinks that the price has fallen by so much that it will generate him a profit after all transaction costs have been paid. In the second case, currency speculators will sell the overvalued currency at the spot market and at the same time they will buy the future price of the same currency. The future price of currencies is traded in the derivatives markets and can be in the form of a forward, a future, or an option contract. In most cases, the currency speculator will "short sell" the asset, that is, she will sell an asset that she does not own hoping to buy it back in the future at a lower value.

The advantage of selling and buying the asset simultaneously is that the potential profit that can be derived from this strategy is secured. However, the downside is that by buying the asset for future delivery the trader binds himself to the future price of the asset. In such a case, the trader discards the opportunity to get an extra profit if the spot price of the currency in the future is much lower than its price of the future contract. Also, speculators, using the purchasing power parity (PPP) rules between two or more currencies, speculate by trading on the price of one currency compared with the value with all the currencies that can be exchanged for one unit of this currency.

Currency speculators predict the future exchange rate prices by analyzing changes in value or by just bluffing about the future price of assets. When speculators analyze changes in the value of assets they do so by estimating the change in the value of assets that is caused by news about their value. For example, if the American interest rate is set at a point higher than the European Union interest rate, speculators will short sell euros as they will expect that investors will start selling euros as well in order to buy U.S. dollars that offer a greater return. The downward pressure will destabilize the euro/U.S. dollar exchange rate and speculators will earn their profits by buying back euros at a lower price. On numerous occasions speculators have been accused of deliberately selling the currency of one country in order to create downward pressure; thus their prediction of a devaluated currency becomes a self-fulfilling prophecy.

The most famous example of a currency speculator is George Soros. Soros is said to be responsible for the "Black Wednesday" when the United Kingdom was forced to withdraw the British pound from the Exchange Rate Mechanism that was designed to keep a number of currencies floating within very small margins. On September, 16, 1992, Soros sold short more than £10 million, putting enormous downward pressure the Bank of England (BoE) either to raise interest rates, so that investors will start buying pounds, or to devaluate the currency. Eventually, the BoE decided to let the currency float freely, leaving the Exchange Rate Mechanism. It is said that, on that day, Soros made more than £1 million from this speculative trade.

However, currency speculators claim that it is on their actions that markets become fully efficient. Their argument is the following; when prices are not fully efficient, i.e., prices do not reflect the true fundamental values of assets, currency speculators trade on those assets, making the prices more informative and as a result the trading prices converge with the fundamental value of assets. Had the currency speculators not traded, the asset prices would have continued to trade in prices different from their optimal. In other words, speculators argue that they help prices to trade at their true value and the absence of speculative trading will have devastating results in the long term. Nevertheless, as with any profit-motivated trader, speculators ask for greater returns in order to accept the exchange rate risk that is associated with trading currencies.

See Also: Currency; Devaluation; Exchange Rate Risk; Exchange Rate Volatility; Fixed Exchange Rate; Foreign Exchange Market.

Bibliography. Brendan Brown, *Bubbles in Credit and Currency: How Hot Markets Cool Down* (Palgrave Macmillan, 2008); L. Copeland, *Exchange Rates and International Finance* (Addison-Wesley, 1994); D. Eiteman, A. Stonehill, and M. Moffett, *Multinational Business Finance* (Addison-Wesley, 1998); C. Goodhart and R. Payne, *The Foreign Exchange Market: Empirical Studies with High-Frequency*

Data (MacMillan, 2000); L. Harris, *Trading and Exchanges: Market Microstructure for Practitioners* (Oxford University Press, 2003); Kathy Lien, *Day Trading and Swing Trading the Currency Market: Technical and Fundamental Strategies to Profit from Market Moves* (John Wiley & Sons, 2009); K. F. Radalj, "Hedgers, Speculators and Forward Markets: Evidence from Currency Markets," *Environmental Modelling and Software* (v.21/9, 2006); K. Pilbeam, *Finance and Financial Markets* (Palgrave, 2005); J. Rutterford, *An Introduction to the Stock Exchange Investment* (Palgrave, 2007); S. Valdez, *An Introduction to Global Financial Markets* (Palgrave, 2007).

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Currency Zone

A currency zone or optimum currency area is defined as a geographical region in which there is a single currency or several currencies that are pegged to each other so that the currencies can fluctuate only against the rest of the world. Currency zones eliminate exchange rate uncertainties and maximize economic stability within that area. The most prominent example of a currency zone is the Eurozone in which the European Union member states have decided to abandon their domestic currencies and adopt the euro as their single currency.

The optimum currency zone theory, first published by R. Mundell (1961), along with the theory of comparative advantage of David Ricardo, are the most cited theories in international economics that have also seen widespread applications in recent decades.

The benefits associated with the adoption of a single currency are twofold: First, the elimination of transaction costs and, second, the minimization of risk originating from exchange rate uncertainties. In particular, it is argued that the most visible gain of a monetary union is the removal of costs associated with exchanging one currency into another. Yet, even though this benefit is relatively small, less than half of 1 percent of the Eurozone GDP, it should be added to the overall benefits of a single currency. These benefits mainly refer to the increased usefulness of money. That is, a currency zone increases price transparency, decreases price discrimination within the zone, and in general fosters competition. So, a currency zone promotes trade between the member-states of the zone, increases efficiency in the allocation of resources, and endorses cross-area foreign direct investment.

The second major advantage of a currency zone is that it reduces the exchange rate uncertainty risk. Even when two or more currencies are narrow-banded to each other, like in the case of the Exchange Rate Mechanism, there is still some exchange rate risk associated with the individual currencies. This risk is eliminated when a single currency is introduced to replace the old monetary system. The indirect welfare gains that come from a currency zone are said to help firms increase their efficiency by eliminating the uncertainty about the future prices of good and services. This, in turn, should increase economic growth within that area. At the same time, a single currency removes from single countries their ability to print money; thus, inflationary pressures to single countries are eliminated.

However, skeptics of currency zones argue that the loss of the ability of individual countries to conduct a national monetary policy is more important than the benefits of a single currency. That is, a nation joining a single currency loses its ability to change interest rates, to determine the quantity of money, and to change the price of its currency. The key point is that, within a currency zone, the member countries may face the one-size-fits-all problem, which refers to the application of policies that are inappropriate for individual countries. So, for example, combating inflation within the Eurozone might have disturbing consequences for individual member states that have no inflation problems. Further, it has been argued that member states lose their ability to react to asymmetric shocks, that is, shocks that affect one economy differently from others.

The costs and benefits of a currency zone are strongly linked with the assumptions that determine its effectiveness. These assumptions refer to the degree of labor and capital mobility within the currency zone and to price and wage flexibilities that apply across the different member states. In the case of the Eurozone, strong doubts have been raised about the mobility of labor and about the wage and price rigidities that seem to persist for some countries. However, as convergence progresses, these problems are likely to decrease.

In general, the effectiveness of a currency zone relies on the pre-conditions that must be met before the application of a single currency and on the time horizon and the law enforcement tools that are available when the single currency is introduced. The Eurozone has still a long way before it is an optimal currency area in terms of reacting to asymmetric shocks and eliminating the structural differences between the member states.

See Also: Central Banks; Common Market; Comparative Advantage; Currency; Economic Union; Euro; European Monetary Union; European Union; Exchange Rate Risk; Exchange Rate Volatility; Fixed Exchange Rate.

Bibliography. D. Eiteman, A. Stonehill, and M. Moffett, *Multinational Business Finance* (Addison-Wesley, 1998); Charles A. Goodhart, "Currency Unions: Some Lessons from the Euro-Zone," *Atlantic Economic Journal* (v.35/1, 2007); P. De Grauwe, *Economics of Monetary Union* (Oxford, 2007); A. Griffiths and S. Wall, *Applied Economics* (Prentice Hall, 2004); Isamu Kato and Merih Uctum, "Choice of Exchange Rate Regime and Currency Zones," *International Review of Economics and Finance* (v.17/3, 2008); P. Krugman, R. Wells, and K. Graddy, *Economics* (Worth, 2007); R. Mundell, "A Theory of Optimal Currency Areas," *American Economic Review* (1961); D. Salvatore, *International Economics* (John Wiley & Sons, 2000); J. Sloman, *Economics* (Prentice Hall, 2006); Leila Simona Talani, *The Future of the EMU* (Palgrave Macmillan, 2009); G. S. Tavlas, "The New Theory of Optimum Currency Areas," *The World Economy* (1993).

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Current Account

The current account measures transactions in goods, services, and income, as well as current transfers between residents and nonresidents of a country. As such, the current account records the value of real resource transactions (i.e., exchanges involving goods, services, and income) and current transfers (i.e., unilateral transfers such as food donations) in a specific time period between a country and the rest of the world. The balance on the current account and the size of the current account relative to gross domestic product are important indicators of a country's integration and openness to the rest of the world.

The value of transactions recorded in the current account of a country is estimated through periodic surveys of economic exchanges between its residents and nonresidents. In the current account, each transaction is recorded either as a credit or debit entry. A transaction that is a source of foreign exchange leads to a credit entry; a transaction that is a use of foreign exchange generates a debit entry. Thus, exports of merchandise goods are recorded as credit whereas imports are recorded as debit.

The current account is said to be in deficit when the value of real resources and current transfers acquired from the rest of the world exceeds the value of real resources and current transfers provided to the rest of the world. A surplus in the current account indicates that the opposite is true: real resources and current transfers to the rest of the world have a greater economic value than those from the rest of the world. Furthermore, the balance on the current account shows the relationship of national expenditure to national income. A current account deficit indicates that a country spends more than it produces (its income); the difference between what it spends and produces is imported from the rest of the world.

The current account is a primary component of a country's balance of payments. The other major component is the capital and financial account, which records capital flows and transfers. The balance of payments is organized on the basis of the double-entry accounting principle; it records economic transactions between residents and nonresidents of a country in the form of two offsetting entries, a credit and a debit. A credit entry in the current account is a source of foreign exchange, which implies an increase in the financial assets acquired from the rest of the world. It is thus recorded as a debit entry in the capital and financial account. For this reason, a surplus or deficit in the current account is offset by a deficit or surplus in the capital and financial account. In other words, a country running a deficit in the current account is a net debtor from the rest of the world whereas a country running a surplus is a net creditor to the rest of the world. It should be observed that the relationship between the current account and the capital and financial account holds true through accounting identity.

The balance on the current account can be seen as being constituted by the balance on goods trade, the balance on services trade, the balance on income, and the balance on current transfers. While the current account is conceptually different from the balance on goods and services trade, a deficit or surplus in the current account is often driven by a trade deficit and surplus. This is because exports and imports of goods and services are often the biggest—in terms of value—components of the current account.

See Also: Capital Account Balance; Exchange Rate; Export; Import; National Accounts; Terms of Trade; Trade Balance.

Bibliography. Jörg Decressin and Piti Disyatat, "Productivity Shocks and the Current Account: An Alternative Perspective of Capital Market Integration," *Journal of International Money and Finance* (v.27/6, 2008); Giancarlo Gandolfo, *International Finance and Open-Economy Macroeconomics* (Springer-Verlag, 2001); International Monetary Fund, *Balance of Payments Manual*, 5th ed. (1993); Rita M. Maldonado, "Recording and Classifying Transactions in the Balance of Payments," *International Journal of Accounting* (v.15, 1979); Robert M. Stern, *The Balance of Payments: Theory and Economic Policy* (Aldine, 1973); U.S. Department of Commerce, *The Balance of Payments of the United States: Concepts, Data Sources, and Estimating Procedures* (U.S. Government Printing Office, 1990).

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Custodians

The global custody business is the safekeeping of clients' assets. It includes processing cross-border securities trades, keeping financial assets safe, and servicing the associated portfolios. Institutional investors, money managers, and broker/dealers are among those who rely on custodians and other market participants for the efficient handling of their worldwide securities portfolios. The kinds of assets involved include 1) equities, 2) government bonds, 3) corporate bonds, 4) debt instruments, 5) mutual fund investments, 6) warrants, and 7) derivatives.

Custodians effect settlement of trades (that is, completion of a transaction, wherein the seller transfers securities or financial instruments to the buyer and the buyer transfers money to the seller) and provide safekeeping of the assets on behalf of clients. The services also include (1) collection of income arising from the portfolios (dividends and interest payable), (2) application of entitlements to reduced rates of withholding tax at source and reclaiming withheld taxes after-the-fact, and (3) notification and dealing with corporate actions (such as bonus issues, rights issues, and takeovers).

In terms of service offering, custodians have moved far beyond the core services on which the business was founded—safekeeping and settlement, income collection, proxy voting—as companies have sought to add value for an increasingly sophisticated globalizing client base. Securities lending, benchmarking services such as performance measurement and risk analysis, compliance monitoring, fund accounting, and retail transfer agency are today variously or all part of the deal, as custodians seek to recast themselves as information enhancers and global market facilitators.

Many custodians outsource safekeeping of assets in foreign markets to sub-custodians. Sub-custodians use their knowledge and expertise for that particular market and charge a fee for their services. This helps custodians extend their network over a wider region and provides better service irrespective of region of operation.

While much of the work is administrative and repetitive, the role of the custodian has widened to a range of other services. Custodians typically specialize in a particular area. Custodians also have client-focused and technical personnel. Relationship managers, for example, work with clients to reassure them that their assets are safely maintained.

The global custody product was conceived out of changes to U.S. pension laws. In 1974 the Employee Retirement Income Security Act (ERISA) became law, requiring U.S. pension plan sponsors to segregate investment management and custody of the underlying assets. Prior to this, banks had provided settlement and safekeeping services on an international basis. However, these activities were typically provided free of charge—and the functions therefore starved of resources—as part of investment management or other activities. The term *global custody* was coined in 1974. Global custody services include the following:

- Safekeeping activities: Ensure that assets are protected.
- Clearing: Operate in a highly automated environment to ensure accurate records are kept of mutual positions in the exchange of cash and securities between counterparties or among a group of participants and to effect orderly settlement of their obligations on a net basis.
- Settlement activities: Ensure timely, accurate, and secure transmission of trade instructions and timely completion of settlement Straight-through processing (STP); an automated passage of a securities trade from execution to settlement is used for faster turnaround time.
- Derivatives: Ensure timely and accurate accounting for derivatives and associated margin payments.
- Network of markets: Ensure strength and reliability in supporting all required markets.
- Other services such as reporting and record-keeping, cash management, securities servicing, and income collection.

Today technology is also enabling an unprecedented democratization of business. It is now feasible for mid-size and even smaller companies to go global. In the future, global custody is going to be more concentrated, more comprehensive, and more competitive. Relationship management will be crucial: Custody will become commoditized. There will be more products and more consolidation. Only those who extend their product through joint ventures, acquisitions, alliances, and consortiums will survive. Stratification and specialization will continue, and processes will be more transparent. There will be more players, but technology will allow custodians to become more specialized. Their clients will choose the best products from a large group of specialists. Technology is a major driving force. Clients will want the ease of access that already exists on the retail side. Key players are the Bank of New York, Citibank, HSBC, EFG Eurobank, and Mellon group, to name a few.

See Also: Citigroup; Cross-Border Trading; HSBC Holdings; Pension Systems; .

Bibliography. Pierre Agnes, "Embeddedness in Custodial Banking," *Tijdschrift Voor Economische en Sociale Geografie* (v.93/3, 2002); Gregg Miller "Maintenance and Custodial Services: Getting the Most for the Money," *School Business Affairs* (v.59/7, 1993).

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Customer Relationship Management

Customer relationship management (CRM) is a customer-centric business philosophy, policy, and strategy that focuses on processes and systems that organizations undertake to enhance their relationships with customers. Customer relationship management is based on the premise that a stable customer base is a core business asset, and further, that knowledge of customer behavior and attitudes coupled with effective service delivery at every point of interaction with customers enhances business performance. CRM takes a long-term perspective, focused on customer retention, and the building of multiple levels of relationships between buyer and seller, in pursuit of enhanced levels of customer commitment. Goals of CRM typically include providing better customer service; making call centers more efficient; cross-selling products more effectively; helping staff close deals faster; simplification of marketing and sales processes; discovery of new customers; and increasing customer revenues.

Successful CRM is dependent on the coordination of different players within the organization responsible for delivering customer value (in accordance with Porter's value chain). These include (1) customer facing operations: the people and technologies that interact directly with and deliver service to the customer; (2) internal functional operations: the people and technologies in the back office that support the activities of the customer facing operations; (3) supplier and partner organizations: the people and technologies that support organizational processes; (4) impression management operations: the people and technologies that have responsibility for managing the impression of the brand, brand reputation, and brand experience.

Types of Relationships

Businesses can seek to create different types of customer relationships. These might include (1) basic: where the organization sells the product; (2) reactive: where the organization sells the product and encourages the customer to call with questions or problems; (3) accountable: where the organization contacts the customer a short time after the sale, to check on product performance; (4) proactive: where the organization contacts the customer with suggestions for use improvements, and with details of new products; and (5) partnership: where the organization works continuously with the customer to drive innovation and improved customer value.

The appropriateness of CRM, and more specifically, the choice of relationship type depends upon the product (e.g., level of complexity and uncertainty in purchase, margins); the customers (e.g., tendency to shop around, consumers or businesses); and, the marketing organization (e.g., structure, business process, and core values). In addition, relationships may vary on another dimension—the stage of the life cycle that they have reached with a specific business. The customer development process is concerned with moving customers through this life cycle: suspects (consumers and businesses with a profile that suggests they might become customers); prospects (consumers and businesses who have indicated potential interest in the organization's products); first time customers; repeat customers; clients (who are in a dialogue with the business); members (who have signed up to a contractual membership engagement); advocates (who actively promote the organization); and, partners (who work with the organization to enhance its products and services to the mutual benefit of both parties).

CRM is designed to reduce customer turnover, or churn. Customer switching is determined by relationship strength (the nature and depth of the bond with the organization), perceived alternatives (e.g., competitors offerings), and critical episodes (such as an unsatisfactory experience). Relationships may terminate if the customer no longer has need for the organization's products or services; more suitable providers enter the marketplace; the relationship strength has weakened; the organization handles a critical episode poorly; and/or there are changes in the organization's offering (such as changes in brand reputation or price) that cause the customer to reconsider their behavior.

Types of CRM

There are two main types of CRM. The first is operational CRM, which supports customer facing operations, including sales, marketing, and customer service. Service agents record details of each interaction into a customer contact history, so that staff can retrieve information on customers from the database to support subsequent interactions. Such data is useful in call centers, but also for managing campaigns, and marketing and sales automation. The second type is analytical CRM, which includes applications that analyze customer data generated by CRM applications to provide information to improve business performance. Analytical CRM applications are based on data warehouses that consolidate data from operational CRM systems and mine the data, to, for example, identify buying patterns, create segments for marketing, and identify profitable and less profitable customers.

Businesses need to be able to identify more profitable customers and focus relationship building on those customers. In seeking to optimize their customer portfolio, businesses seek measures of customer worth. A key measure is customer lifetime value, based on consideration of customer interactions in terms of recency x frequency x value. Other measures may be based on estimates of "relationship costs" versus "relationship revenue" for specific customers, or on the balance between the value of a customer and the risk associated with their likelihood of switching. Such analysis complements the effect of the segmenting and targeting undertaken by the organization on the customer portfolio.

See Also: Branding; Brand Loyalty; Consumer Behavior; Consumer Needs and Wants; Consumer Surveys; Customer Responsiveness; Customization; Focus Groups; Marketing.

Bibliography. F. Buttle, *Relationship Marketing* (Chapman, 1996); M. Christopher, A. Payne, and A. Ballantyne, *Relationship Marketing: Creating Customer Value* (Butterworth-Heinemann, 2002); J. Egan, *Relationship Marketing,* 2nd ed. (FT Prentice-Hall, 2004); B. Foss and M. Stone, *Successful Customer Relationship Marketing* (Kogan Page, 2001); Mae Y. Keary, "Electronic Customer Relationship Management," *Online Information Review* (v.31/5, 2007); Stephen F. King, "Understanding Success and Failure in Customer Relationship Management," *Industrial Marketing Management* (v.37/4, 2008); A. Ant Ozok, Kristen Denburger, and Gavriel Salvendy, "Impact of Consistency in Customer Relationship Management on E-Commerce Shopper Preferences," *Journal of Organizational Computing and Electronic Commerce* (v.17/4, 2007); D. Peppers and M. Rogers, *Managing Customer Relationships: A Strategic Framework* (Wiley, 2004); Keith A. Richards, "Customer Relationship Management: Finding Value Drivers," *Industrial Marketing Management* (v.37/2, 2008); Keith A. Richards and Ell Jones, "Customer Relationship Management: Finding Value Drivers," *International Marketing Management* (v.37/2, 2008); D. Rigby, F. F. Reichheld, and P. Schefter, "Avoid the Four Perils of CRM," *Harvard Business Review* (v.80/2, 2002); Rima Tamosiuniene, "Consumer Relationship Management as Business Strategy Appliance: Theoretical and Practical," *Journal of Business Economics and Management* (v.8/1, 2007); Julian Villanueva, Pradeep Bhardwaj, Sridhar Balasubramanian, and Yuxin Chen, "Customer Relationship Management in Competitive Environments: The Positive Implications of a Short-Term Focus," *QME-Quantitative Marketing and Economics* (v.5/2, 2007).

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Customer Responsiveness

Organizations compete in their markets basically in two ways: By offering products and services at lower prices than competitors do and by offering better products and services than competitors do. In the first case, an organization relies on cost leadership business strategy and in the second case on differentiation business strategy. An organization that can outdo its competitors in terms of lower price or differentiation stands to gain competitive advantage.

Charles Hill and Gareth Jones, in their text on strategic management, describe customer responsiveness as giving customers what they want, when they want it, and at a price they are willing to pay so long as the organization's long-term profitability is not compromised in the process. Customer responsiveness can thus be understood as the ability of an organization to take action to identify their customers and react to their needs and wants in a way that will satisfy them. Consequently, customers learn to attribute more utility to the products and services. For example, an automobile company trying to develop customer responsiveness can build cars to order for individual customers, letting them choose from a wide range of colors and options. In doing so, it strives to be better than its competitors and aims to gain competitive advantage.

The purpose of customer responsiveness is to develop customer loyalty—preference of customers for an organization's products and services so that they continue using them. When an organization is successful at creating customer loyalty it can charge a premium price that the customers are willing to pay for that something extra they get and that they do not get elsewhere.

Organizations that provide superior customer responsiveness pay attention to several aspects such as customer response time, superior design, superior service, and superior after-sales support. Customer response time is the time it takes for the product to be delivered to the customer. An organization that takes less time to respond to its customers reaches them earlier than its competitors. In this manner, that organization gains on time beating its competitors and gaining competitive advantage. Superior design and service backed by superior after-sales support is another way organizations try to serve their customers better than their competitors do. For example, mobile phones have evolved from being simple communication device to becoming sophisticated, multiple-feature gadgets, responding to customers' needs as time went by. Those mobile phone companies that have succeeded in offering better mobile phones with more features have consistently outrivaled their competitors. As they did so, they were able to charge a premium price that their customers are happy to pay.

An organization striving to develop customer responsiveness has to start by identifying what its customer needs are. This calls for keeping customers at the forefront when designing products and services. The top management of an organization plays a critical role in creating commitment to customers within the organization. They may design the mission statement of an organization that puts customers first. This gives a clear signal to the employees inside and the customers outside of the priorities of an organization.

When an organization tries to provide customer responsiveness outside it has to take several steps inside. For instance, a company trying to develop customer responsiveness may design newer products with new features that it thinks will serve customers' needs better. It will have to manage its internal processes in such a way that they are attuned to serving customers' needs better. This will require added emphasis to quality and innovation.

When an organization builds products and services around customer needs and wants, the process is called customization. In the example of the automobile company that builds cars keeping in view their individual customer needs, it is trying to customize its cars to satisfy the unique requirements of its customers. Customization usually results in increasing the costs of production, forcing the company to raise the prices. So long as customers are willing to pay those higher prices, customization works. When the costs become prohibitive, companies have to find other ways. This may involve better and faster production methods that save on costs.

Organizations that operate internationally may choose to consider each of their country markets as separate market segments, adapting their products and services to suit the local preferences of customers in those market segments. This approach, often referred to as the polycentric approach, involves customizing the marketing mix in each market segment in order to meet the unique needs and wants of customers in those market segments.

See Also: Brand Loyalty; Competition; Consumer Needs and Wants; Customer Relationship Management; Customization; Local Adaptation; Polycentric; Service Level.

Bibliography. Janet Godsell, Alan Harrison, Caroline Emberson, and John Storey, *Customer Responsive Supply Chain Strategy: An Unnatural Act?* (Taylor & Francis, 2006); Ricky W. Griffin and Michael W. Pustay, *International Business: A Managerial Perspective* (Pearson Prentice Hall, 2007); Charles W. L. Hill and Gareth R. Jones, *Strategic Management: An Integrated Approach* (Houghton Mifflin, 2008); M. Mital, "An Empirical Analysis of Factors Influencing Customer Responsiveness to Mobile Advertising," *Journal of Database Marketing and Customer Strategy Management* (v.15/2, 2008); Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (Free Press, 1980).

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Customization

Customization refers to the efforts of companies to offer goods and services specifically designed or customized according to the needs of a particular customer, a group of customers, or an entire market (country). The core of customization or customization strategy is the focus on specific customer needs. The opposite of customization is standardization, which refers to the efforts of companies to offer a common product or common marketing programs throughout a particular market, region, or the whole world. Therefore, with respect to global business, companies pursuing the customization strategy or view treat each country as having unique features and customize their offerings accordingly instead of offering standardized products. That means that companies will modify their offerings according to differences in market characteristics, culture, industry conditions, legal environment, and marketing infrastructure (distribution channels, advertising agencies, and media) to better serve foreign consumers. Some terms used in the same or similar meaning with customization are *adaptation, personalization, personalized marketing*, and *one-to-one marketing*.

There are two broad strategies regarding international operations of companies: the global and the multidomestic strategy. In companies implementing the global strategy, products are the same across all countries in which the company operates and there is a centralized decision-making and control system. This strategy is appropriate when there are small differences across foreign markets with respect to the product the company offers; this strategy provides cost advantage and flexibility. However, companies pursuing the multidomestic strategy customize their offerings for each market and give these markets autonomy in decision making. This strategy is appropriate when there are significant differences across foreign markets and companies may better serve local customers if local needs and preferences affect buying behavior. Compared to the global strategy, the multidomestic strategy is harder to design and implement due to the existence of different factors to be considered in each foreign market.

From the marketing point of view, companies are expected to serve consumers better through customization than standardization since the ideal market segment size is one for which 100 percent customer satisfaction is needed. Therefore, customization at the individual level is the highest level of customization and assumes that each individual is different from others and thus has unique needs. Therefore, companies need to know the specific needs of each customer to be able to individually customize their offerings. For example, many computer producers now do not offer computers with only standardized configurations; instead, they give consumers the opportunity to configure computers according to their needs. Similarly, companies in many industries such as automobile, clothing, real estate, and tourism offer customization opportunities to best meet the needs of their customers.

However, it may not be possible for some companies to customize products at the individual level since such a high level of customization increases costs and requires additional resources. As a result, some companies implement customization at the consumer group or segment level as well. For example, the needs of children, teenagers, and adults may be different, and thus companies customize their offerings according to the group's needs; in addition to age, customers can also be segmented in many other ways, for example, climate, language group, media habits, education, and income.

In addition to customization at the individual and group level, customization can be done at the country level as well; laws and regulations, traditions, and religion may necessitate such a country level customization. For example, cars with the steering wheel on the right in the United Kingdom and meatless hamburgers in India are examples of customization of products at the country level, resulting from differences in law, regulations, and religion across markets.

Customization is sometimes referred to as mass-customization, which means production and marketing of good and services according to customers' needs at normal or low prices that are close to prices of products produced in large quantities, which is called mass-production. When companies engage in mass-production, they are able to decrease their unit cost, capitalizing on the scale economies; however, with respect to customized production, this is not always the case since companies need to have additional resources to produce customized or somewhat different products. So, how are products not so high priced in mass-customized production? In the past, companies could offer low-priced but similar products through mass-production (having taken advantage of low unit cost), but they used to offer customized or differentiated products at generally higher prices. However, technological developments nowadays have allowed companies to interact with customers easily and effectively and also enabled quick and flexible production that together allow decreases in costs of customized products as well. Therefore, mass-customized products are not priced as high as they once were.

Types

There are four types of customization: collaborative, adaptive, transparent, and cosmetic. In collaborative customization, companies listen to their customers and find out their exact needs. According to this information, companies then produce the product. Customized computers, clothes, and cars are all this type of customization. In adaptive customization, companies produce a standard product but the consumer or the end user can change the product according to his/her needs. For example, think of two chairs. One is not adjustable, whereas the other is adjustable. The latter gives opportunity to the end user to adjust the chair and is an example of a product for adaptive customization. In transparent customization, companies offer individual customers unique products without telling them directly. This kind of customization occurs when companies can foresee customers' specific needs. Companies implementing transparent customization observe consumers without interaction and based on this observation and further analyses, companies forecast the needs of customers and produce accordingly. In cosmetic customization, consumers use a product in a similar way, but they do change the way the product is marketed. For example, through different packaging, advertisement, marketing materials, promotion, placement, terms and conditions, and brand names, a particular product is highly customized psychologically or emotionally but not functionally.

There are several patterns and various degrees of customization that firms can adopt to do business in international markets. The most common of these are obligatory and discretionary product customization. An obligatory or minimal product customization indicates that a company is urged to introduce minor changes or modifications in the product design for either of two reasons. First, customization may be obligatory to enter and operate in a particular foreign market. Second, customization may be forced by external environmental factors, including the special needs of the foreign market. In brief, obligatory customization is related to safety regulations, trademark registration, quality, and media standards. An obligatory customization requires mostly physical changes in a product. Discretionary, or voluntary, product customization reflects a sort of self-imposed discipline and a deliberate move on the part of an international company to build stable foreign markets through a better alignment of product with market needs and/or cultural preferences.

Many factors necessitate customization, and customization may require significant changes in the design, manufacturing system, distribution, and marketing of the product in foreign markets. These changes will no doubt bring additional costs, and if the company has operations in many foreign markets, then the costs will further increase due to the increased number of adaptations. Therefore, if possible, companies usually prefer standardization because it is easier and less costly than adaptation. Others implement customization to meet local customer needs and mandated regulations. In most cases, companies implement standardization and customization simultaneously at varying degrees since it is rarely feasible or practical to follow a one offering–one world strategy across all different markets. Convergence of regional preferences, regional economic integration, harmonization of product standards, and growth of regional media and distribution channels all make regional customization more feasible than pursuing global standardization.

In conclusion, customization offers opportunities to companies to better serve their customers since companies can create greater variety in their products to be sold at competitive prices because products are produced according to customers' specific needs. When companies are able to find opportunities for mass-customization by identifying unique needs of consumer groups, they can gain benefits from offering both unique and relatively low-priced products. Companies may also have to customize their offerings for a foreign country since laws, traditions, life styles, and religion necessitate customization.

See Also: Consumer Behavior; Consumer Needs and Wants; Customer Responsiveness; Local Adaptation; Localization; Marketing; Service Level; Standardization.

Bibliography. R. P. Bagozzi, J. A. Rosa, K. S. Celly, and F. Coronel, *Marketing Management* (Prentice Hall, 1998); Thorsten Blecker, *Innovative Processes and Products for Mass Customization* (Gito, 2007); S. T. Cavusgil, G. Knight, and J. R. Riesenberger, *International Business, Strategy, Management, and the New Realities* (Prentice Hall, 2008); H. M. Hayes, P. V. Jenster, and N. E. Aaby, *Business Marketing: A Global Perspective* (Irwin, 1996); Lars Hvam, Niels Henrik Mortensen, and Jesper Riis, *Product Customization* (Springer, 2008); S. C. Jain, *Marketing Planning & Strategy* (Thomson, 1997); T. Levitt, "The Globalization of Markets," *Harvard Business Review* (May–June, 1983); Haim Mendelson and Ali K. Parlakturk, "Competitive Customization," *Manufacturing & Service Operations Management* (v.10/3, 2008); B. J. Pine II and J. H. Gilmore, "The Four Faces of Mass Customization," *Harvard Business Review* (v.75/1, 1997); B. J. Pine II and S. Davis, *Customization: The New Frontier in Business Competition* (Harvard Business School, 1999); M. M. Tseng and J. Jiao, "Mass Customization," in *Handbook of Industrial Engineering, Technology and Operation Management*, Gavriel Salvendy, ed. (Wiley, 2001).

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Customs Broker

A customs broker is a company or individual licensed by the host country to act on behalf of importers and exporters. The broker handles the formal paperwork to assure legal compliance and speed in the importing process. While brokers are involved in expediting imports, they are often hired by the exporter to assure that all work is done in compliance with local law and to speedily meet the conditions needed to receive payment for their products. The broker prepares import documents and calculates client payments for duties, tariffs, excise taxes, and any other special fees. The broker performs this work at the local customhouse—the government specified location where customs duties and import transactions are managed. In the United States, customs brokers are a licensed profession.

When goods reach a foreign destination, the customhouse performs a series of steps before allowing them to enter the country. These steps typically include checking to see if entry documents are properly completed, verifying any necessary markings related to the country of origin, making sure the goods are not on a prohibited item list, checking the goods against the tariff schedule (a price list of tariffs organized according the Harmonized System), checking the inventory of goods, and determining the value of goods in terms of customs duties and tariffs. When all of these steps are completed, the government customs agent clears the goods for entry into the country and posts the results to a public space (typically an electronic space). Because of the sheer volume of goods that pass through a port of entry, shipments without an expediter move more slowly. The slower the goods move through the entry process, the more cost is accrued for warehousing and storage.

The customs broker expedites the customs clearing process, assisting the customhouse to clear goods for entry. The broker, for example, reviews the tariff schedule and prepares a customs invoice for the client. The customhouse need only verify that the broker selected properly. In some ports, the broker certifies that the client has met the obligations for country of origin markings. If markings are incorrect, the customs broker will act as an intermediary, securing the correct documentation and markings and affixing them to the goods while in customs. To accelerate the customs clearing process, clients often provide their customs broker with power of attorney, a legal document that empowers the broker to act on behalf of the client in all customs clearing issues. The customs broker is a valuable source of knowledge for the exporter, staying current on all issues related to import documentation and duty and tariff changes.

Certain customs clearing tasks require notification and/or approval by government agencies other than the customhouse. For example, aquaculture importers into the United States need approval of the Fish and Wildlife Service of the U.S. Department of Agriculture to ensure that imported fish are not on the invasive species list. Because of these unique requirements, many customs brokers specialize in particular industries. Because of the relationship of customs clearing to overall delivery efficiency, many freight forwarders employ their own customs brokers.

Importing firms often bring in goods that they transform for export. In most cases, the local government allows a refunding of the duties when the goods leave the country after transformation. We call the refunding of duties a "duty drawback." Customs brokers who maintain contractual relations with clients often manage their duty drawback programs to ensure the client receives full refunds for duties paid.

In the earliest days of customs clearing, brokers and customs officials would post their findings on bulletin boards in the local customhouse. Brokers would read the bulletin board and telex their findings to the client. The current state of the art is to have sophisticated electronic data interchange systems (EDI). With each change in status, the broker instantaneously transfers information to the client's account. Brokers also provide document imaging services, scanning processed documents for immediate retrieval by their clients. Similarly, modern brokerage services interlink with freight forwarders to provide documentation that the exporter has met transportation security standards. Often, this includes the sophisticated integration of global position (GPS) data with accounting information.

To become a licensed customs broker in the United States, candidates must meet experience requirements and pass a proctored standardized examination. In developed countries, the preponderance of all import transactions are managed by customs brokers.

See Also: Duty; Freight Forwarder; Harmonized System; Letter of Credit; Tariff.

Bibliography. G. Alexis and M. Pavlos, "On the Development of a Web-Based System for Transportation Services," *Information Sciences* (2006); C. M. J. Carr and M.

R. Crum, "The U.S. Customs Modernization and Informed Compliance Act: Implications for the Logistics Pipeline," *International Journal of Logistics Management* (1995); M. A. Haughton, "Information Technology Projects by International Logistics Services Providers: The Case of Canada's Small Customs Brokers," *Canadian Journal of Administrative Sciences* (March 2006); E. Ianchovichina, "Are Duty Drawbacks on Exports Worth the Hassle?" *Canadian Journal of Economics* (2007); International Business Publications, *US Customs Broker Handbook Regulations, Procedures, Opportunities* (International Business Publications, 2008); Scott W. Taylor, *Introduction to Customs Brokerage* (Boskage Commerce Publications, 2005).

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Customs Union

A customs union is a treaty signed between two or more countries to promote trade between participants. The countries in the customs union establish a common free trade market with each other while simultaneously maintaining a common trade barrier for foreign goods. This agreement is the third step in complete trade integration between participating nations, occurring after the "free trade" zone step and before the "common market" step. Trade with outside participants is regulated through a common external tariffs rate and the application of a common trade policy. Some custom unions will be negotiated to allow different import quotas from one country to the next. Current custom unions include the Southern African Customs Union and the East African Community.

Customs unions provide three main advantages for participating countries. They promote the trade of goods between participants; protect industries operating within the protected region; and serve as a source of revenue for participating countries that are less likely to generate trade activities.

Customs unions promote the trade of goods in participating countries due to lower tariffs. Hence, the union increases local competition and lowers costs of goods for consumers while imposing a common barrier for the same goods from nonparticipating countries. This is used to effectively promote intracountry trades. A recent study examined the impact of Turkey's integration in the European Custom Union. It found a positive effect in importations from European Union (EU) countries without overly impacting local industries.

Simultaneously, external tariffs protect regional industries operating inside the protected zone. This is important, as it protects a strategic sector of activity (such as agriculture and fishing). Hence, products that are produced inside the tariff zone have an immediate advantage over products that are from the external zone.

Finally, custom unions can serve as a source of revenue for the participating members, since revenue generated by the external tariff is pooled in a common revenue pool and shared among participants. This allows sharing of import revenues between participants. This is especially beneficial for countries that are insular and are less likely to trade with nonperipheral countries.

There are also have a number of disadvantages that countries must contend with when participating in a customs union. These include some loss of control over fiscal policy, increased competition to local industries, and the inherent advantages customs unions confer to larger participating countries.

One disadvantage a country faces when joining a custom union is that participants have to give up some level of control on fiscal matters. Hence, when a country is unable to unilaterally control tariffs, excise duties, and sales taxes, it loses some level of ability to use these instruments to control internal economic policy and strategy formulation.

Another disadvantage is that while custom unions favor the emergence of some regional industries, they can produce adversity for national companies as they find themselves competing directly with neighboring countries (without the benefit of tariffs to protect them). This often leads to the disappearance of local inefficient industries in favor of more regional competitors.

Finally, customs unions often favor larger countries because they are able to take advantage of economies of scale to produce goods more cheaply than their smaller counterparts. As such, bigger participants usually have the upper hand in these arrangements. While smaller countries get access to cheaper goods, they often find that their local industries are slowly eroding, leaving them unable to compete in their national markets.

Hence, smaller countries have to increasingly depend on market specialization, focusing their local economies on some natural resources or local expertise in favor of a broader diversified industry.

Customs unions are present throughout the world. Examples include the Southern African Customs Union (SACU), which is the oldest customs union in operation. Established in 1910, SACU permits the free movement of goods among five member countries (South Africa, Botswana, Lesotho, Swaziland, and Namibia), and a uniform external tariff regime on goods from outside the region. The East African Community (EAC) is another customs union in Africa, comprised of five east African countries—Kenya, Tanzania, Uganda, Burundi, and Rwanda.

Other examples around the world include the European Union. While not itself a customs union, the EU establishes customs unions with other countries when they are evaluated for membership (like Turkey in 1996). Mercosur is a free trade area that is considering evolving into a full-fledged customs union. Negotiations in the region are ongoing.

See Also: Candidate Countries; Common Market; Economic Union; European Union; Free Trade; Mercosur/Mercosul; Monetary Union; South Africa.

Bibliography. Arzu Akkoyunlu-Wigley and Sevin Ã. Mihci, "Effects of the Customs Union with the European Union on the Market Structure and Pricing Behaviour of the Turkish Manufacturing Industry," *Applied Economics* (v.38/20, 2006); D. K. Brown, K. Kiyota, and R. M. Stern, "An Analysis of a US-Southern African Customs Union (SACU) Free Trade Agreement," *World Development—Oxford* (v.36/3, 2008); Daniel C. K. Chow and Thomas J. Schoenbaum, *International Trade Law: Problems, Cases, and Materials* (Aspen Publishers, 2008); Ian F. Fergusson and Library of Congress: Congressional Research Service, *United States-Canada Trade and Economic Relationship Prospects and Challenges* (Congressional Research Service, Library of Congress, 2008); Laurence W. Gormley, *EU Law of Free Movement of Goods and Customs Union* (Oxford University Press, 2007); Alina Kaczorowska, *European Union Law* (Routledge-Cavendish, 2008); L. Simon and J. Van Der Harst "Beyond the Customs Union: The European Community's Quest for Deepening, Widening, and Completion, 1969–75," *Journal of Common Market Studies* (v.46/4, 2008); Veysel Ulusoy and Ahmet Sözenm, "Trade Diversion and Trade Creation: The Case of Turkey Establishing Customs Union with the European Union," *European Journal of Scientific Research* (v.20/2, 2008).

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CVS Caremark

Woonsocket, Rhode Island–based CVS Caremark (NYSE:CVS) is the largest U.S.-based integrated pharmacy service provider, combining one of the leading American pharmaceutical benefit management companies (Caremark) with the country's largest pharmacy chain (CVS). The U.S. healthcare system is struggling to manage growing costs as employers shift responsibility for managing costs to employees. In response, CVS acquired Caremark for $26.5 billion in order to become more consumer-centric and responsive to rapid changes in the healthcare delivery system. This 2007 merger of the two entities was expected to permit more fully integrated pharmacy services, including pharmacy benefit management, mail order, specialty pharmaceuticals, an online pharmacy (CVS.com), and the retail-based health clinic subsidiary, MinuteClinic.

CVS Caremark has been making investments in new stores and technology in order to drive future growth both through in-house start-up and acquisitions. Several of their larger recent acquisitions include the 2004 purchase of over 1,200 Eckerd drugstores, primarily in high-growth markets in Florida and Texas, and in 2006 Southern California–based Sav-on and Osco drugstores (700 stores total) that were integrated into CVS/pharmacy. Altogether, CVS Caremark offers end-to-end services from plan design to prescription fulfillment. The company feels that the combination of CVS Caremark helps payers control costs more effectively, improves patient access (through phone, mail, the internet, or face-to-face), and promotes better customer health outcomes.

The lineage of CVS Caremark can be traced back to the Melville Corporation, a large retail holding company incorporated in 1922 as the Melville Shoe Company, and renamed in 1996 as CVS Corporation. (The CVS stands for Consumer Value Stores.)

Caremark was established in 1979 as Home Health Care of America, changing its name to Caremark in 1985. In 1987 Caremark was acquired by Baxter International, but then spun off as a public company, Caremark, in 1992. In 1996 Caremark merged with MedPartners/Mullikin, Inc., and they became MedPartners. In 1998 MedPartners changed its name to Caremark Rx.

CVS Caremark currently employs 136,000 people in two operating segments: CVS/pharmacy and Caremark Pharmacy Services. CVS/pharmacy fills more than one of every seven retail prescriptions in America, amounting to more than 1 billion prescriptions per year, which is more than any other pharmacy service provider. CVS/pharmacy generates over 68 percent of its revenues from its pharmacy business. Their ExtraCare program has enrolled over 50 million cardholders. Caremark Pharmacy Services is one of the nation's leading pharmacy benefit management companies, providing comprehensive prescription benefit management services to over 2,000 organizations' health plans, including corporations, managed care organizations, insurance companies, and government agencies. Caremark also operates a national retail pharmacy network of over 60,000 participating pharmacies, 11 mail service pharmacies, and 70 specialty pharmacies.

Among their initiatives in community involvement are the CVS Caremark Charitable Trust (education and community involvement in cities where the company operates pharmacies), the CVS Samaritan Vans providing free roadside (medical and on-site auto repair) assistance to motorists and communities in numerous cities, and the annual CVS Caremark Charity Golf Classic.

According to CVS Caremark, the average revenue per employee is close to $200,000. Strong future demand is anticipated in response to an aging population, increasing incidence of chronic diseases, and increasing utilization of the Medicare drug benefit.

See Also: Acquisitions, Takeovers, and Mergers; Cardinal Health; Caremark Rx; S&P 500 Index; Walgreen; Wal-Mart Stores.

Bibliography. *Chain Drug Store Review*, www.chaindrugreview.com (cited March 2009); CVS Caremark, www.cvscaremark.com (cited March 2009); Hoover's, www.hoovers.com (cited March 2009); National Association of Drug Stores, www.nacds.org (cited March 2009).

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Cyprus

Cyprus is an island in the Mediterranean Sea whose political status is dominated by the division of the country into the Greek-Cypriot southern area (Republic of Cyprus) controlled by the Cyprus government and the northern area that is administered by Turkish-Cypriots. The Greek-Cypriot part of the island enjoys a prosperous economy—it is one of the advanced economies of the world according to the International Monetary Fund.

A large part of the southern part's prosperity is attributed to Cyprus's strategic location at the crossroads of three continents and in close proximity to the Middle East. This position has played a significant role as Cyprus has been a country with a platform of political turbulence for many years. Characteristics like a developed infrastructure, a stable legal framework, and the highly skilled workforce also contribute to the wealth that Greek Cypriots enjoy, and have made Cyprus a popular business center. Moreover, tourism plays a dominant role in growth and wealth generation, which is, however, susceptible to external influences such as fluctuations in the financial conditions of major tourism-producing countries (primarily western European countries such as Germany and the United Kingdom).

The Turkish Cypriot area of the island has about 20 percent of the population and its gross domestic product (GDP) is one-third of the GDP of the southern part of the island. The de facto Turkish-Cypriot administration is recognized only by Turkey, so attracting foreign investment has been a difficult task to accomplish. As a result, the economy of the northern part still relies on agriculture and on the government.

The Republic of Cyprus has been a member of the European Union since May 2004. The beginning of 2008 marked the entry of the country to the Eurozone and thus, Cyprus has adopted the euro at a fixed exchange rate of CYP 0.585274 per EUR 1.00. The introduction to the Eurozone was accompanied by accelerated growth at a rate that is above the European Union average. This growth is largely a result of the activity of traditional, family-owned enterprises with a strong entrepreneurial flair supported by a liberal economy whose backbone is the private sector. In this respect, the public sector has a supervising role monitoring the smooth operation of the economy and providing public utilities. The main economic indicators manifest the country's economic "health," with the inflation rate being less than 3 percent and registered unemployment less than 4 percent.

The services sector is an increasingly important part of the economy, as indicated by its 70–73 percent contribution to GDP and its share in employment. At the same time, the importance of agriculture and manufacturing showcase a steady decline over the years. Key services sectors include banking and financial services, insurance, advertising, legal, architecture and civil engineering, accounting and auditing, consultancy, design, electrical and mechanical engineering, market research, medical, printing and publishing, public relations, education, software development, tourism, and related services. In terms of social life, Cypriots enjoy a high standard of living with no or extremely low levels of homelessness or criminality.

In terms of international trade, the country relies on the importation of energy resources such as oil from the Middle East because of the lack of raw materials and heavy industry. Export-wise, many Cypriot products and services go international, primarily to several European and neighboring Middle Eastern countries. A prime feature of the Cypriot economy is its attractiveness for foreign investment. The strategic location of the country, favorable tax incentives, and a free zone area located near Larnaca airport provide an ideal location for many investing enterprises. Some restrictions on foreign investors are, however, applied in some economic sectors such as broadcasting, land development, education, the press, travel agencies, commercial shipping, and fisheries, since relevant licenses must be obtained.

See Also: Euro; European Union; Greece; Turkey.

Bibliography. CIA, "Cyprus," *The World Factbook*, www.cia.gov (cited March 2009); Maria Krambia-Kapardis and Jim Psaros, "The Implementation of Corporate Governance Principles in an Emerging Economy: A Critique of the Situation in Cyprus," *Corporate Governance: An International Review* (v.14/2, 2006); IBP USA, *Cyprus Business Intelligence Report* (International Business Publications, 2008).

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Czech Republic

The Czech Republic, capital Prague, is a small landlocked central Eastern European state with a population of 10.2 million. The lands of Bohemia and Moravia were an advanced part of the Austro-Hungarian Empire. When the empire collapsed in 1918, a new Czechoslovak state was formed. This lasted until Nazi expansion in World War II. Liberation led to the recreation of the state and a short-lived coalition government before integration into the Soviet bloc in still-controversial circumstances in 1948–49. The communist regime was shaken in 1968 by the Prague Spring. Soviet invasion halted this, but in 1989 the communist regime collapsed in the face of popular demonstrations and the peaceful Velvet Revolution. The current Czech state emerged in January 1993 from a Velvet Divorce with Slovakia—hitherto the eastern part of the country.

When the communist regime failed, the Czech Republic was seen as something of a model transition country and its leaders sought to obtain recognition for its strategic location in central Europe. (Czechs were often offended at being considered "east," as Prague is farther "west" than Vienna). The Czech Republic joined NATO in 1999 and the EU in 2004.

Czech leaders, and especially Vaclav Klaus as prime minister from 1992 to 1997 (elected president in 2003 and 2008), were careful to echo the appropriate free market rhetoric, although some skeptics suggested that reality often deviated. Czech privatization was distinguished by the use of vouchers to create popular share ownership. This aim was not achieved but the management quality of Czech privatized firms tends to be relatively high. Early on, a high international credit rating was gained. Czech politics and society were viewed positively despite undercurrents of corruption, crime, racism, and minority oppression. The tourist boom reflects these contradictions, with some attracted to the glories of the past and others by cheap alcohol and prostitution.

Czech industrialization began early, and the country today is 75 percent urban. Agriculture plays a small role (3 percent output). Industry provides around 38 percent, and services the remainder. The Czech arms industry was famous for many decades. Engineering, machinery, and iron and steel along with consumer goods, including the famous Czech beers, are an important part of industrial output. But parts of Czech industry are still in the central European economic "rust belt." There is significant inequality between the 13 different regions of the Czech Republic, with a strong polarization around the capital Prague.

Economic growth has enabled a sustained rise in output per capita. Inflation has been held down and unemployment has been contained. The government has tried to make the Czech economy more market friendly. Staged reductions in corporate taxes are in place, as is the replacement of the progressive income tax with a flat rate. But there is a strong tradition of welfare support and opposition to elements of a neo-liberal agenda. This makes consensus difficult to maintain.

Trade is focused on the West, with Germany having a third share. Trade with Slovakia is relatively small given the history of unity. Manufactured goods make up an important part of commodity trade. The Czech Republic early on attracted significant foreign investment and is one of the more successful cases in the transition states. Brands like Skoda and the Czech beers were still seen to be valuable by Western multinationals.

The Czech population offered a more qualified support for joining the European Union, with a 77 percent yes vote on only a 55 percent turnout. Both as prime minister and president, Vaclav Klaus has been notorious for his skepticism about aspects of the European Union. This has often found him favor in Washington and among those who see the possibility of a more pro-American "new Europe" to set against the "old" western Europe.

See Also: Capitalism; Communism; European Union; Slovakia; Transition Economies.

Bibliography. I. Berend, *Central and Eastern Europe, 1944–1993: Detour from the Periphery to the Periphery* (Cambridge University Press, 1999); *Czech Republic Taxation Laws and Regulations Handbook* (International Business Publications, 2008); Czech Statistical Office, www.czso.cz/eng (cited March 2009); Thomas Dalsgaard, Sònia Muñoz, and Anita Tuladhar, *Czech Republic: Selected Issues.* IMF country report, 08.40 (International Monetary Fund, 2008); M. Dangerfield*, Subregional Economic Cooperation in Central and Eastern Europe: The Political Economy of Cefta* (Edward Elgar, 2001); Datamonitor, *Retailing in the Czech Republic 2008: First Phase of Retail Development Successfully Completed, Tougher Times Ahead* (Datamonitor, 2008) A. Innes, Czechoslovakia: The Short Goodbye (Yale University Press, 2001); P. Kenney, *The Burdens of Freedom: Eastern Europe since 1989* (Fernwood, 2006); Daniel Miller, "Czech Republic," in *Eastern Europe: An Introduction to the People, Lands, and Culture*, vol. 2, Richard Frucht, ed. (ABC-CLIO, 2005); OECD Economic Surveys, *Czech Republic* (2008).

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Dai-ichi Mutual Life Insurance

Dai-ichi Mutual Life Insurance (Dai-ichi Seimei Hoken Sōgo-gaisha) was founded on September 15, 1902, by Tsuneta Yano, and it is the oldest mutual insurance company in Japan. It took its name from the Dai-ichi Bank Ltd. that had been established in June 1873, the first banking institution established in Japan (when it was called the First National Bank). In 1896 it became a joint-stock commercial bank as the Dai-ichi Bank; the insurance company was established six years later when Tsuneta Yano published a small booklet entitled *Characteristics of My Company*. The company prospered and in 1938 moved its headquarters to its current location in Chiyoda, the business district of Tokyo. In 1945, its headquarters became the General Headquarters of the Allied Powers under General Douglas MacArthur. Later Dai-ichi built a new 20-story building for the company's policy service department and computer systems section.

During the 1960s, Dai-ichi Mutual Life Insurance Company started to expand into other parts of Asia, but faced problems in some areas owing to the lingering resentment toward the Japanese in parts of the region they had occupied during World War II. This led Dai-ichi to join the Foundation for the Advancement of Life Insurance Around the World (FALIA) in 1970. Five years later, the company established its first overseas office in New York City, initially to help staff study how the U.S. insurance market works, and later to help with the promotion of business in the United States. Seven years later it opened an office in London. The company continued to prosper and in 1990 invested in the Lincoln National Life Insurance Company, the first time a Japanese company had provided capital for a leading U.S. insurance company. Three years later, in 1993, the company finished its DN Tower 21 as its new head office.

The Great Hanshin (or Kobe) earthquake on January 17, 1995, listed in the Guinness Book of Records as the "costliest natural disaster to befall any one country," resulted in such a vast number of claims that this led to the simplification of the entire claims settlement procedures, and in the following year the company set up a subsidiary, the Dai-ichi Property and Casualty Insurance Co. Ltd., and in 1997 the Dai-ichi Life Research Institute, Inc. After years of competition, in 1999 the company agreed on business cooperation with the Industrial Bank of Japan (now the Mizuho Financial Group), and in 2000, there was an agreement to form a business alliance with the Sompo Japan Insurance and with Aflac.

This building was damaged in the Kobe 1995 earthquake, a costly disaster that led Dai-ichi to change its procedures.

In 2001 Dai-ichi won the Japan Quality Award, being the first company from the financial and insurance industry to get this award. In recent years the company has continued to expand, and in 2007 it bought Bao Minh CMG and started trading in Vietnam as Dai-ichi Life Insurance Company of Vietnam, Ltd. The Dai-ichi Mutual Life Insurance Company employs about 54,400 people (2005), with total capital of $21,425 million (2006) and total assets of $276,552 million (2006). It now has about 8.65 million policy holders.

See Also: Japan; Nippon Life Insurance.

Bibliography. "Dai-ichi Mutual Life Insurance," www.dai-ichi-life.co.jp/english (cited March 2009); Richard Halloran. "Banking's Cautious Colossus," *New York Times,* December 15, 1974.

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DaimlerChrysler

DaimlerChrysler was the name of the entity created by the 1998 merger of two of the most storied names in automotive history, the Chrysler Corporation of the United States and the Daimler-Benz AG of Germany. This was the first major merger of an American and a German auto firm, and was valued at the time at $36 billion. The companies had co-headquarters, one in Auburn Hills, Michigan, and the other in Stuttgart. During its existence, it was the fifth-largest automobile company, by vehicle production, in the world.

Chrysler, a company created by auto industry legend Walter Chrysler in 1925, had, since the 1960s, been the third of America's Big Three auto makers, continually lagging behind General Motors and the Ford Motor Company. After a near-bankruptcy in the late 1970s, the company bounced back spectacularly under the leadership of president Lee Iacocca. Iacocca introduced new products such as the K-Car and the minivan and secured government-backed loans during the company's darkest period. By the 1990s, Chrysler's successes in the marketplace, particularly with its minivans, large trucks, and Jeep brand, had made the company a lucrative proposition.

Daimler-Benz AG, Germany's most famous brand, had been created in 1926 by the merger of the Daimler and Benz companies, two of the most important and innovative firms in the worldwide motor industry. After World War II, Daimler Benz reclaimed its place among the leading German firms by focusing upon quality and luxury vehicles, such as its flagship nameplate, the Mercedes Benz. While it remained among the most popular brands in Europe, by the 1980s and 1990s, the company was keen to expand its market share, particularly in the largest car market in the world, the United States.

In 1998, following a series of highly secret meetings, the two companies announced what they called a merger of equals. There were to be co-CEOs, German Jürgen Schrempp and American Robert Eaton, equally sharing decision making. The announcement of the merger was met with skepticism in many quarters, as some observers saw the coupling as ill-fitting, given Daimler Benz's focus on luxury, while Chrysler was known for its big trucks. Some saw this as a strength, and believed the two companies would present a synergy for the new company. Others saw it as another example of America's corporations being taken over by foreigners. Still others felt that the $36 billion that Daimler-Benz paid for Chrysler was far too high.

Initially, there was some success. The two companies shared some technology, and Chrysler's quality improved through its association with Daimler. However, within a few years, it was clear that the decisions for the company were all being made in Germany, even for the Chrysler unit. Eaton stepped down in 2000, leaving Schrempp as the sole executive. The Chrysler unit's chief executive was a German, Dieter Zetsche, and only a few products emerged from direct cooperation between the two entities, such as the sporty Chrysler Crossfire.

Soon, many in Germany, especially in the automotive press, were unhappy about the erosion of the Daimler brand and valuation. Many Americans were also unhappy, feeling that instead of a merger of equals, the transaction was actually a takeover. There were court cases over the merger by some of Chrysler's main investors, which further drove down the value of the company. After 1998 a general downturn in the American market, coupled with high gas prices, meant that the success that Chrysler had experienced in selling large trucks and sport-utility vehicles was coming to an end. Its market share, which reached nearly 14 percent in the mid-1990s, declined to under 10 percent by the mid-2000s. The company's stock slowly declined.

Given these difficulties, in 2007 Daimler announced that it was selling 80 percent of Chrysler to an American private equity firm, Cerebrus, for $7.4 billion. Daimler would maintain a 19.9 percent share of the company and also assume one-fifth of the company's outstanding pension obligations to workers. Daimler also promised to invest $1.7 billion in Chrysler. In the end, the merger of these two companies was a failure. With the de-merger of the two companies, Daimler-Benz was renamed Daimler AG, while Chrysler took the name Chrysler LLC. Chrysler is a privately held company, while Daimler AG is a public company traded extensively in Europe and the United States.

See Also: Acquisitions, Takeovers, and Mergers; Ford Motor; General Motors; Germany; United States.

Bibliography. Vincent Curcio, *Chrysler: The Life and Times of an Automotive Genius* (Oxford University Press, 2005); Charles K. Hyde, *Riding The Roller Coaster: A History of the Chrysler Corporation* (Wayne State University Press, 2003); Arnd Klein and Helmut Krcmar, "DCXNET: E-transformation at DaimlerChrysler," *Journal of Information Technology* (v.21/1, 2006); Doron P. Levin, *Behind the Wheel At Chrysler* (Harcourt Brace & Company, 1995); Bill Vlasic and Bradley A. Stertz, *Taken for a Ride: How Daimler-Benz Drove Off with Chrysler* (HarperCollins, 2001); David Waller, *Wheels on Fire: The Amazing Inside Story of the Daimler Chrysler Merger* (McCarthur and Co., 2001).

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DAX Index (Germany)

The Deutsche Aktien Index (DAX) is a blue-chip index tracking 30 major stocks on the Frankfurt Stock Exchange (FSE), with prices taken from the Xetra electronic trading system that has been in use since 1997. One of the biggest stock exchanges in the world, FSE is also considered the most efficient. Business is conducted from 9 A.M. to 5:35 P.M.; in order to coincide with U.S. trading hours, the Late DAX Index tracks prices from 5:45 P.M. to 8 P.M.

The following 30 companies are tracked by the DAX 30: Adidas AG, the sports apparel manufacturer; Allianz, a financial services and insurance provider; BASF, the largest chemical company in the world; Bayer AG, a chemical and pharmaceutical company; BMW (Bavarian Motor Works), the automobile company; Commerzbank, the second-largest bank in Germany; Continental AG, a manufacturer of tires and auto parts; Daimler AG, the German motor company (no relation to the British Daimler Motors); Deutsche Bank, the largest bank in Germany; Deutsche Börse, a marketplace organizer and transaction services provider; Deutsche Lufthansa, Europe's largest airline; Deutsche Post, a German postal services company; Deutsche Postbank, a retail bank; Deutsche Telekom, Germany's largest telecommunications company; E.ON, an energy corporation and the largest company on the DAX 30; Fresenius Medical Care, a medical supplies producer; Henkel, a company manufacturing home and personal care supplies; Hypo Real Estate, a holding company for real estate financing banks; Infineon Technologies, a semiconductor manufacturer spun off from Siemens; Linde AG, a gas and engineering company; MAN AG, an engineering company; Merck KGaA, a chemical and pharmaceutical company; METRO AG, a wholesale and retail company; Munich Re, the world's largest reinsurance company; RWE, a power company; SAP AG, the largest European software company; Siemens AG, Europe's largest engineering company; ThyssenKrupp, an industrial conglomerate; TUI AG, a tourism and shipping company; and Volkswagen AG, the automobile manufacturer.

See Also: Bonds; Common Market; Company Profiles: Western Europe; Dow Jones Index; European Union; Germany; Markets.

Bibliography. Holger Claessen and Stefan Mittnik, *Forecasting Stock Market Volatility and the Informational Efficiency of the DAX-Index Options Market* (CFS, 2002); "Deutsche Boerse Group," deutsche-boerse.com (cited March 2009); Alexander K. Koch and Zdravetz Lazarov, *Clustering of Trading Activity in the DAX Index Options Market* (Bonn Graduate School of Economics, 2001); Wikipedia, "DAX," en.wikipedia.org (cited March 2009).

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Debt

Debt is the state of owing something to another party. It is generally assumed to involve the transfer of financial assets, but in the barter economy the payment is executed in kind. It is important for both lender and borrower to reach an agreement about a deferred payment, and the lender is rewarded with an appropriate interest payment for forgoing current consumption. In the contemporary Islamic world, which has strong similarities with the stance of the medieval Catholic Church that condemned usury, debt repayment is replaced by profit sharing of co-investing parties. The orthodox religious thinking in certain parts of the world thus indicates that interest payment associated with debt leads to profit making without commensurate work effort and simultaneously causes the exploitation of those expected to pay it.

Nevertheless, debt has been an important market phenomenon throughout history. Expensive and prolonged wars had to be financed by extensive borrowing and this could eventually lead to bankruptcy. Private investors, such as the Rothschilds, supported the British government in war against Napoleon I, and one of the major roles of early central banks in the world was to provide public financing for the state. In contemporary economic flows it is evident that leverage, i.e., increased debt levels, lead to higher risk, but also to higher returns because of the difference between the (higher) investment return and (lower) cost of debt. The cost of debt financing is even lower because it is paid before tax, which implies lower after-tax cost of financing.

The notion of debt is not only essential at the microeconomic level. Governments issue so-called sovereign debt instruments (bonds) or accumulate various sorts of international loans for investment and consumption-related purposes and like companies are prone to default on debt if overexposed to the same. The best examples are Mexico and Brazil in 1982, the Russian Federation in 1998, and Argentina in 2001.

Small- and Medium-Scale Enterprises

At the micro level, companies borrow funds directly from financial markets or indirectly from financial intermediaries, such as commercial banks, savings institutions, credit unions, and finance companies. The scale and scope of lending instruments is different among lending institutions and are suited for particular market niches that occasionally include individual consumers (car financing provided by finance companies or personal loans from commercial banks). The involvement of a financial intermediary increases borrowing costs by a charged fee, which is potentially more disadvantageous with comparison to direct financing. However, small- and medium-scale enterprises (SMEs) would pay a significant premium to obtain funding from non-bank investors who do not have full insight in its business/credit rating. Accordingly, bank lending can be more attractive for SMEs, due to financial intermediaries' customer knowledge base and especially if debt is collateralized, i.e., supported by tangible assets that can be resold in the case of bankruptcy to retrieve extended funds.

Two-thirds of bank loans have maturities shorter than one year, and the modes of loan extension are diverse. Banks ask companies to sign promissory notes that may be secured with tangible assets. A series of promissory notes are issued as part of an informal line of credit indicating the maximum credit a bank will provide for the borrower during the year. When formalized, the line of credit becomes "revolving," the committed sums are larger, lending periods turn generally longer than a year and loans are provided by a single bank or a syndicate of banks.

Large Enterprises

By contrast, "blue chip" companies with high credit rating receive comparatively low-cost funding by issuing debt instruments directly to public or even private placements. Securities issued in debt markets are called bonds, denoting certificates issued by the borrower, which promise regular annual/semi-annual interest payments and on maturity date, the return of the principal amount stated on them. Zero-coupon bonds are issued at a heavy discount, do not provide interest payments (no interest coupons to be cashed in), and the principal is returned at the end of the contracted period.

From the maturity point-of-view, short- and medium-term debt instruments are called notes, while issues with longer maturities are called bonds or debentures. For periods shorter than one year, companies brandishing high credit standing issue unsecured commercial papers, i.e., promissory notes assuring that the principal payment will be made after the expiration of the prescribed period, which can be anything from one day to nine months. Funds raised are used to finance daily operations and as a bridge until long-term funds have been received. If a company does not have a good credit rating, banks provide acceptances to increase the quality of the issue called the bill of exchange. Alternatively, the sale of a security accompanied by a promise to repurchase the same at a future point in time is an additional vehicle for secured near-cash investments and is called a repurchase agreement.

Debentures are long-term bonds that are not collateralized by any property (tangible asset) as a reassurance that the debt will be paid. Not surprisingly, blue-chip companies routinely issue debentures. If called "subordinated," debentures are inferior to all senior debt positions on the liabilities side of the balance sheet. This indicates that no payments will be made until after all senior obligations have been honored, which is an important rule in liquidating the company.

A company can accrue liabilities due to the nature of its business or taxation policies. Salaries are paid on fortnightly or monthly basis and some of these liabilities will accrue in the balance sheet. In addition, sales taxes are paid on a weekly, monthly, and quarterly basis, which leads to further accruals. These liabilities are interest free, but the creation of this type of debt is not controlled by the company. Another type of debt financing is provided by trading partners. If a firm purchases goods with a payment expected after an extended period of time (30 or 60 days), there will be a significant amount of accounts payable (trade credit) on the liabilities side of the balance sheet. If the market player acts as a monopsonist, i.e., a business entity with overwhelming purchasing power in the market, it is possible to extract longer payment periods from suppliers.

On the other side, an aggressive market growth policy would most likely include an increase in the amount of trade credits extended to new customers in order to drive them away from competitors. Nevertheless, in order to improve cash flow positions, companies offer discounts for early payments. For instance, if a payment been made by a purchaser after 10 instead of 30 days, a 2 percent discount is offered. The debtor will make early payments if this 2 percent return is sufficient to offset any other profitable short-term investments over the 20-day period (from the 10th until the 30th day).

In a more complex multinational corporation, the parent provides loans to subsidiaries in which case notes and interest payable appear as additional balance sheet positions of a subsidiary. The parent company combines intracompany debt issues with other types of financing such as equity infusion or loans extended by local banks in the country where the subsidiary is located.

The last source of financing is politically desirable, because it strengthens ties with the local banking community and reduces the incidence of expropriation by rogue regimes. It is essential that the capital structure reflect an appropriate level of the subsidiary's (debt) leverage and that it acts as an independent entity from the parent, which leads to an increase in efficiency in the face of potential default not guaranteed by the parent company.

Sovereign Borrowing

Sovereign countries borrow from domestic and international markets and like companies are expected to provide good record in repaying debts. Financial institutions request collateral in order to secure placements, but this feature is sometimes unfeasible in extending sovereign loans. Therefore, lenders must conduct the meticulous analysis of trade policy, government intervention, political stability, fiscal and monetary austerity, foreign direct investment flows, inflation, and financial system structure in order to obtain adequate risk assessment. Thereafter, risk levels are converted into premiums for each country above or below U.S. Treasury bond rates, which is a good estimate of debt costs associated with the foreign project. Even though U.S. Treasury issues are assumed to be risk-free in financial evaluations, the incidence of sovereign countries' defaulting on international debt is not unheard of.

Moratoriums, i.e., unilateral decisions to postpone repayments of sovereign debt, can lead to significant financial losses. In 1982, Mexico and Brazil announced their inability to service debt, which prompted many U.S. banks to increase reserves in the expectation of an increase in unserviceable loan positions. Citicorp in 1987 boosted reserves by US$3 billion to cover losses. In 1998 the Russian Federation defaulted on a US$40 billion short-term debt, and the subsequent year some banks accepted 5 cents for each dollar owed to creditors. The abandonment of the Argentine peso peg to the dollar in 2001 caused financial turmoil and the default on a US$130 billion in sovereign debt. However, a settlement with international creditors was not reached until 2005, when 30 cents was offered on the dollar of debt defaulted in 2001. In this manner, Argentina has topped the list with the most unfavorable, nonnegotiable dollar-denominated debt settlement ever reached.

Commercial lenders and creditor countries have always tried to create countervailing forces against irresponsible debtors. The Paris Club of creditor countries in 1956 and the ad hoc London Club of commercial lenders were created as a result of this tendency. The Paris Club comprises 19 creditor countries from North America and Western Europe along with the Commonwealth of Australia, Japan, and Russian Federation. Another 13, mainly newly industrialized or resource-rich countries, have been invited to attend meetings on a case-by-case basis, but any final agreement is made between permanent members and debtor countries. It was created in 1956 as a result of negotiations between Argentina and various creditor nations; over the period of 50 years, the Club negotiated 402 debt restructurings worth US$532 billion across 81 countries.

Since 1996, significant concessions have been granted to the Highly Indebted Poor Countries (HIPC), following the joint recommendation of the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD) to reduce debt burdens for most disadvantaged countries. This action should allow them to service debt through trade, financial aid, and capital inflows. To become eligible for this scheme, a country must (a) be the exclusive recipient of international development assistance from the IMF and World Bank; (b) reach unsustainable debt levels where extant debt-relief mechanisms such as Naples terms are insufficient (a potential reduction of eligible external debt of 67 percent in net present value (NPV) terms); and (c) demonstrate a track record of reforms advocated by IMF and World Bank. By 2008, 21 countries had reached the completion point at which Paris Club members reduced their debt burden by 90 percent or more in net present value terms. An additional 18 countries are still at various stages of negotiation leading to the final completion point.

The major criticism of the Club's policy is directed toward decisions that are allegedly politically tainted, such as the 80 percent write-off of Iraq's debt in 2004. In addition, the growing concern voiced by Club officials is related to the aggressive lending of nonmember countries such as Brazil and China. The extending of loans under less strict terms prompts borrowing countries to request the Paris Club to renegotiate previous debt agreements under more acceptable conditions.

The London Club is an informal group of commercial investors temporarily created for negotiations with the sovereign debtor. Following the acceptance of the debtor's request, the Advisory Committee of the London Club is created, which is usually chaired by a leading financial institution. When the restructuring agreement is signed, the Advisory Committee is dissolved.

In the contemporary financial markets, investors purchase developed and emerging countries' bond issues by visiting local debt markets. While in developed countries most of the bond issues have investment grade, in developing economies potential borrowers can seldom demonstrate high investment grade, which is Baa or above if rated by Moody's or BBB or above if rated by Standard & Poor's. In addition to political risk, impediments to this type of cross-border investments are the exchange risk and occasional inability to transfer funds outside the country. By contrast, governments rarely default on bonds denominated in domestic currency, because they can always print money to fully repay debt.

Alternatively, foreign bonds can be issued on major national bond markets and are denominated in the currency of the trading place. Dollar-denominated foreign bonds traded in the United States are called Yankee bonds, while foreign bonds denominated in yen and traded in Tokyo are called Samurai bonds. Third, investors buy Eurobonds, which are bonds placed by a syndicate of international banks in countries that are different from the one in which currency the issue is denominated. Among emerging economies, major Eurobond issuers are the representatives of largest Central and South American countries.

Finally, as part of the Brady plan in 1990, heavily indebted emerging countries decided to issue Brady bonds that are traded in the international capital market and mainly supported by various principal and interest payment guarantees. In addition, Mexico and Venezuela issued securities linked to the price of oil, which means that extra payments are made to investors if the value of oil exports increases over time.

Islamic Finance

If someone is using someone's money, he or she is expected to pay interest, and depending on the maturity of the obligation, the interest rate will be fixed. In other words the price of using money is interest that one party has to pay to another. However, in early Christian times, as now in Islamic finance, usury or charging interest was forbidden and *haram*. Therefore, Islamic finance offers a series of instruments which have interesting complexity in order to offer free-interest banking for those who observe religious rules closely. In Islamic finance, the modalities are such that a person lends money via a financial intermediary and becomes an indirect business partner, and shares to some extent the (business) risk to which the borrower may be exposed when utilizing borrowed money. The non-interest (or not-for-profit) options offer a richer variety of instruments and give a different perspective on debt and borrowing and how the risk may be pooled or shared, depending on a situation.

See Also: Bankruptcy; Bonds; Debt Rescheduling; Debt (Securities); Government Bonds; Sovereign Borrowing.

Bibliography. D. R. Appleyard, A. J. Field, and S. L. Cobb, *International Economics* (McGraw-Hill, 2006); E. F. Brigham and J. F. Houston, *Fundamentals of Financial Management* (Thomson, South-Western, 2004); A. Damodaran, *Corporate Finance: Theory and Practice* (John Wiley & Sons, 2001); Ayub Mehar, "Is Debt a Substitute of Equity? Relevancy of Financial Policy in Current Economic Scenarios," *Applied Financial Economics* (v.15/5, 2005); A. Saunders and M. M. Cornett, *Financial Markets and Institutions: An Introduction to the Risk Management Approach* (McGraw-Hill Irwin, 2007); James D. Scurlock, *Maxed Out: Hard Times, Easy Credit, and the Era of Predatory Lenders* (Scribner, 2007); B. Solnik and D. Mcleavey, *International Investments* (Pearson Addison-Wesley, 2004).

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Debt-for-Equity Swap

A debt-for-equity swap is a financial transaction in which creditors who have debt in a company (such as loans or bonds) agree to have these debts canceled in exchange for equity in the business. Hence, this transaction alters the capital structure of the firm. It does not generate any new cash flow for the business (although there are some considerable administrative costs related to the transaction), but it does improve the profitability of the business by lowering debt service payments and restructuring the current debt/assets ratio. Companies do these swaps when in a favorable or difficult financial situation, depending on its strategic implications, but consequences on the company's stock are usually negative, given the negative market perspective on this type of operation.

Typically, a company that wishes to initiate a debt-for-equity swap will offer its investors to exchange their debt for a predetermined amount of equity (or stock). The amount of equity given in a transaction is usually determined by current market rates, but in some cases, the company's management may offer higher exchange values to convince debt holders to participate in the swap. If the investors agree to cancel their existing debt, they are given equity equivalent to the negotiated amount.

Motivations

Companies that are in a positive financial situation rarely use a debt-for-equity swap, as the cost of servicing bonds or loans is usually less than the long-term costs related to stocks. Nonetheless, some companies will do this type of transaction to take advantage of specific tax provisions or if there is favorable internal information about the Net Present Value of existing and future projects. A company might also proceed with this type of operation to take advantage of current stock valuation. As for lenders, doing a debt-for-equity swap results in trading a fixed-rate debt for an asset whose return is tied to company performance; if the firm is doing very well, the lender might be enticed by the higher return potential. In all cases, swaps under positive financial circumstances are rather rare.

Most of the time, debt-for-equity deals take place when a company has run into severe financial troubles, and the cost to service the debt is crippling the short-term functionality of the company, or the company feels it might be unable to make face value payments in the near future. Other reasons for swaps include a contractual obligation to maintain a specific debt/equity ratio or pressure from existing lenders to reimburse some amount that is currently due. Hence, facing bankruptcy, the company will try to arrange for a private reorganization of its capital structure.

Lenders habitually accept these swaps because the current debt is very large and the company's remaining assets are worth significantly less than current assets and there is no advantage in driving the company into bankruptcy. Also, faced with a choice of writing off the debt and getting nothing or writing off the debt and getting equity, lenders often prefer to get equity in the hope of recouping their investment. Hence, debtors participate in these transactions to get an increased level of control over the company, so they are better positioned to recover some amount of capital.

During a favorable financial situation, a debt-for-equity transaction might increase stock values, but only to a small extent. Even if the firm is restructuring its capital structure to take advantage of external events (such as higher stock prices or corporate tax shields), market reactions are usually negative to this type of transaction, perceiving it as masking an unfavorable internal financial situation.

When used in a downturn situation, this type of transaction benefits the company by relieving some of the pressures linked to servicing the debt. It can also be used in a defensive manner. For example, if a company has low market valuation, it could be worried about being a target of a hostile takeover; by converting debt into shares, it could reduce the risk of hostile acquisition by increasing the total number of shares outstanding.

Responses

Existing shareholders are usually displeased with the announcement of a swap. First, they may find their shares severely diluted as substantial amounts of new stock are issued, and significant debts are restructured into a deteriorating stock. Furthermore, several studies have demonstrated that the value of the stock declines at the announcement of a swap.

This is most often attributed to an information effect, whereas stockholders find (or believe) that a company's financial condition is worse than expected. Sometimes, it is possible for shareholders to block these transactions if the value of the shares being issued exceeds the value of the debt being written off, but in the case where the company has a net negative value, shareholder consent is usually not necessary to proceed.

By the same token, debt holders, seeing the risk related to their investment increase, may prevent the swap from occurring without their consent. As such, management will often deploy extra incentives (such as a higher valuation of debt capital) as a necessary step to increase the likelihood of this transaction occurring.

See Also: Bankruptcy; Bonds; Debt; Debt Rescheduling; Debt (Securities).

Bibliography. Don M. Chance, "Equity Swaps and Equity Investing," *Journal of Alternative Investments* (v.7/1, 2004); Steven Graham and Wendy Pirie, "The Effect of Debt for Equity Swaps When Equity is Valued as an Option," *Managerial Finance* (v.30/12, 2004); Elhanan Helpman, "The Simple Analytics of Debt-Equity Swaps," *American Economic Review* (June 1989); Chris Rowley and Malcolm Warner, *Globalization and Competitiveness: Big Business in Asia* (Routledge, 2005).

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Debt Rescheduling

Debt rescheduling is the reorganization of an outstanding debt amount (stock) and/or its terms. Debt rescheduling is undertaken in situations where the debtor faces serious obstacles in repaying the debt, either on time or at all. Often this procedure is referred to as debt reprogramming. In most instances when debt rescheduling is undertaken it eases the position of the debtor, addressing the issues of his/her liquidity and the potential of insolvency. The rescheduling of the debt may address the amount that is borrowed, where the creditor may reduce the principal in order to facilitate the debt service, but all the other conditions of the original contract remain in force. Or, the creditor may focus more on the servicing of the debt and facilitation of the repayment process, allowing the deferral of payments due, reducing the interest rate, extending the maturity, etc. In critical situations, the rescheduling may target both the outstanding debt stock and the conditions of contract. The creditor is interested in saving as much as possible of his/her own money and also ensuring the economic viability of the debtor, as a potential future client as well.

Debt rescheduling is a contract that alters the previous debt contract and requires the full consent of both contractual parties. Both creditor and debtor have to agree on new terms and conditions in order to have this contract concluded. Often it is assumed that unilateral actions are debt rescheduling modes, but this is not the case. Unilateral actions are usually undertaken by the creditor in situations where it is difficult, if not impossible, to gain consent of the debtor, and where the debtor's situation is virtually hopeless and it is necessary to undertake measures that would ease its position, even without consent. This on a few occasions has been the case with the least developed countries (LDCs), where their inability to service loans has been endemic and the only way forward was to write off part of the loan, or arrears, or sometimes both. Even if a new credit follows unilateral action of the creditor, these two consequent contracts should be regarded separately. Debt rescheduling is just one of the modalities of debt restructuring (reprogramming). Rescheduling entails the changes in terms for repayment of the principal and/or interest of the signed contract, or deferment of some or all payments until some mutually agreed future date. In the case of deferment, one can focus on flow rescheduling or stock rescheduling. If debt rescheduling is entertained, the debtor may find it a temporary relief, but if the structural problems are not addressed, the eventual capitalization of interest and future possible successive rescheduling agreements may prove far too costly to be done in the future. Rescheduling of debt in a narrow sense of the term means changing the conditions of the contract and not really addressing the underlying problems of inability to meet payments either on time or in general.

Debt refinancing is another modality of debt rescheduling in a wider sense, and in the case of refinancing, the debtor is getting a new loan that would consolidate all existing debts, and/or will provide full accounting support for the activities. In the case of refinancing the client would look for favorable (lower) interest rates and/or longer maturities. In the case of increased competition in the banking sectors worldwide, it is likely that some new entrants in the market would attempt to penetrate the market with underpricing, and therefore these refinanced credits can prove to be a time bomb. Refinancing options can be either voluntary or involuntary. In the former case the country is short of cash, foreign reserves, etc. and simply cannot meet the payments; while in the latter case the country is just following the market conditions, and if a country can raise the money in the financial markets cheaper, it will be prone to repaying the costly debt and looking for another, cheaper one.

One of the possibilities for rescheduling is the debt buyback. In this case the debtor may purchase its own debt at a discount. The creditor would agree to this transaction, in order to salvage at least some of the costs invested. Most recently Nigeria has repurchased a significant amount of public debt due to the unexpected revenues from oil. The debt buyback model is promoted by the International Development Association (IDA), which targets the world's poorest nations; IDA provides support if requested. IDA has created a special debt reduction facility that gives grant funding either alone or in partnership with some of the players.

Another instrument for debt restructuring is debt conversion and swaps. Swaps offer a possibility of exchanging the loan in foreign currency for a loan in domestic currency and in this way reduces the risks of foreign exchange rates. A number of conversions/swaps can take place: debt-for-equity swaps, debt-for-nature swaps, debt-for-development swaps, debt-for-education, and debt-for-debt swaps. Although debt swaps may be attractive, they may have a series of disadvantages, such as the fiscal impact of prepayment, associated inflationary risk, and high transaction costs in the case of a bespoke service.

Although debt rescheduling is a two-way process, either of the contractual parties may initiate the process. Often the debtor is the one who initiates the change in terms and proposes the amendments to the existing contract. Usually both sides begin with negotiations as to how to change the current contract to reflect the current situation and immediate future (in economic terms) of the debtor. The debtor can also put forward a finalized proposal and ask creditors to adhere to it. In the case of Dominica in 2003, the preemptive restructuring was intended to head off the default on public debt. The government of Dominica had approached all creditors (multilateral, bilateral, private, and so on) and offered the exchange of the bonds that were in default for three new classes of bonds. Because the situation was rather serious, almost three-quarters of all creditors have endorsed the proposal.

In the end, debt restructuring may have several outcomes. Debt rescheduling is usually seen as short-term relief, as is refinancing, while write-off (although a unilateral action) and various swaps are perceived to have contributed to the permanent reduction in debt exposure. Both the London (a group of creditors representing commercial banks) and the Paris Clubs (a group of creditors consisting of national governments, official bilateral creditors) have endorsed the policy of debt restructuring (rescheduling) from the late 1980s, when the problem of high international indebtedness emerged. In a number of instances, without the well-designed model, many countries would have defaulted on their credits, and it would have led to a serious systemic shake-up of the international financial system. Debt rescheduling (restructuring) is now accepted as a common practice.

See Also: Bankruptcy; Debt; Debt-for-Equity Swap; Debt (Securities); Sovereign Borrowing.

Bibliography. A. Berg and J. Sachs, "The Debt Crisis," *Journal of Development Economics* (v.29, 1988); Katy Cornwell and Brett Inder, "Evidence for the Ineffectiveness of Debt Rescheduling as a Policy Instrument," *Applied Economics* (v.39/17, 2007); C-T. Ebenroth, C. Maina Peter, and M. J. Kemner, "Rescheduling of the Sovereign Debt: A New Role for the Paris Club," *Journal of International Banking Law* (v.10, 1995); Claude Fluet and Paolo G. Garella, *Relying on the Information of Others: Debt Rescheduling with Multiple Lenders* (Centro Studi Luca d'Agliano, 2007); Chris Jochnick and Fraser A. Preston, *Sovereign Debt at the Crossroads: Challenges and Proposals for Resolving the Third World Debt Crisis* (Oxford University Press, 2006); S. Marchesi, *Adoption of an IMF Programme and Debt Rescheduling: An Empirical Analysis*, Warwick Economic Research Papers (University of Warwick, 1999).

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Debt (Securities)

Debt, in general can be understood as an amount (of money) owed to a person or organization for financial resources (funds) that have been borrowed. Debt can appear in several ways: In the form of a banking credit, in the form of securities, or in any other form that confirms that an entity (physical or a legal person) owes something to someone (specified either as a bearer or by name).

In terms of size, businesses borrow the most from banks, including the financial systems where financial markets are very propulsive. The reason for that lies in the fact that it is comparatively more difficult to raise finance in financial markets, and that the price of borrowed funds is usually higher than the interest that is under normal circumstances paid to the (commercial) banks. There are a series of securities that can be used for providing debt finance to an enterprise and they are primarily classified based on the term conditions. Companies can issue bills and/or bonds. In the former case one is looking at the term of less than a year, and in the latter case the security will mature in more than a year. There are also many varieties of these financial instruments, but the basic principles remain largely the same. Debt instruments are associated with a number of risks. Creditors are often able to claim some or all of the assets of the enterprise in the even of noncompliance with the conditions of the loan, which sometimes can result, ultimately, in liquidation. Some of the instruments can have additional conditions attached to them and there may be a requirement to keep certain financial ratios at the preferred level.

Instruments

Debt securities are bonds, commercial papers, treasury bills and treasury notes, certificates of deposit, and mortgage-backed bonds or mortgage bonds. Not all these instruments are equally and readily available. Bonds are long-term contracts in which the bondholder agrees to lend the money to the firm and in turn the firm promises to pay the bondholder interest until the bond matures. Depending on the type of bond, the borrower will pay both principal and interest, or will just pay interest in the predefined intervals, usually semi-annually or annually. The principal that is returned when the bond matures is often called the par, face, or nominal value of the bond. Bonds may be regarded as somewhat more complex "I owe you" (IOU) instruments, which are traded in secondary financial markets. The trading is usually done in an organized manner, through the Exchange and via the authorized broker. Therefore, although bonds have specified maturity, they may be sold in the market and the proceeds received would be immediately available to the bond holder, without waiting for redemption concepts.

Because bonds are fixed income instruments, they are highly dependent on the movements of interest rates. Negotiability of the bond, that is, their marketability in the secondary market, is an important feature for the investors, especially those who cannot easily plan their liquidity needs. A classical form of bond will pay out interest semi-annually and will have a specified redemption date; these bonds are known as straight, vanilla, or bullet bonds. Some bonds can be commodity indexed, or even linked with some events, and depending on the outcome of the event, the condition would come into force.

There are also different levels of security, and debentures are the most secured bonds. Debentures are usually secured by either a fixed or a floating charge against the company's assets. A fixed charge means that specific assets are sued as security which, in the event of default, can be sold at the insistence of debenture bondholder. There are also possibilities to include some trust deeds and covenants (like the limits on further debt issuance, dividend level, limits on the disposal of assets, and keeping financial ratios at a desired level).

Investors also have an opportunity to invest in financial debt instruments that are retailed in the international financial market. The international bond market, as a subset of the international financial market, trades foreign bonds and Eurobonds. Foreign bonds are denominated in the currency of the country where they are issued, when the issuer is a nonresident. Eurobonds are those bonds that are sold outside the jurisdiction of the country of the currency in which the bond is denominated.

A security that enables short-term financing is a bill of exchange. The bill of exchange is a document that sets out a commitment to pay a sum of money at a specified point in time. Historically, bills of exchange have been used to finance international trade and as such have played an important role in providing short-term liquidity to the system.

Use

When it comes to analyzing financing of debt by securities, one must take into account the term for which the debt finance is requested. If the case is with long-term finance, one opts primarily for bonds, especially debentures (fixed-charge, floating-charge debenture, zero-coupons). There are also floating-rate notes (FRNs), which are used as both long-term and medium-term instruments. Medium-term notes (MTNs) are a promise to pay a certain sum on a named date in the future. Short-term debt finance can be based on the commercial paper, mentioned bill of exchange, acceptance of credit (bank bills), or revolving underwriting facility (RUF). In either case, a borrower will issue a security of some kind or a written document. Sometimes there are limitations imposed on trading in some instruments, but not all securities are to be traded in the financial markets. In fact, some trading gives better results if a usual national blueprint is followed. In deciding how to finance its needs, a company follows the pecking order, where raising money through the issue of securities comes only after financing with retained profit and bank credit becomes the form that can be endorsed.

Debt security is a financial instrument representing the borrower's obligation to the lender from whom he/she has received funds. In this particular contract the contracting parties will agree on terms of repayment (most notably, the maturity) and lender's remuneration, expressed usually as interest. Interest is in fact a price of using other people's money. The obligation to pay provides a schedule of financial flows defining the terms of repayment of the funds and lenders' remuneration within the time framework. As already mentioned, the comparative advantage of debt securities to the bank credits is that the former can be traded, even in very limitedly developed financial markets. In trading in the financial markets, it is important to ensure the soundness of the financial instruments traded in them, in order to ensure that stability has not been affected adversely. To have a debt security work without much trouble, it is necessary to stipulate in the contract the nominal or face value, issue price, redemption, issue date, interest rate, and periodic coupon repayment.

Redemption may have interesting variations, as the particular contract may stipulate a deferred redemption period. In this case the issuer enjoys a grace period and may focus on the activities that will secure the market position of the company, rather than wasting talent on routine operations. As the securities are (as a rule) traded on the financial market, the market price of securities is important and to a large extent the offer prices are not of much importance for future developments. Trading in the secondary market is very important for proper understanding of costs of capital. Namely, the change in the yield on the secondary market suggests clearly how much the company will have to commit in costs before even considering rising funds and services. Debt securities are generally the second, or even third, option in the pecking order, as they will always be more expensive to arrange and service than drawing financial resources from the retained profit position and securing a bank credit. Often, only after these two options are given careful consideration, a borrower will begin looking at the securities option.

Similarly, the attractiveness of the option and marketability of the instruments have led to the practice of securitization, where immobile assets are bundled together and, based on the future guaranteed or estimated cash flows, one issues securities that are large in size and have some guaranteed income (or at least easily definable future revenues).

The very practice of securitization requires as a precondition a stable financial system, a robust regulatory environment, and a high level of legal, regulatory enforcement.

See Also: Bonds; Debt; Debt Rescheduling; Government Bonds; Sovereign Borrowing.

Bibliography. G. Arnold, *Corporate Financial Management* (Prentice Hall, 2005); Peter Atrill and Paul Hurley, *Financial Management for Decision Makers* (Pearson Prentice Hall, 2008); D. Blake, *Financial Market Analysis*, 2nd ed. (John Wiley & Sons, 2000); S. A. Dennis, R. T. Upton, and D. W. Wile, *Debt Securities* (Kaplan Business Publishing, 2005); Kelly DePonte, *The Guide to Distressed Debt and Turnaround Investing: Making, Managing and Exiting Investments in Distressed Companies and Their Securities* (Private Equity International, 2007); F. Fabozzi, *The Handbook of Corporate Debt Instruments* (John Wiley & Sons, 1998); J. Finnerty and D. Emery, *Debt Management: A Practitioner's Guide* (Harvard Business School, 1997); B. Tuckman, *Fixed Income Securities*, 2nd ed., (John Wiley & Sons, 2001); P. Vernimmen et al., *Corporate Finance Theory and Practice* (John Wiley & Sons, 2005).

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Decision Making

Decision making is a complex process that can be seen to involve many different stages or events before an actual decision is made. Essentially, decision making is concerned with the processing of generating options and then choosing among them. Decisions in organizations can be divided into various groups, and each decision has various phases. For instance: operational decisions, usually with short-term effects and of a routine nature; tactical decisions, usually with medium-term effects and of a nonroutine nature; strategic decisions, usually with long-term effects concerning the organization's goals.

Moreover, decisions can be classified into various types. Many are routine, with considerable guidance available on how and what to do, given company policy and prior history. These may be considered well structured and they are called programmed in the sense that organizations have a program to deal with them. Other decisions have to be more creative because they are made about phenomena that are new or where there is a limited amount of data or experience to go on. These may be considered ill structured or unique and they are called nonprogrammed.

There is strong evidence among traditional theories of a polarization between unitary and pluralist approaches to decision making. Unitary approaches to decision making posit a general agreement about goals and the best means to achieve them. Pluralist approaches to decision making emphasize conflict and power struggles between individual coalitions in organizations in circumstances in which participants have substantial knowledge and information. The basis of most of the traditional models of decision making is choice. Decision making in this approach can be defined as a response to a situation requiring a choice.

Models

There are various models of decision making with different assumptions about aspects of decision making, such as the preference and goals of participants; the types of conditions with which different styles and processes of decision making are associated; the nature of power and authority implicit in them; expected results and outcomes; and the underlying values, beliefs, and dominant rationale. Under the rational model of decision making, the assumption is made that participants have agreed in advance that making a decision is the right process to follow and that the rules and language of decision making are understood by all. The rational model aims at making optimal decisions on the basis of a careful evaluation of alternative courses of action. The model views the decision-making process as a sequential series of activities leading from an initial recognition of a problem, through the delineation and evaluation of alternative courses of action, and the selection of the preferred alternative to the implementation of action.

The administrative model of decision making is based on the actual behavior of decision makers, proposing that organizational decision making is a product of bounded rationality. This model recognizes the influence of nonrational, emotional, and unconscious elements in human thinking and behavior on suboptimal efforts to reach decisions and the existence of group pressures that limit the appearance of optimizing behaviors as well as the limited availability of perfect information and time and cost considerations attached to information gathering and evaluation. Thus, decision making leads to a satisfying rather than a rational decision, which broadly satisfies the parameters of a problem rather than searching for an ideal or optimal solution.

Incrementalism introduces the notion of mutual adjustment and gradual change, reflecting the troublesome character of decision-making processes arising from the competing interests and values that are brought into play in complex decision-making processes. It proposes that the decision maker does not attempt to roll out all possible alternatives before tackling a problem, but rather places limits on the alternatives to be considered, based on the current state of knowledge, and solves the problem through making small and gradual changes.

The garbage can model of decision making assumes that some organizations display characteristics of organized anarchy, for instance, problematic goals, unclear methods, and fluid participation. Under such conditions, where clear criteria of choice are absent, extraneous matters tend to get lumped into the decision making process, and solutions often bear little relation to problems. According to this model, the factors that influence decision making in organizations are the range of issues-cum-solutions-cum-problems that happen to be in the garbage can at a particular time and the total demands upon the decision makers at that time. In this sense, it could be argued that the model is based on circumstantial rationality.

The political model is pluralistic in nature, recognizing the role of various stakeholders as well as of conflict and conflict resolution in the decision-making process. According to this model, organizations are portrayed as consisting of shifting coalitions, and decision making is about reconciling the interests of different stakeholders.

Group Behavior

Many decisions may also be affected by the effectiveness of group behavior. In the case of successful groups, a phenomenon that can lead to the escalation of bad decisions is referred to as *groupthink*, which is defined by Irving Janis as the “deterioration of mental efficiency, reality testing and moral judgment that results from in-group pressures.” The primary condition of groupthink is group cohesion, underwritten by a history of individual and group success. Groupthink has the following symptoms: (a) an illusion of invulnerability, with excessive optimism and risk taking; (b) pressures on individual members to conform and reach consensus, meaning that unpopular ideas may be suppressed; (c) the continuing search for group consensus can result in collective rationalization by members, which leads them to discount warnings and negative information; and (d) an unquestioned belief in the morality of the group that leads members to be convinced of the logical correctness of what they are doing and ignore the ethical or moral consequences of decisions. With groupthink, members’ striving for unanimity—their need for consensus—overrides their motivation to realistically appraise alternative courses of action.

To prevent or reduce the effects of groupthink, managers can encourage each member of the group to evaluate their own and others’ ideas openly and critically; ask influential members to adopt an initial external stance on solutions; discuss plans with disinterested outsiders to obtain reactions; use expert advisers to redesign the decision-making process; assign a devil’s advocate role to one or more group members to challenge ideas; explore alternative scenarios for possible external reactions; use subgroups to develop alternative solutions; and meet to reconsider decisions prior to implementation.

Finally, there have been recent developments that recognize some of the limitations of traditional decision-making literature and have led to a shift away from decisions to other concerns such as action; from choice to that of change in the context of decision

Decision making among close-knit teams can lead to “groupthink”—ways to combat it include designating a member to play a devil’s advocate role, seeking input from outsiders, or creating subgroups to develop alternative solutions.

making or to the interpretation of action. These revisions acknowledge that the concept of a decision is problematic and individuals in organizations are not often faced with clear-cut rational choices. In fact, decision makers often value ambiguity and they can see how events unfold and influence interpretations of them so that they can look good and avoid blame.

See Also: Attitudes and Attitude Change; Conformance/Conformity; Empowerment; Leadership; Teams.

Bibliography. Dan Ariely, *Predictably Irrational: The Hidden Forces That Shape Our Decisions* (Harper, 2008); Kenneth Chelst and Yavuz Burak Canbolat, *Value Added Decision Making for Managers* (Chapman & Hall, 2009); Malcolm Gladwell, *Blink: The Power of Thinking Without Thinking* (Little, Brown and Co., 2005); David Hardman, *Judgment and Decision Making* (Wiley-Blackwell, 2009); Anne Houlihan, "Empower Your Employees to Make Smart Decisions," *Supervision* (v.68/7, July 2007); Göktuğ Morçöl, *Handbook of Decision Making* (CRC/Taylor & Francis, 2007)

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Dell

An international computer manufacturing and sales company of the United States, Dell, Inc., was founded by Michael Dell (1965–) in 1984. With capital of $1,000, Dell set up PC's Limited while a student at the University of Texas, Austin. He left the university to work full time in his business enterprise, helped by $300,000 from his family. The "Turbo PC" with an Intel 8088-compatible processor with a speed of 8 MHz was the first computer manufactured by the company in 1985. It netted about $73 million in the same year.

After four years PC's Limited founded the first on-site service program. It began outside the United States with a branch in Great Britain, followed by 11 outlets throughout the world. With a new name, Dell Computer Corporation, from 1988, the company's market capitalization increased from $30 million to $80 million with an initial public offering (IPO) of 3.5 million shares. Selling directly to consumers was one of the reasons for the phenomenal growth of the company. By 1992 it became one of the world's 500 largest companies named by the *Fortune* magazine.

After four years, Dell adopted the innovative method of selling computers from its Web site. The strategy of adopting online commerce resulted in market valuation of Dell growing at an incredible rate of 7,600 percent. The introduction of dell.com was advantageous for both consumers and the company and reduced the cost of taking orders by telephone. The inventory turnover of the company also became much faster.

By the end of the 20th century, Dell Computer Corporation had become number one in sales of personal computers, and its revenue was $25 billion in January 2000. The company expanded from personal computers into multimedia and printers. It changed its name to Dell, Inc., by which it is known today. Apart from its headquarters at Round Rock, Texas, Dell, Inc., set up an assembly plant in Winston-Salem, North Carolina, in 2004. In February 2005, *Fortune* magazine placed Dell first among its "Most Admired Companies."

Not everything went smoothly for Dell. It incurred losses of $300 million because of defective capacitors for Optiplex GX270 and GX280 motherboards. Its first forays into using the Linux operating system as an alternative to the dominant Microsoft Windows stalled. A second attempt in 2007 resulted in selling computers with pre-installed Ubuntu Linux 7.04 in France, Germany, and Great Britain only. Dell was also losing to its competitor Hewlett-Packard by the end of 2006; the latter's market share was 17.4 percent in comparison to Dell's 13.9 percent. Its sales and net income went down 5 percent and 33 percent, respectively, by March 2007 versus the previous year. Dell also faced innumerable lawsuits over alleged claims in advertising, exaggerated financial reports, backdating, and delayed service to consumers.

Despite its problems, Dell has become a pioneer of the information technology industry in recycling programs. It has also strived to reduce carbon emissions and to manufacture the "greenest personal computer." The company has also not lagged in philanthropic activities. The University of Texas, Austin received a grant from the Michael and Susan Dell Foundation of $50 million for a pediatric research institute, computer science building, and a center for healthy childhood development.

The international operations of Dell have made it a truly global concern. Apart from centers in Europe, it has assembly plants, production units, and customer contact centers in Asian countries including China, Japan, India, Malaysia, Singapore, and the Philippines. However, recession in the United States, decline of the American dollar, and increasing strength of local currencies have decreased profits in early 2008, impacting Dell call centers in India to an extent.

With a net worth of $15.8 billion, Michael Dell became the 30th richest person in the world in 2007 as estimated by *Forbes*. In the age of fierce competition in the computer market, Dell has not fared badly. Its growth has been the result of an innovative marketing strategy, avoidance of overproduction, and willingness to provide service to customers around the clock.

See Also: Company Profiles: North America; Microsoft.

Bibliography. Damon Darlin, "Dell Accounting Inquiry Made Formal by S.E.C.," *New York Times* (November 16, 2006); "Dell: Going After Apple," *Business Week* (August 25, 2008); Michael Dell and Catherine Fredman, *Direct from DELL* (HarperCollins, 1999); "Face Value: Michael Dell, Dell's Inventor and Reinventor," *Economist* (May 3, 2008); Gary Fields, "Innovation, Time and Territory: Space and the Business Organization of Dell Computer," *Economic Geography* (v.82/2, 2006); Steven Holzner, *How Dell Does It* (McGraw-Hill, 2006); Joshua Lipton, "Dell's Investigation Comes To a Close," *Forbes* (August 17, 2007).

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Deming Model

A method for ensuring that quality is incorporated into every stage of every task carried out by an organization is known as the Deming Model or Deming Cycle. The model is named for Dr. William Edwards Deming (1900–93), who is widely credited with exerting a lasting influence on the study of quality. Deming's model is a feedback loop with four parts: (1) Plan: identify customer needs and expectations, set strategic objectives; (2) Do: implement and operate processes; (3) Check: collect business results, monitor and measure the processes, review and analyze; and (4) Act: continually improve process performance.

Deming argued that managers must continuously improve their production and service processes. He believed that improvement was not just a one-time effort, but that managers are obligated to continuously search for and implement ways to reduce waste and improve quality. Continuous quality improvement is driven by two imperatives: (1) To maintain and increase sales income, companies must continually evolve new product features and new processes to produce these features; and (2) to keep costs competitive, companies must continually reduce the level of product and process deficiencies. Continuous improvement is embodied in a structured approach—the Plan, Do, Check, and Act model (PDCA)—that emphasizes organizational commitment to the systematic, continual improvement of the capability, reliability, and efficiency of business processes.

Deming was one of the leading figures in the quality movement of the 1950s to 1970s. His early work involved the development of statistical quality control (SQC) on production lines. While his work was largely ignored in his home country, in the early 1950s in postwar reconstruction Japan, Deming, and another quality control expert, Joseph Juran, emerged as major influences on the Japanese drive for quality, most notably in the Toyota Production System. In the late 1970s, as American firms found themselves under increasingly fierce competition from Japanese firms producing low-cost, high-quality goods, Deming and Juran were rediscovered by their home country as quality issues became integrated into management thinking and practice. Today, Deming-influenced practices can be seen in firms of every size all around the world, his name forever associated with the concept of total quality management (TQM).

While pursuing his Ph.D. in mathematical physics at Yale University, Deming spent his summers working at the Hawthorne-based telephone assembly plant of Western Electric, a subsidiary of AT&T. During Deming's time at Hawthorne the company was part of a research project, led by two Harvard University investigators, Elton Mayo and Fritz Roethlisberger, focusing on the effects of environmental conditions on productivity. Deming's Hawthorne experience taught him about factory management and the mistakes being made in terms of both machine and human efficiency. While at Hawthorne, Deming came across the pioneering work in statistical quality control being undertaken by Walter Shewhart, then employed in doing research for AT&T. Shewhart developed statistical sampling methods that could identify defects or variations in quality during the production process. In Shewhart's view, the root causes of defects need to be detected as soon as possible, and then those causes should be eliminated.

During the 1980s Deming was for a time the best-known management guru in the world. To Deming, quality was more than just a set of techniques for quality control and standardization. Quality had to become a mindset, embraced by the entire company. His book *Out of the Crisis* (1986) describes how a quality system can be introduced, while his last work, *The New Economics for Industry, Government, Education* (1993), urges the importance of quality thinking for national competitiveness and prosperity.

Deming believed that the primary responsibility for quality lay with management; he was opposed to the misconception that poor quality was due solely to low skills and/or poor performance by workers. From Shewhart, Deming adopted the PDCA cycle in which actions and events are constantly monitored and defects or problems noticed quickly and eradicated. This became famous in Japan as the Deming cycle or Deming model.

Revisionists think that Japan (as well as Shewhart) had a profound influence on Deming's thinking, rather than the reverse. Statistical quality control was already known in Japan and several organizations were actively involved in its development and implementation. Japanese ideas on total quality management influenced Deming's later thinking. Other revisionists credit Joseph Juran with even greater influence in Japan than Deming. Working independently, Juran argued that to achieve quality, management needs to move away from statistical targets and toward a culture of continuous improvement, backed up by training and motivation. Another quality guru, Philip Crosby, an engineer with ITT for many years, developed his own 14 points, which likewise include training, motivation, and the commitment by top management to improving quality, focusing on zero defects to avoid repairs, replacement of defective products, and lost customers.

See Also: Japan; Quality; Quality Control; Toyota Motor.

Bibliography. John Beckford, *Quality* (Routledge, 2002); Thomas J. Douglas and Lawrence D Fredendall, "Evaluating the Deming Management Model of Total Quality in Services," *Decision Sciences* (v.35/3, 2004); Caroline M. Fisher, Jesse Barfield, Jing Li, and Rajiv Mehta, "Retesting a Model of the Deming Management Method," *Total Quality Management and Business Excellence* (v.16/3, 2005); Michael W. Lowenstein, *The Customer Loyalty Pyramid* (Quorum Books, 1997); David E. Meen and Mark Keough, "Creating the Learning Organization," *McKinsey Quarterly* (1992); Michael A. Milgate, *Transforming Corporate Performance: Measuring and Managing the Drivers of Business Success* (Praeger, 2004); Judy D. Olian et al., "Designing Management Training and Development for Competitive Advantage: Lessons from the Best," *Human Resource Planning* (v.21, 1998); Morgen Witzel, *Fifty Key Figures in Management* (Routledge, 2003); John C. Wood and Michael C. Wood, *W. Edwards Deming: Critical Evaluations in Business and Management* (Routledge, 2005).

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Democratic Globalization

Democratic globalization is the idea that all humans share a common interest and should have a common say in the future development of humanity. Its supporters counterpose democratic globalization to existing globalization, which they claim reflects the interests of state, corporate, and financial elites. These groups control policy in existing global institutions and the world's 200 or so states. Instead, supporters of democratic globalization insist on globalization "from below" rather than "from above."

Few human communities in history have ever grown up in isolation from one another. In this sense globalization is not new. But the paradox of capitalism's political economy is that as it has developed in the last five centuries the world has been brought closer together in some ways but become more divided in others. The end of the Cold War in 1989–91 seemed to suggest that this had changed. Market capitalism had triumphed. The next years saw a huge wave of globalization talk and claims of a qualitative shift in global relations. Critics saw the euphoria of this "globo-babble" as the equivalent in ideas of the "irrational exuberance" that seemed to characterize markets at this time. It served to allow corporate and financial interests to try to remold the economy more in their favor.

"Free Market Fundamentalism"

Free market and neoliberal economists argue that markets are welfare enhancing and work best when they are free. They deny that there are serious trade-offs or choices and argue that if some gain more this is of little consequence. Everyone can hope to gain something through the trickle-down effects of the integration of global markets. These ideas were embodied in the politics of the Washington Consensus and the policies of the U.S. government abroad, the International Monetary Fund (IMF), the World Bank and, from 1995, the World Trade Organization (WTO). "Free market fundamentalism," as its critics call it, has been invested with a moral character, part of the struggle between good and evil. These ideas are propagandized, advised, and even imposed on many parts of the world as part of the conditionality of Western aid.

Such ideas always had their critics but it was not until November 1999 when a meeting of the WTO in Seattle met with huge protests that this opposition found its real voice. Described variously as the anti-globalization movement, the alter-globalization movement, or the anti-capitalist movement, it developed into an alliance of groups with varied (and sometimes competing) perspectives. They shared a common skepticism about the claims made for globalization and the trustworthiness of the forces behind it. This informal alliance is often chaotic. Nevertheless it has sustained campaigns around the globe and regular meetings of a World Social Forum, initially at Porte Allegre in Brazil but later at changing locations. The movement also began to develop into an anti-war movement opposing U.S.-led intervention in Afghanistan and Iraq and threats elsewhere.

This movement for democratic globalization was immediately attacked as naïve, utopian, and even irresponsible. But it was able to mobilize considerable pressure and arguments in its favor. It was helped by internal critiques of earlier globalization talk and not least by the work of the leading economist Joseph Stiglitz. It also found support from the International Labour Organization's World Commission on the Social Dimensions of Globalization (2001–04), which concluded that "seen through the eyes of the vast majority of women and men, globalization has not met their simple and legitimate aspirations for decent jobs and a better future for their children."

Supporters of democratic globalization challenge the way in which existing globalization is shaped by the interests of powerful states (the United States, United Kingdom, European Union, Japan) and the major multinational corporate interests. Some even suggest these interests now form the basis of an unaccountable transnational ruling class. They argue that there can be no truly democratic globalization without there being a local democratic base. This democracy must extend to the democratic control of the economic and social structures of the world. Even where formal democracy exists there is a large democratic deficit, and at the global level there are no structures that allow the proper relationship to the interest of the mass of humanity.

Institutions

Current global governance reflects the interests of powerful states. The United States plays a decisive role followed by the other members of the G8 (Canada, France, Germany, Italy, Japan, Russia, and the United Kingdom [UK]). The United Nations (UN) is dominated by its five veto-holding permanent members (the United States, UK, France, Russia, and China). Leadership of the IMF and the World Bank is shared by Europe and the United States, but with the United States having a de facto veto. The WTO is formally more equal at the level of state participation but actually operates on a two-tier system of the same powerful insider states and supplicants outside.

These and similar institutions are characterized by a lack of transparency and accountability. Key decisions, especially in trade and finance, are even negotiated by ministers with limited input from their government colleagues, let alone their parties and their electorates. This is sometimes justified as putting control into the hands of experts and so "depoliticizing decision making." What it actually does is enable global policy making to be subject to the influence (if not be determined by) big companies and their lobbyists who have direct access to the decision-making process. This accounts for the narrow and self-interested priorities of existing globalization, which conflict with the interests and priorities of those on the outside. The global arena remains a lawless one. There is no legality independent of the interests of the powerful. Such "global law" as exists tends to codify the interests of the strong, since they determine and enforce it. Its use is highly politicized and it is used effectively when it is in the interests of the powerful states and their clients.

Arguments

Supporters of democratic globalization challenge this global democratic deficit. At the level of theory, the more radical supporters of democratic globalization question the role of markets themselves. Less radical supporters accept a role for markets but argue that market failure is endemic because, as Stiglitz puts it, markets are always incomplete and information always imperfect. Far from being competitive, the global economy can only be understood through an analysis of the imperfect competition of global corporations and financial institutions which have the power to ignore externalities and exploit informational and other asymmetries.

Contrary to textbook simplicities, comparative advantage does not always produce a win-win situation. Resources do not flow easily from the rich to the poor but often in the opposition direction. Knowledge is not treated as a public good but protected by patents whose reach is being extended by corporate campaigns for trade-related intellectual property rights (TRIPS). Knowledge is also being trapped by attempts at "corporate bio-piracy" through the patenting of naturally occurring forms, including the processes of the human body. Powerful states, too, that advise deregulation and state minimization for others regularly protect their own through regulation, subsidy, and protection.

Controversy also exists over the claimed successes of globalization. At the level of individuals there is no dispute that deregulation has allowed a growing concentration of personal wealth in the hands of global elite as wealth and income inequality has increased. At the turn of the new century it was estimated that the 225 largest personal fortunes were equivalent to the income of nearly half the world's population. The top 15 fortunes equalled the income of the whole of sub-Saharan Africa. If absolute global poverty has decreased, and this is contested, it is because tens of millions now survive just above the $1-a-day poverty marker than below it. No less, "the great divergence" between the worlds's richest and poorest countries is continuing to grow. Whereas in 1960 the top 20 percent of the world's population had an income 30 times the poorest 20 percent, by 2000 their income was 80 times that of the poorest.

But not all countries have remained poor. In recent decades rapid progress has been made in East Asia, including more recently China. The problem is knowing whether this is explained by these states following the prescriptions of the neoliberal globalizers or ignoring and violating them as their critics argue. This dispute becomes especially sharp at times of crisis when supporters of democratic globalization argue that global institutions use their power to enforce neoliberal measures as part of a "shock doctrine" that risks undermining economic and political gains in the world at large.

The use of "shock" to enforce "economic globalization" over democratic globalization is seen as an expression of the way in which the "invisible hand" of the market often depends on a very visible fist of power. War and intervention have always been a part of globalization from above. In the 19th century when gunboat diplomacy was used to open markets, it was commonly supported by a moral rhetoric. "Barbarians" were thought to fail to appreciate the benign nature of Western power (even as that power was being used to enforce the payment of odious debt or to force the opium trade to the Far East).

Latter-day Western states have proven equally adept at supporting, even bankrolling, undemocratic states when it is in their interests. When it is not, they use the rhetoric of "humanitarian imperialism" to justify overthrowing those who are now seen to stand in their way. Globalization from above and imperialism are therefore two sides of the same coin. This is even reflected in the "revolving door" effect as individuals move from one job to another. Robert McNamara (1916–), for example, rose from being the first non-family president of the Ford motor company to prosecuting the Vietnam War as U.S. secretary of defense (1961–68) to becoming president of the World Bank

(1968–81). A generation on, the career of the neoconservative Paul Wolfowitz (1943–) took him through various positions in the U.S. defense establishment including deputy secretary of defense (2001–05) (in which role he advocated the invasion of Iraq and then oversaw the first years of its occupation) to president of the World Bank (2005–07) until he was forced to resign amid accusations of abuse of his position.

Many supporters of democratic globalization argue that the 2003 invasion of Iraq and its subsequent bloody occupation seemed as much about oil and the seizure of Iraqi assets under the guise of liberal deregulation as it was about rescuing the Iraqi people. The reduction, for example, of odious debt accumulated by Saddam Hussein was made conditional on the opening of the Iraqi economy and making its resources available to Western multinationals.

Achievements

The potential breadth of the movement for democratic globalization can be seen in a number of its achievements. One strand is built on single-issue politics and has often proven creative in mobilizing youth through its association with youth culture and music. The 1980s popular campaigns against debt and South African apartheid can be seen as forerunners of later developments. Nongovernmental organizations (NGOs) successfully led a campaign against land mines in 1997 against the opposition not least of the U.S. government. As the 1990s neared their end, Jubilee 2000, drawing on the churches, mobilized a huge campaign for debt relief of the poor countries, which chimed with a new wave of youth campaigns, concerts, and the like.

Seattle then saw the birth of a more openly political and broader movement for democratic globalization. It became difficult for international organizations that had previously met in comfort to come together save in heavily guarded and remote locations for fear of provoking major demonstrations, countermeetings, and festivals of resistance. As opposition to the war in Iraq mounted, an estimated 35 million demonstrated globally in January–April 2003, including some 20 million on February 15. These are the biggest demonstrations ever held and led the *New York Times* to talk of a new "world second superpower."

Three political tendencies have played a major role here. One has been the French-based organization ATTAC—the Association for the Taxation of Financial Transactions to Aid Citizens. This was founded in 1998 with a focus initially on campaigning against global financial speculation, but its interests soon widened to pressuring nation states toward reform. A second strand is a more radical socialist one looking for more fundamental change. A third is the autonomist strand that contests traditional concepts of political power.

Strategy and Tactics

There are four overlapping areas of debate about strategy and tactics. One is whether we can imagine a world in theory, and achieve it in practice, where those who hold power will relinquish their domination in favor of more democratic decision making and whether this democratization is compatible with capitalism or needs systematic change from it. Those who suggest that it is compatible point to the fact that two centuries ago national democracy seemed a dream and was frequently said to threaten the survival of capitalism. Yet it developed in many countries and some now argue that capitalism and democracy can be mutually supportive. Advocates of the need for systemic change argue that earlier democratic advance still involved major upheavals and even then it produced an attenuated democracy. Economic power remains protected from democratic control. It is just this economic power that needs to be challenged to achieve democratic globalization.

The second debate is over organization. But in part because of the negative experiences associated with supposedly left-wing dictatorships, some sections of the movement are deeply suspicious of the dangers of overorganization and thought control. Others insist that a degree of centralization and movement democracy is both possible and necessary if the campaign for democratic globalization is to be a success. Spontaneous organization is limited, especially when your opponent is well organized as is existing globalization with its formal state-based meetings, summits, and forums and its informal but real structures of power.

The third area of debate is over alliances within and outside the movement. The role of NGOs is a special problem. Some see them as the basis for a new global civil society. But while the movement for democratic globalization could not exist without them, they are nevertheless often seduced (or forced) to work with the existing system rather than challenge it. Some see the dangers of this reflected in the career of Bernard Kouchner (1939–), who courageously cofounded and led the medical humanitarian NGO Médecins sans Frontières (Doctors without Borders) only to become a supporter of "humanitarian intervention" and a French government minister, UN High Representative in Kosovo (1999–2001), and French foreign minister. No less a cause of debate is how far alliances would be made with establishment politicians and political forces. The self-appointed rock and film stars who meet presidents one day and popes the next, while pausing to announce the success of a major initiative to a group of reporters on the way, also have a contradictory effect. They bring enormous publicity but also disorientation and confusion and misplaced optimism about where power lies and who is an ally and who is not.

The fourth area of debate is over priorities. The roots of the movement for democratic globalization lie in concerns over economic and social injustices, poverty, unfair trade practices, sweatshops, debt, and so on. Necessarily, though, concern reaches out to other issues like the environment, climate change, and war. Should the movement for democratic globalization embrace all of these or is there some virtue in separating them and emphasizing a narrower rather than a broader agenda? Western interventionism in the new century has provoked tensions as some argued that the movement for democratic globalization had also to be a movement against war while others criticized the danger of having too broad a set of goals. While the strength of antiwar sentiment and criticism of U.S. policy worked in favor of the first view, these tensions were evident within different groups' countries and between them.

Democratic globalization remains therefore an idea and a movement in motion and development. To its critics it is an unwelcome diversion. To its supporters it is the basis of a new and better world that needs to be built.

See Also: Antiglobalization Movement; Capitalism; Fair Trade; Free Markets; Globalization.

Bibliography. A. Callinicos, *An Anti-Capitalist Manifesto* (Polity Press, 2003); W. Bowman Cutter, Joan Spero, and Laura D'Andrea Tyson "New World, New Deal: A Democratic Approach to Globalization," *Foreign Affairs* (v.79/2, 2000); Mark Engler, *How to Rule the World: The Coming Battle Over the Global Economy* (Nation Books, 2008); M. Hardt and A. Negri, *Multitude* (Penguin, 2005); Indymedia, www.indymedia.org (cited March 2009); N. Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (Penguin, 2007); J. Neale, *You are G8, We are 6 Billion* (Vision, 2002); I. Ramonet, *Wars of the 21st Century: New Threats New Fears* (Ocean Press, 2004); J. Stiglitz, *Making Globalization Work* (Norton, 2006); Joseph S. Tulchin and Gary Bland, *Getting Globalization Right: The Dilemmas of Inequality* (Lynne Rienner Publishers, 2005).

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Demonstration Effect

The meaning of demonstration effect (DE) depends on the context in which it is used. Regardless of the context, DE entails some form of imitative behavior. This entry focuses on DE as widely used in the consumption, international trade/investment, and international tourism literature.

With globalization and improvements in transportation and communications, the movement of people, businesses, or products across international borders has intensified. As a result, societies are more likely to be exposed to other societies' lifestyles and consumption habits (e.g., food, transportation, dress, and entertainment). The perception that the new lifestyles are superior may incite their imitation, which may be more expensive. For example, a multinational corporation with headquarters in a more developed country (MDC) may set up production or sales facilities in a less developed country (LDC) and advertise extensively to promote the consumption of its new and more expensive products in the LDC. Also, the arrival of foreign tourists from more affluent countries may expose the populations of the host countries to the tourists' lifestyles, which may be deemed superior, albeit more expensive. The worldwide proliferation of the internet has also facilitated the accessibility of information pertaining to the superior standards of living enjoyed by other societies, triggering imitation of such living standards.

DE entails the transfer of new and more expensive consumption habits and lifestyles/tastes to other societies. Two aspects of DE are noteworthy. First, DE may affect different countries differently depending on information and transportation costs, sociocultural factors, and effectiveness of advertising or communication networks, among others. Second, since the adoption of expensive tastes is of greater concern to LDCs, whose resources are more limited, DE is widely used in the development literature to mean the adoption of expensive Western standards of living by LDCs. Examples of DE in LDCs include the substitution of expensive infant formula for breast milk and the substitution of cheaper staple foods by more expensive imported foods. Contributory factors to DE include tourism, foreign trade, and the operations of multinational corporations.

The DE concept appeared in the trade literature in the 1940s and 1950s when Milton Friedman and Franco Modigliani, winners of the 1976 and 1985 Nobel Prize in Economics, respectively, and James Duesenberry promoted the idea of "interdependent consumption functions" for which the consumption of one individual/group might influence that of another individual/group. In that literature, DE is labeled the "relative income hypothesis." Economist Ragnar Nurske popularized the concept in the economic development literature by arguing that the exposure of the LDC populations to information pertaining to the (higher) consumption standards in MDCs incites imitation of these habits with negative impacts on savings and, hence, economic growth in LDCs. In light of this argument, some have ascribed the underdevelopment of LDCs to DE.

How does DE impact economic growth in LDCs? The literature on this issue is convoluted, rendering it difficult to generalize the impact. This difficulty arises because the impact could be positive or negative. For example, as noted above, DE impacts economic growth negatively by reducing savings incentives. However, DE may cause an increase in work incentives to support the expensive lifestyles, with positive effects on growth. Also, DE may have adverse effects on the balance of payments, a statistical summary of the transactions between a country's residents and its nonresidents during a given period, if the new products are imported from abroad. However, the balance of payments problem may rectify itself over time if local firms imitate investments in the production of the imported goods, thereby reducing the need to import. Thus, the net impact of DE on a particular country depends on the extent to which the positive and negative impacts do cancel out.

As noted above, DE is also used in other contexts. For example, in politics and sociology, DE describes situations in which successful protests/revolutions by political or social activist groups in one place led to their imitation by similar groups in other places. In economics, DE is also used to explain the motives for intergenerational income/wealth transfers. For example, economists Donald Cox and Oded Stark use the concept to convey the ideas that when parents transfer income/wealth to their own parents, they are motivated by the desire that their own children will imitate this behavior in future.

See Also: Consumer Behavior; Consumption; Globalization; Multinational Corporation.

Bibliography. Donald Cox and Oded Stark, "On the Demand for Grandchildren: Tied Transfers and the Demonstration Effect," *Journal of Public Economics* (v.89/9–10, 2005); N. Kelley-Gillespie and O. W. Farley, "The Effect of Housing on Perceptions of Quality of Life of Older Adults Participating in a Medicaid Long-Term Care Demonstration Project," *Journal of Gerontological Social Work* (v.49/3, 2007); George C. Kottis, "The International Demonstration Effect as a Factor Affecting Economic Development," *Kyklos* (v.24/3, 1971); Po-Ting Liu and Guang-Zhen Sun, *International Demonstration Effect and Domestic Division of Labour: A Simple Model* (Monash University, 2005); Jerome L. Mcelroy and Klaus De Albuquerque, "The Tourism Demonstration Effect in the Caribbean," *Journal of Travel Research* (v 25/2, 1986); Ragnar Nurske, *Problems of Capital Formation in Underdeveloped Countries* (Oxford: Blackwell, 1964).

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Denmark

This northern European country has a population of around 5.5 million (2007), and has a land border with Germany, but has always had close contact with Sweden. Historically, Denmark was one of the major powers in Scandinavia, where it controlled, at times, modern-day Norway (until 1814, then ruled by Sweden until 1905) and Iceland (until 1944). It still controls the Faeroe Islands and Greenland making it, technically, the second largest country in Europe.

In the Middle Ages, Denmark was the center of a large trading network. Copenhagen, on the island of Jutland, emerged as a major port, and there was a great concentration of traders and wealth. As a result, with the start of European colonial expansion to Africa and the Americas, Danes started taking part in the slave trade, establishing forts in West Africa, in modern-day Ghana, and also taking over three Caribbean islands, which became known as the Danish West Indies (modern-day U.S. Virgin Islands). There was also extensive trade with India, and the Danish East India Company was founded in 1614 (dissolved in 1729). Denmark was to lose its possessions in West Africa with the rise of British maritime power, but held onto the Danish West Indies—major producers of sugar—until 1917, when it sold the islands—St. Thomas, St. Croix, and St. John—to the United States for $25 million.

Denmark has become a leader in wind power technology. The photo shows a turbine in Copenhagen.

Denmark remained neutral in the Crimean War and in World War I, emerging as a major producer and exporter of dairy products, biscuits, chocolates, and fish products. Its neutral status in most European conflicts allowed it to establish contacts with some countries anxious not to get entangled in European politics, with Danes training the Siamese (Thai) police force. The East Asiatic Company, founded in 1897, also developed into becoming agents for many European products in east Asia and southeast Asia, taking its lead from the business Andersen & Co., which had been operating in Bangkok, Siam (Thailand) from 1884.

The Nazi Occupation of Denmark from 1940 until 1945 left the economy of the country badly damaged, although because there was little fighting in Denmark, the infrastructure was not damaged as much as in most other European countries. With high rates of literacy in Denmark, the country emerged from the war as a small but significant economic power, but one which was fiercely independent. Denmark joined the European Economic Community, the precursor to the European Union (EU), in 1973, and in a referendum held in September 2000 rejected a closer monetary union. In spite of this, and occasional opinion polls published showing dislike of some EU policies, the Danish governments have committed themselves to remaining in the EU, especially since its expansion into the Baltic.

Some 76 percent of the workforce are in the services sector, and produce 74 percent of the country's gross domestic product (GDP), with 21 percent working in industry contributing 24 percent to the nation's GDP. Only 3 percent work in agriculture, and in spite of the continued reputation of Danish dairy products and bacon, this provides only 2 percent of Denmark's GDP. In terms of its balance of payments, Denmark generally runs a surplus, with exports being mainly machinery and instruments, meat, meat products, dairy products, fish, chemicals, furniture, and ships and shipping equipment. In addition, Denmark has harnessed wind power and exports wind technology, including windmills. Lego has been a major Danish export, as have been other toys and playground equipment. Major imports include machinery, raw materials, and semi-manufactures for Denmark's industry, chemicals, grain and foodstuffs, and consumer products. Some 17 percent of exports go to Germany, which makes up 23 percent of its imports. Sweden also contributes much to bilateral trade, with many exports to the United Kingdom, and imports from the Netherlands.

See Also: European Union; Germany; Sweden.

Bibliography. "Denmark, Immigration and the EU—Hoist by Its Own Policy," *Economist* (v.388/8593, 2008); *The Europa Year Book* (Europa Publications, 2008); Ole Feldbaek, *India Trade under Danish Rule 1772–1808: European Enterprise and Anglo-Indian Remittance and Trade* (Studentlitteratur, 1969); Palle Lauring, *A History of Denmark* (Dorset Press, 1991); Anders Ølgaard, *The Danish Economy* (Commission of the European Communities, 1980); Harald Westergaard, *Economic Development in Denmark Before and During the World War* (Humphrey Milford, 1922); Paul Westphall, *The East Asiatic Company Limited* (East Asiatic Company, 1972).

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Department of Commerce

The purpose of the U.S. Department of Commerce is "to foster, promote, and develop the foreign and domestic commerce" of the United States to ensure that "the United States continues to play a lead role in the world economy." The current mission statement of the Department of Commerce states that it "creates the conditions for economic growth and opportunity by promoting innovation, entrepreneurship, competitiveness, and stewardship." The Department of Commerce seeks to promote job creation and improve living standards for all Americans.

The Department of Commerce and Labor (32 Stat, 826; 5 U.S.C. 591) was created by the U.S. Congress on February 14, 1903. On March 4, 1913, President William Howard Taft authorized renaming it the U.S. Department on Commerce following the creation of the U.S. Department of Labor (37 Stat. 737; 5 U.S.C. 616). The Department of Commerce is headquartered in Washington, D.C., and normally employs over 35,000 persons. Temporary staffing during the Decennial Census increases the number of employees to over 500,000 persons.

The Office of the Secretary of the Department provides general management for its operating units, supports the formulation of policy, and provides advice to the president of the United States. The Departmental Management (DM) supports the Office of the Secretary, and develops and implements policy for the Department of Commerce affecting U.S. and international activities.

Operationally, the Department of Commerce is composed of 12 bureaus or administrations: the Bureau of Industry and Security (BIS), the Economics and Statistics Administration (ESA) with its Bureau of the Census (Census) and its Bureau of Economic Analysis (BEA), the Economic Development Administration (EDA), the International Trade Administration (ITA), the Minority Business Development Agency (MBDA), the National Institute of Standards and Technology (NIST), the National Oceanic & Atmospheric Administration (NOAA), the National Technical Information Service (NTIS), the National Telecommunications and Information Administration (NTIA), and the Patent and Trademark Office (USPTO).

The Bureau of Industry and Security (BIS) enforces effective export control and treaty compliance and promotes strategic technology leadership. The Economics and Statistics Administration (ESA) provides economic research and policy analysis in support of the secretary of commerce and the president.

The Bureau of the Census maintains the U.S. Census, which serves as an important source of economic and demographic data about and for the American people in support of effective decision making by policy makers, businesses, and individuals. The Bureau of Economic Analysis (BEA) also produces timely, relevant, and accurate economic statistics that are used by policy makers, business leaders, households, and individuals for financial decision making.

The Economic Development Administration (EDA) promotes favorable business environments across the country through its Economic Development Assistance Program, which enhances economic capacity by planning and building infrastructure investments and making grants to regions, states, and communities. The International Trade Administration (ITA) supports the development, negotiation, promotion, and implementation trade laws and agreements and also ensures compliance with them and the enforcement of them. The Minority Business Development Agency (MBDA) promotes the ability of minority-owned businesses to grow and participate in the global economy through a network of centers that provide business assistance services.

The National Institute of Standards and Technology (NIST) develops, promotes, and disseminates measurement science to create standards and technology needed by industry to compete successfully through quality enhancement and by innovation.

The National Oceanic & Atmospheric Administration (NOAA) maintains and improves coastal and ocean resources, supports sound environmental practices in commercial navigation, studies climate variability and change, and provides weather information. The National Technical Information Service (NTIS) collects, preserves, and disseminates scientific, technical, engineering, and business-related information for the industrial research community and American business.

The National Telecommunications and Information Administration (NTIA) develops telecommunications and information policy for the executive branch and ensures the effective and efficient use of the federal radio spectrum. The Patent and Trademark Office (USPTO) administers U.S. patent and trademark laws and provides technical advice and information on intellectual property to other executive branch agencies.

The fiscal year 2009 budget request for the Department of Commerce was for $8.18 billion in discretionary funds. This appropriation, less one percent for its administration, is designed to serve three strategic goals. The first strategic goal is to maximize U.S. competitiveness and enable growth. The bureaus charged to support strategic goal one are the ITA, the EDA, the ESA, the BEA, the Census, the BIS, and the MBDA. The second strategic goal is to promote innovation and industrial competitiveness in the United States. The bureaus charged to support strategic goal two are the NIST, the NTIS, the USPTO, and the NTIA. The third strategic goal is to promote stewardship of the environment, and the bureau charged to support it is the NOAA.

The Department of Commerce has a "Management Integration Goal" which is about achieving organizational and managerial excellence by effectively implementing a performance-based budget process. This goal is the responsibility of the Departmental Management and the Office of the Inspector General.

See Also: United States.

Bibliography. *The Department of Commerce* (Paw Prints, 2008); *U.S. Department of Commerce Handbook* (International Business Publications, 2007); U.S. Department of Commerce, www.commerce.gov (cited March 2009).

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Dependency Theory

Defined as an explanation of the economic development of a state in terms of the external influences—political, economic, and social—on national development policies, dependency theory argues that history shapes economic structure, favoring some countries to the detriment of others and limiting their development possibilities. Dependency theory sees the world economy as comprising of two sets of states, those that are dominant and those that are dependent. The dominant states are the advanced industrial nations in the Organization of Economic Co-operation and Development (OECD). The dependent states are those states of Latin America, Asia, and Africa that have low per capita gross national products (GNPs) and which rely heavily on the export of a single commodity.

Most dependency theorists regard international capitalism as the motive force behind dependency relationships, which are caused by a rigid international division of labor that is responsible for the underdevelopment of many areas of the world. The dependent states supply natural resources, in which they might be said to have an absolute advantage, and cheap labor, but depend on the industrialized nations for manufactured goods. Foreign direct investment flows into the dependent states, but the allocation of investment is determined by the economic interests and efficiency requirements of the dominant states, and not by the economic interests of the dependent state.

Theories

While not all dependency theorists are Marxists, many have been, including Paul Baran, whose critically acclaimed book, *The Political Economy of Growth*, is regarded as a pioneering study of the problems of underdevelopment. Writing in the mid-1950s, Baran tried to relate underdevelopment in the Third World to the global operations of capitalism. He held monopoly capitalism responsible for underutilization of human and material resources, inefficient organization of the productive facilities, and an insufficiency of effective demand. To overcome these weaknesses, Baran advocated a form of centralized planning. Following Baran was Andre Gunder Frank, who wrote extensively on underdevelopment from the mid-1960s to the mid-1970s. A recurrent theme in his works concerns commercial monopoly as the particular economic form with which metropolitan countries have exploited their satellites.

A new theory of dependency was introduced by Theotônio Dos Santos in the 1970s. This new theory of dependency understands industrial development to be dependent on exports, tied to the traditional sectors of an economy that are controlled by the landed bourgeoisie. Exports generate foreign currency with which that bourgeoisie buys imported capital goods. Despite the efforts of the dependent countries to impose policies of exchange restrictions and taxes on foreign exports and to lean toward the nationalization of production, industrial development is conditioned by fluctuations in the balance of payments, which in dependent countries often lead to deficits caused by trading in a highly monopolized international market, the repatriation of foreign profits, and the need to rely on foreign capital aid, leading to deepening dependency that cannot be altered without a change in internal structure and external relations.

Latin American dependency theory and its African and other Third World variants were introduced in the late 1960s and early 1970s. Director of the United Nations Economic Commission for Latin America (ECLA) Raul Prebisch argued that the international division of labor was outdated, imposing on Latin America, as part of the periphery of the world economic system, the role of producing food and raw materials for the great industrial countries. There was no place within this scheme for the industrialization of Latin American countries.

Yet world events—two world wars and a great economic crisis—were forcing industrialization on the Latin American countries, showing them where their opportunities lay. To eliminate dependence, ECLA advocated planning as a means of rationally allocating scarce resources; a program of export diversification and import substitution; accelerated industrialization; use of the state apparatus to bring about institutional reforms; and the formation of regional entities to integrate the economies of the countries in the region. These policy recommendations evolved into what became known as "state capitalism."

Critiques

Dependency theory has had numerous critics. Stephan Haggard argues that dependency theory underestimates the growth potential of underdeveloped nations, as evidenced by the emergence of East Asian economies; that it overestimates the importance of external factors and ignores the fact that many of the most powerful obstacles to development lie in the domestic system and in the histories of individual states and societies; that it places too much emphasis on the role of foreign direct investment, downplaying the importance of the international trading and financial system; and that there is no necessary link between dependence in the international economy and political systems, whether democratic or authoritarian.

Citing the rapid development of some southeast Asian countries, which dependency theory failed to predict or to explain, Ted Lewellen calls the theory's prescriptive solutions, which called socialism or delinking from the capitalist system self-destructive or impractical, and its classification of core and periphery nations, simplistic. This classification has been replaced by a much more complex, multidimensional system of interaction based not on raw material production versus manufacture, but on low-tech manufacture versus high-tech manufacture and factory production versus information processing, combined with attention to international finance, media technology, and local culture. Ngaire Woods notes that in Central America it was not global capitalism and exploitation but Cold War geopolitics and security issues that prompted aspirations of nationalism, independence, and autonomy.

See Also: Absolute Advantage; Core; Economic Development; Export-Oriented Development; Industrialized Countries; Less Industrialized Countries; Periphery; Socialism.

Bibliography. Ronald H. Chilcote, *Theories of Comparative Politics: The Search for a Paradigm Reconsidered* (Westview Press, 1994); David W. Dent, *Handbook of Political Science Research on Latin America: Trends from the 1960s to the 1990s* (Greenwood Press, 1990); Martha Fineman, *The Autonomy Myth: A Theory of Dependency* (New Press, 2004); B. N. Ghosh, *Dependency Theory Revisited* (Ashgate, 2001); Stephan Haggard, *Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries* (Cornell, 1990); Ted C. Lewellen, *The Anthropology of Globalization: Cultural Anthropology Enters the 21st Century* (Bergin & Garvey, 2002); Mary Ann Taetreault and Charles Frederick Abel, *Dependency Theory and the Return of High Politics* (Greenwood Press, 1986); Howard J. Wiarda, *New Directions in Comparative Politics* (Westview Press, 1992); Ngaire Woods, *Explaining International Relations Since 1945* (Oxford University Press, 1996); Timothy J. Yeager, *Institutions, Transition Economies and Economic Development* (Westview Press, 1998).

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Deregulation

The erosion or abandonment of formal regulations by legislative means is known as deregulation. Formerly regulated industries—transportation, electric utilities, gas utilities, telecommunications, and financial markets—share certain characteristics that made them candidates for regulation, and in transitioning to deregulation they share a common set of problems.

Wherever they have appeared around the world, regulatory systems were not the result of strategic planning, but represented a reaction to financial, economic, and political crises. The airline industry, the steel industry, and every other industry have been subject to direct and indirect regulation. Indirect regulation dealing with the environment, work safety, product quality, truth in advertising, and similar issues affects all firms. The fundamental reasons for regulating the banking industry lie in the key role banks play in the efficient functioning of the economic system and in the conduct of an effective monetary policy, as well as protection for depositors and monetary stability.

In a Brookings Institution study, Martha Derthick and Paul Quirk acknowledge that government regulation had long been rationalized as a way of guaranteeing service to the public by industries having the character of public utilities and as a means of protecting the public from monopoly pricing practices, including the destructive competition that was said to lead to the creation of monopolies. However, the regulatory agencies had instead sheltered the regulated industries from competition and fostered very costly inefficiencies. Long a target of experts in administrative law, public administration, and political science, who found much fault with their structure and procedures, by the 1960s the regulatory commissions had become a target also of economists, who attacked their purposes by undertaking to show that the social costs of regulation far outweigh the benefits.

The notion of government regulation as a profit-seeking enterprise in which self-interested groups and individuals seek to gain competitive advantage and in which the regulator is captured by the regulated is the basic argument of Chicago School economists George Stigler and Sam Peltzman. Deregulation suddenly changes the game of market competition, threatening the long-held advantage of dominant large firms and opening the way for new entrants.

The United States

Deregulation has been the global trend since the late 1970s and early 1980s. In the United States, the energy, airline, trucking, and telephone industries were deregulated in 1978, 1980, and 1982. Under strict federal regulation since 1954, the natural-gas industry began to exhibit shortages in the late 1960s. By the 1970s, producers were unable or unwilling to supply as much gas as customers wanted to buy at the regulated price. In 1978 Congress set a timetable for deregulation of most natural-gas prices. By 1985, when all gas discovered after 1976 was freed from federal price regulations, gas prices began a steep plunge. After that, federal regulators began to transform natural-gas pipelines into "open access" transporters of gas from various producers. Deregulation not only lowered prices for consumers, but also improved the quality of service by removing the threat of artificially created shortages.

Before 1978, both the maximum and minimum fares for air travel were set by the Civil Aeronautics Board (CAB). The CAB began to loosen its regulations in the mid-1970s. In 1978, Congress passed legislation to abolish the CAB within six years, open up the industry to new competitors, and eliminate government-set fares. Under regulation, intercity airline routes were served by one, two, or three carriers, all charging the same fare; after deregulation both the number of carriers and their prices became highly competitive, including such practices as restricted discounts, promotional fares, reduced off-peak fares, and premium services.

Federal regulation of interstate trucking began in 1935. Throughout the 1960s and early 1970s, economic research showed that trucking rates would be far lower in a competitive marketplace. In response to the growing opposition to interstate regulation, Congress passed legislation in 1980 that virtually deregulated the trucking industry. Deregulation meant shipping rates could be negotiated by individual shippers and carriers, with prices and services tailored to the shippers' needs. While big shippers were in the strongest bargaining position, smaller shippers often needed to consolidate shipments to get a good rate.

The collapse of the merged Penn Central rail line in the mid-1970s prompted a major push to deregulate and transform the railroad sector. Congress passed a bill in 1976 that allowed railroads to merge and to abandon unprofitable routes; in 1980, Congress deregulated rates for some commodities. Gradually, rate deregulation extended to about 90 percent of rail traffic. Rail deregulation led to improved service, improving delivery time by 30 percent.

The first movement toward competitive long-distance telephone service came not from Washington policymakers but from the entrepreneurial efforts of Microwave Communications, Inc. (MCI). In 1969 MCI won federal permission to begin competing with the AT&T monopoly to provide "private-line" long-distance to companies, but did not receive the go-ahead to enter the ordinary long-distance market for businesses or residences. MCI clandestinely began to offer standard long-distance to businesses in 1974 without authorization by the Federal Communications Commission (FCC). The FCC tried to stop MCI, but lost in federal court. The FCC did authorize competition in telephone equipment, a move ratified by the courts in 1977.

As the pressure for competition in the long-distance and telephone-equipment industries began to heat up, the federal government challenged AT&T's use of its monopoly on local telephone service to compete unfairly. Its legal actions finally led to a consent decree in 1982 that split "Ma Bell" into seven local telephone companies and a separate long-distance and equipment business that retained the AT&T name. Equipment prices fell by 6 to 7 percent a year between 1972 and 1987. Competition has also improved quality dramatically and led to the introduction of many new devices and services. Deregulation meant telephone users found that they could shop for bargains in long distance service. Whereas American Telephone and Telegraph (AT&T) and the affiliates and "independents" in its network were at one time the sole suppliers of long distance service, competitors now offered service at rates substantially below AT&T's.

While the history of U.S. financial deregulation began in 1973, the period 1982–90 saw the disintegration of the savings and loan insurance fund and a sizable portion of the thrift industry and regulator-sponsored deregulation that provided increased earning opportunities, and risk, for surviving thrifts and commercial banks.

Japan, Russia, and China

By the early 1980s many capitalist governments reduced government interference in the marketplace, prompting increased competition. Japan's telecommunications monopoly, NT&T, was deregulated in 1985, and European deregulation followed in the mid-1990s.

Before the collapse of communism, governments in most command economies exercised tight control over prices and output through state planning, prohibiting private enterprises from operating in most sectors of the economy, severely restricting foreign direct investment, and limiting international trade. Deregulation involved removing price controls, thereby allowing market forces to set prices. Laws regulating the establishment and operation of private enterprises were abolished, and restrictions on foreign direct investment and trade were relaxed or removed.

In Russia deregulation of prices was imposed through a presidential decree of December 3, 1991, "Measures to Liberalize Prices," which solemnly declared that "on January 2, 1992, [the Russian Federation would undertake] the basic transition to free (market) prices and tariffs, formed under the influence of demand and supply" on producer goods, consumer goods, services, and labor. By the end of 1993, only two sectors, energy and agriculture, were regulated. The state monopoly on foreign trade had effectively been abolished in late 1986, when various branch ministries were given the right to pursue foreign trade independently.

Deregulation in China went through two phases. From 1980 until 1993, government began the partial or total deregulation of public sector enterprises, increasing the autonomy of state-owned enterprises under the "contract responsibility system," under which state-owned assets were leased out. By 1987 over 27,000 state-owned enterprises had been leased out.

The second stage in China's deregulation began in 1993 when the Central Committee of the Chinese Communist Party issued the so-called Resolution on Several Issues Concerning the Establishment of a Socialist Market Economy, which established a 50-point agenda for bold economic reform, including placing the assets of 1,000 large state-owned enterprises under the supervision of new asset management companies; transferring control of 100 large and medium-sized state-owned enterprises to shareholding companies, among other reforms. The plan was stalled by the 1997 East Asia financial crisis, but has resumed.

India

In mixed economies, the role of the state was more limited, but in certain sectors the state set prices, owned businesses, limited private enterprise, restricted investment by foreigners and restricted international trade—alongside an active, growing private sector. India is a good example of a mixed economy that is currently deregulating a large portion of its economy. Deregulation in India has involved reforming the industrial licensing system that made it difficult to establish private enterprises, opening areas that were once closed to the private sector, removing limits on foreign ownership of Indian assets, and lowering barriers to international trade.

Like China, India has also followed a sequenced deregulation pattern since the mid-1970s, when the central government proposed a reduction in the number of industries reserved exclusively for the public sector. India's public sector undertakings are the equivalent of state-owned enterprises, often state monopolies in core or strategic industries, which are the sole suppliers of steel, coal, and oil to industry. A significant percentage (over 70 percent) of the total employment in the industrial sector is in these enterprises; other public sector undertakings exist in noncore or nonstrategic areas, such as hotels and tourism.

Major institutional reforms in the public sector were announced in July 1991 with the passage of the New Industrial Policy, which gradually reduced India's extensive industrial licensing regime. The New Industrial Policy also encouraged reforms of public enterprises in order to make them better performers and more competitive. Beginning August 7, 1996, the Ministry of Industry moved quickly and aggressively to select public sector enterprises for disinvestment. India's economic reforms have continued despite an apparent trend in minority governing coalitions at the center.

Latin America

During the 1980s, many developing countries entered upon a process of deregulation in which government controls over market operations, resource allocation, and capital flows were removed or loosened, a consequence of the oil price shock and the ensuing economic crisis, which forced fundamental reorientation of development strategies across countries and thrust the issue of financial reform onto the policy agenda. Coupled with the economic crisis was a cross-national ideological crusade against state interventionism supported by the World Bank, the International Monetary Fund (IMF), and major industrial powers to expand the role of market forces. In Argentina, Chile, and Uruguay, deregulation included steps to privatize state-owned banks, free interest rates, and eliminate restrictions on capital flows. Contrary to what had been expected by proponents of financial liberalization, reform efforts in the Southern Cone ended in chaotic financial markets, massive inflation, and worsening external imbalances, leading to the reversal of the liberalization process.

The disastrous outcomes raised the question about the appropriate economic and institutional conditions under which financial reform strategies should be designed and implemented.

Unlike their Latin American counterparts, however, the East Asian newly industrializing economies (NIEs) took a cautious and gradual line of action, until the second half of 1997, when many of the East Asian NIEs were struck by the worst-ever financial crisis in the postwar economic history of the region.

Indonesia, Korea, and Thailand

Farrukh Iqbal and William James note that until the mid-1980s, Indonesia lagged behind its East Asian neighbors in deregulating or liberalizing trade and investment policy, due in part to reliable primary sector (mostly oil) revenues. During the latter half of the 1980s, Indonesia made substantial reforms in its trade, investment, and financial regimes: Tariffs were cut, nontariff barriers were reduced, a duty-drawback system was introduced for export activities, a complex investment licensing system was replaced by a much simpler and relatively short "negative list," foreign investment regulations were significantly eased, credit ceilings and interest rate controls were abolished, and entry into the banking system was made substantially easier.

Like many of their neighboring economies, Korea and Thailand opted for a gradual pattern of policy responses, particularly in the initial stages of financial reform. Korea adopted a gradual and piecemeal approach to the liberalization of interest rates and credit controls, but gave greater freedom to nonbank financial institutions, such as finance companies, merchant banking corporations, and securities firms, to mobilize savings and develop the financial system.

In Thailand, the authorities placed more emphasis on expanding the role of the banking system in service diversification and financial development. Thailand, which had maintained relatively relaxed controls over its external financial transactions, further deregulated the remaining controls while liberalizing the domestic financial market.

Effects

Sarkis Khoury sees the deregulated international financial environment as having been developed partially by design, but largely as a result of the dynamic market forces that produced more competitive markets all over the world and "leaner and meaner" financial institutions, with consolidation through mergers and acquisitions reducing the number of firms and increasing competition among the larger, remaining institutions. Khoury predicts that competition will only continue to increase as markets become more global and as new, aggressive entities come into the market. The Japanese firms which were once nowhere on the list of prominent financial institutions are now dominant in the world of finance. The Koreans and the Chinese have become major players. European financial institutions have streamlined their operations, and improved their product mix and their resource base in order to better compete more successfully in a united Europe.

While governments have taken a proactive strategy to deregulate their industries and financial markets, to open trade and foreign direct investment in order to stimulate sluggish economies, the permanency of the changes is still in doubt. A severe worldwide economic setback could prove a real test. Again, it must be emphasized that regulation is cyclical and potentially reversible. As Barbara Emadi-Coffin argues in her study of deregulation and governance, while deregulation implies the roll-back of the state, in fact, deregulation and the establishment of free trade zones have necessitated extensive government regulation and subsidy.

A financial crisis in 2008 had its roots in the Gramm-Leach-Bliley Act (1999), a bank deregulation bill, that swept away a Depression-era law known as Glass-Steagall. Gramm-Leach-Bliley tore down the separation of banks doing risky investments from those doing basic lending. In addition, some investment banking houses make risky bets that went awry in 2008. American policy makers and regulators let Wall Street recklessly invest in the context of extremely inflated housing prices (a bubble). Also to blame was the Commodity Futures Modernization Act, which freed the derivatives market and enabled banks to become more aggressive in their mortgage investments.

See Also: AT&T; Competition; Mortgage Credit Crisis of 2008; Regulation.

Bibliography. Anders Aslund, *How Russia Became a Market Economy* (Brookings Institution, 1995); Sean Barrett, *Deregulation and the Airline Business in Europe* (Routledge, 2009); Martha Derthick and Paul J. Quirk, *The*

Politics of Deregulation (Brookings Institution, 1985); Barbara Emadi-Coffin, *Rethinking International Organization: Deregulation and Global Governance* (Routledge, 2002); John Hood, "Dividends of Deregulation," *Policy Review* (v.84, 1997); Farrukh Iqbal and William E. James, *Deregulation and Development in Indonesia* (Praeger, 2002); Sarkis J. Khoury, *The Deregulation of the World Financial Markets: Myths, Realities, and Impact* (Quorum Books, 1990); David Leonhardt, "Washington's Invisible Hand," *New York Times* (September 26, 2008); Paul W. MacAvoy, *The Unsustainable Costs of Partial Deregulation* (Yale University Press, 2007); John R. Meyer et al., *The Transition to Deregulation: Developing Economic Standards for Public Policies* (Quorum Books, 1991); Tom W. Norwood, *Deregulation Knockouts. Round Two* (Airways International Inc., 2006); Jeffrey Worsham, *Other People's Money: Policy Change, Congress, and Bank Regulation* (Westview Press, 1997); Xiaoke Zhang, *The Changing Politics of Finance in Korea and Thailand: From Deregulation to Debacle* (Routledge, 2002).

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Deutsche Bahn

The German National Railway Company, Deutsche Bahn AG, was founded on January 1, 1994, taking over from the state railways of Germany, the Deutsche Bundesbahn ("German Federal Railways") in West Germany, and the Deutsche Reichsbahn ("German State Railways") in East Germany. Its origins lie in the establishment of the railway network in Germany that started with a steam locomotive in Bavaria running between Nürnberg and Fürth in 1835 and the first long-distance railroad from Leipzig to Dresden in 1839.

When the German Empire was founded in 1871, there were a number of state railways operating in various parts of the new country. To make this easier to maintain, the Deutscher Staatsbahnwagenverband ("German State Railway Wagon Association," or DSV) was created to standardize the wagons used. German railway expertise was outside Germany, with German engineers working in the Ottoman Empire before World War I, especially on plans to build the Baghdad Railway and the railway to Mecca (which was bombed by T. E. Lawrence). In 1920 standardization of the network continued with the formation of the Deutsche Reichsbahn; in 1924 it became the Deutsche Reichsbahn-Gesselschaft ("German State Railway Company"—DRG), which continued until 1945.

By the end of World War II, the network had been seriously damaged, and Germany had been divided into four zones. Each of the occupying powers established their own network with West Germany, from 1949, forming the Deutsche Bundesbahn, and East Germany retaining the old name, Deutsche Reichsbahn. Technically, the Deutsche Bundesbahn also had access to the railway that went from the West German–East German border to West Berlin, although the line was owned by the East Germans. It was the closing of this line in 1948 that contributed to the Berlin Blockade and the subsequent Berlin Airlift.

With the reunification of Germany on October 3, 1990, there was a need to unify the network that operated with different locomotives and rolling stock, but had the same gauge. This was the reason for the establishment of Deutsche Bahn AG in 1994 as a public limited company, although all the shares were owned by the government of the Federal Republic of Germany that had long planned a privatization of the company. However, before that could be achieved, an extensive administrative railway reform, or *Bahnreform*, took place. Initially this saw the structure changed to that of a private company, and then in 1999, the track, personnel, and assets were divided into five subsidiary organizations.

The Deutsche Bahn Reise & Touristik AG (later renamed the Deutsche Bahn Fernverkehr AG) handles long-distance passenger services, with the Deutsche Bahn Regio AG covering regional passenger services. Deutsche Bahn Cargo AG (now Railion AG) provides freight services, Deutsche Bahn Netz AG runs the railway system, and Deutsche Bahn Station & Service AB controls the stations. Hartmut Mehdom, a German who was born in Warsaw in 1942, has been the chairman since December 16, 1999.

There is much controversy over the plans to privatize the railway network, with the government arguing that it will make the company more efficient and raise fresh capital for an upgrade of the system. However, there are economic and political concerns—

first about Deutsche Bahn maintaining an effective monopoly over rail transport, and politically about worries that a privatized company might reduce its labor force. This led to a strike by rail engineers, the first on the railways since the 1992 nationwide strike. With the company worth an estimated €200 billion, it seems likely that the government might sell the shares in several tranches, initially retaining a 51 percent stake, and then gradually lowering this.

See Also: Company Profiles: Western Europe; Germany.

Bibliography. "Business: Deutsche Bahn: Summer of Discontent," *Economist* (v.384/8540, 2007); Tim Engartner, *Die Privatisierung der Deutschen Bahn: über die Implementierung marktorientierter Verkehrspolitik* [The Privatization of the German National Railroad: On the Implementation of Market-oriented Transportation Policy] (VS Verlag für Sozialwissenschaften, 2008); Brian Garvin and Peter Fox, *DB: German Federal Railway* (Platform 5, 1998); Roy E. H. Mellor, *German Railways: A Study in the Historical Geography of Transport* (University of Aberdeen, 1979); Alfred C. Mierzejewski, *The Most Valuable Asset of the Reich: A History of the German National Railway* (University of North Carolina Press, 1999).

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Deutsche Bank

Deutsche Bank was founded in 1870 by Adelbert Delbrück (a private banker) and Ludwig Bamberger (a politician and currency expert). In the beginning it focused on foreign trade and was involved in the development of Germany's electrical, engineering, iron, and steel industries.

Soon after its establishment, a period of rapid expansion followed, with branches opening outside Germany. Shanghai and Yokohama in 1872 were the first branches to be established, followed by the London branch the next year. Deutsche Bank expanded in the United States, too. In the beginning, this was accomplished via partnerships, but in 1979 it established its first branch under its own name in New York. The solid base generated in Germany was a major support for the bank's ability to finance its foreign businesses. Deutsche Bank started buying other major banks as early as 1876. In the 1890s, the bank formed alliances with banks in various locations in Germany, strengthening its presence in various industrial regions of the country.

Continuing domestic investments, Deutsche Bank merged with Disconto-Gesellschaft in 1929, the largest merger in German banking industry. In the 1930s, the bank became a tool of the Nazi state. That period was almost catastrophic for the bank. In 1947 it was divided into 10 smaller banks, which merged in 1957, reestablishing Deutsche Bank. In the 1980s and 1990s, Deutsche Bank managed to build a worldwide network of branches. It was also involved in acquisitions, and at the same time established subsidiaries around the world.

Deutsche Bank continued its worldwide expansion strategy in the new millennium. In 2001 it was listed on the New York Stock Exchange (NYSE). In Europe, it acquired Rued Blass & Cie (2002) and Russian investment bank United Financial Group (2006) in order to support its private banking business. However, it did not neglect domestic investments—it acquired Noris Bank and Berliner Bank. This move strengthened its retail business in Germany, but its investments were not limited to that—there was also expansion into the markets of China, India, and Russia.

Deutsche Bank offers its services not only to corporate and institutional customers, but also to private and business clients. Grouping the services offered, the bank can be divided into two divisions. First, the Corporate and Investment Bank Group Division deals with capital markets. It involves the origination, sales, and trading of capital markets products including debt, equity, and other securities, together with its corporate advisory, corporate lending, and transaction banking businesses. This division is further subdivided into (1) Corporate Banking and Securities, whose main services are the origination, sales, and trading of capital market products, corporate advisory and corporate financing businesses, asset finance and leasing, and commercial real estate; and (2) Global Transaction Banking, whose main services are trade finance, cash management, trust, and security.

On the other hand, the Private Clients and Asset Management Division offers investment management services to both private and institutional clients. It services private individuals and small and medium-sized business with traditional banking activities. It is further subdivided into (1) Asset and Wealth Management, which offers traditional asset management, alternative assets, real estate asset management, and mutual funds to retail clients across the globe as well as wealth management, portfolio management, tax advisory, inheritance planning and philanthropic advisory services; and (2) Private and Business Clients, which offers banking services (loans, current accounts, deposits and payment services, securities and mutual funds, and portfolio investment advisory) to private customers as well as small and medium-sized business clients in Germany and seven other countries across Europe and Asia.

The bank has a presence in 75 nations worldwide through its 1,922 branches, 986 of which are in Germany (as of 2008). More than half of its 80,253 employees work outside Germany. Its mission is to be the leading global provider of financial solutions for demanding clients, creating exceptional value for its shareholders and people. In fulfilling the above, Deutsche Bank's strategy aims at accelerating global growth, maintaining strict cost, risk, and capital discipline. It also aims at taking advantage of synergies across complementary business lines. Future investment options will include not only organic growth, but also acquisitions of other organizations, which will contribute to the successful global presence of the bank.

See Also: Bank of America Corp.; Bank of China; Germany; Globalization.

Bibliography. *Deutsche Bank* (WetFeet, 2008); Deutsche Bank, www.db.com (cited March 2009); "Finance and Economics: Snakes and Ladders; Deutsche Bank," *Economist* (v.386/8568, 2008); Christopher Kobrak, *Banking on Global Markets: Deutsche Bank and the United States, 1870 to the Present* (Cambridge University Press, 2008).

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Deutsche Post

The German postal company that now is also involved in logistics and courier services, Deutsche Post AG was refounded in 1995, taking over from a company of the same name that had a mail monopoly in Germany. Although the word *Reichspost* was used by Franz von Taxis as early as 1495, the German postal service in its current form was the Deutsche Reichspost, which was established in 1871 with the unification of Germany, and operated until the end of World War II.

Initially after the war, the various Allied-controlled postal authorities issued their own postage stamps and ran their own services. Subsequently four entities took over, the major ones being the Deutsche Bundespost (German Federal Post Office) that operated in West Germany and the Deutsche Post DDR in East Germany. Because of its different status, there was also a Deutsche Bundespost Berlin for West Berlin, and a separate postal authority for the Saar until 1956. In 1990 the Deutsche Bundespost took over having a monopoly on postal services until 1995 when it became Deutsche Post AG.

Prior to 1871, the various states in Germany operated their own postal services, with the people in Prussia and nearby places using those of the North German Confederation. King Wilhelm I of Prussia had, on January 18, 1871, been proclaimed emperor of Germany, and he started unifying the various agencies of the German states. The first German Imperial Parliament met in March 1871, and on May 4, 1871, the German Reichspost officially came into being. Wurttemberg was allowed to use its own stamps for a period, with stamps for official state business until 1923; and Bavaria was also allowed to issue its own postage stamps until 1920.

To show the unity of Germany, the first postage stamps issued by the Reichspost in 1872, "inscribed Deutsche Reichspost," had the Imperial Eagle, and ranged in value from ¼ Groschen to 18 Kreuzers. Demand was such that some were reprinted by the Prussian State Printing Office in July 1872. In 1875 the old currency was replaced by the Pfennings and the Marks, and new stamps were issued. From 1900, stamps started showing "Germania," a figure embodying the German spirit. In that year some larger stamps were also issued by the post office, featuring the General Post Office in Berlin, the unveiling of the Kaiser Wilhelm I Memorial in Berlin, and Wilhelm II speaking at the 25th anniversary of the founding of Germany in 1896.

In 1902 the stamps were designated "Deutsches Reich" and this continued until 1944, when a stamp showing Hitler had the caption "Gross Deutsches Reich." From 1945, the Allied occupying powers issued their own stamps with "Deutsche Post," and from 1951, the stamps of West Germany were designated "Deutsche Bundespost." Those of West Berlin were inscribed "Deutsche Bundespost Berlin," and those of East Germany had "Deutsche Demokratische Republik" or "DDR" on them. After the reunification of Germany, the stamps continued to have "Deutsche Bundespost" on them until May 1995, from when they were designated as "Deutschland."

This change signified the creation of Deutsche Post AG, which maintains its headquarters in Bonn and has divided its operations into four sectors. One is in charge of mail delivery and handles about 70 million letters, with deliveries on every day except Sunday. It also has direct connections with most countries in the world for delivery of mail overseas and receipt of mail from these countries. The second sector of Deutsche Post, under the DHL brand, covers courier services, express, and parcel shipment around the world. The logistics section, also operating under DHL, handles long-term contracts with major companies; and the last sector of the business is financial services, with a retail banking network in Germany for about 14.5 million customers. Privatized in 2000, Deutsche Post claims to be the leading logistics provider in the world. It employs about 520,000 employees in almost every country in the world. It has revenue of $80.65 billion (2006).

See Also: Deutsche Telekom; Germany; United Parcel Service; U.S. Postal Service.

Bibliography. Jennifer Lach, "Deutsche Delivers," *American Demographics* (v.22/2, 2000); Nils Machemehl, *Deutsche Post, Logistics: Update.* Equity Research Germany (Investment Research, 2005); John Parker, "Deutsche Post Hones Images," *Traffic World* (v.261/10, 2000).

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Deutsche Telekom

Formed in 1996 from the Deutsche Bundespost (German Federal Post Office), Deutsche Telekom is the largest telecommunications company in Germany and also in the European Union. When it was controlled by Deutsche Bundespost, the telephone service in Germany had been part of the state-owned monopoly that also controlled the postal services.

After the establishment of the first telephone services in the United States, it was not long before the first telephone network was established in Germany. In 1880 the first telephone exchange in Germany was built in Mulhouse, in Alsace, then a part of Germany but now a part of France. The builders wanted to get a government permit to start operations, but the authorities in Berlin did not want a telephone service in Mulhouse before there was one in the German capital, so Berlin quickly opened its exchange in January 1881, initially with eight subscribers. The exchange had capacity for 99 people, and they were dubbed by the press the "99 fools." However, by May 1882, there were 699 subscribers, and the service grew rapidly after that, with the Berlin Boerse (stock exchange) having a large number of lines for its brokers to use.

The Reichspost—which also ran postal services—also continued with the telephone service, and by 1888 the Berlin Telephone Exchange was able to claim that it had more telephone connections than any city outside the United States. Two years later, a public "pay

The headquarters of Deutsche Telekom in Bonn displays the logos of T-Mobile International, a wholly owned subsidiary.

phone" was established in each of the 10,000 local post offices. The service became better during World War I with the increased use of military engineers, and was also adapted and improved after the war by the Inter-Allied Control Commission.

During the 1920s and 1930s, the telephone system continued to grow, with international calls possible, some by radio. It was even possible—at a cost—to telephone zeppelins such as the *Hindenburg*. During World War II, the Germans connected conquered territories in eastern Europe to their telephone network. However, much of the phone system in eastern Germany was destroyed in late 1944 and 1945, although many lines survived—a Soviet soldier was able to telephone the Berlin Bunker where an astonished Josef Goebbels answered the telephone.

After the war, the system was repaired and much of the network in Berlin and in many other cities were working reasonably well by the end of 1945. There were then two systems in operation, one covering West Germany and West Berlin, and the other for East Germany. There were also separate networks established by the Americans and the British, but these were quickly merged with the West German system. In spite of the Cold War, it remained possible to telephone from West Germany to East Germany and vice versa, but there were occasional technical difficulties. Nevertheless, the system did work well and with the unification of Germany on October 3, 1990, the two systems were both held under Deutsche Bundespost, although moves were already afoot to split the postal and telephone services of the company, as had happened in so many other countries in the world.

In 1996 Deutsche Telekom was privatized, but the German government has continued to hold a stake in it. The expectation was that the new company would be able to raise capital more easily and be more efficient. Instead, with privatization, the government was forced to break the telephone carrier's monopoly; this led to some 1.5 million customers leaving them for rival companies in 2005 and 2006. As a result, Deutsche Telekom shed 30,000 workers as its stock price fell dramatically. At the height of the speculative fever, shares went as high as €100, but later fell to €12, and in August 2008 they were trading at €10.97.

See Also: AT&T; Deutsche Post; Company Profiles: Western Europe; Germany.

Bibliography. "Deutsche Telekom—Bad Connection," *Economist* (v.387/8575, 2008); Christian Hilpert, *Strategische Perspektiven die Deutsche Telekom im deregulierten Marktumfeld* [Strategic Perspectives on the German Telecom Deregulated Market Environment] (VDM Verlag Dr. Müller, 2007); Gerhild H. M. Komander, *1881: Berlins erstes Telefonbuch* (Story Verlag, 2006); Eli Noam, *Telecommunications in Europe* (Oxford University Press, 1992); "Research and Markets Ltd.; Germany Has Europe's Largest Telecom Market, Supported by a Large and Affluent Population," *Computers, Networks & Communications* (August 18, 2008).

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Devaluation

Devaluation occurs when a government or its central bank reduces the official price at which its currency can be bought on the foreign exchange (Forex) market. For example, suppose that the current $/£ exchange rate was 2:1, meaning that two USD had to be given up for each 1GBP or, equivalently, that 1GBP was worth 2 USD. If the GBP were devalued, this would mean that fewer USD had to be exchanged for each GBP, meaning that GBP had become cheaper in dollar terms.

Devaluation occurs under a fixed exchange rate regime. Under such a regime the government is committed to a particular exchange rate and manages its foreign exchange reserves (holdings of foreign currencies and gold) to ensure that this rate is maintained. Because a country's holdings of foreign exchange reserves are closely related to its balance of payments, the extent to which a government is able to maintain a fixed exchange rate is also affected by the balance of payments. For example, a country that has a deficit on its external account would face a positive net supply of its currency as domestic residents seek to pay for their net imports. This, in turn, would place downward pressure on the exchange rate and the government would intervene to defend it by buying its domestic currency on the Forex markets. This mechanism works in the opposite direction in the case of a revaluation.

The operation of this balance of payments mechanism can impose severe macroeconomic costs on the country effecting devaluation. Often, devaluation occurs because of persistent trade deficits caused by a country experiencing higher rates of inflation (or lower levels of productivity growth) compared to its trading partners. To overcome this problem, one solution is to impose contractionary fiscal and monetary policies to reduce inflation in an effort to restore international competitiveness. Such policies can result in significant reductions in the standard of living for domestic residents in the following ways: Reduction in government expenditure on education, health, social, and welfare programs. In certain cases, the International Monetary Fund (IMF) requires the imposition of such policies as a pre-condition for international borrowing. In more serious cases, and to avoid a conflict between external policy objectives (deficit on external account) and internal policy objectives (low levels of unemployment), countries can devalue their currency. The advantage of devaluation in this case is that by making the currency less expensive, deflationary pressures are subdued.

Historically, countries that have devalued their currencies have suffered relatively lower rates of growth in productivity and this, in turn, has resulted in significant deficits on the external account. A classic example of this situation was Britain in 1967. It is often the case that heavy international speculation precedes devaluation. This is because speculators hope to benefit from purchasing a currency at a lower price and selling it after revaluation. In the preceding example, the Bank of England spent £200 million on November 19, 1967, trying to defend sterling against speculative attack. Similarly, in a more recent British example—the decision to take sterling out of the European Exchange Rate Mechanism in 1992—the chancellor of the exchequer authorized the Bank of England to spend billions of pounds trying to defend sterling from speculative attack.

Devaluation can be beneficial for a number of reasons, especially in the short term. For example, it makes exports relatively cheaper with consequent benefits for the trade balance. In the short run, it is possible that a devaluation will worsen the external account. This is because contracts agreed before devaluation have to be honored after devaluation, but using a cheaper currency. Only in the longer term, when contracts are renegotiated and when the full impact of the devaluation on exports has occurred, will the external account improve. Additionally, there are two other factors that can undermine the long-run benefits from devaluation. The first is that if a country continues to have relatively high rates of inflation (or relatively low rates of productivity growth) after devaluation, any costs advantage will quickly be eroded and eventually reversed; this may require another devaluation. Second, and particularly in times of a global recession (for example, during the 1930s), devaluation by one country can trigger a series of competitive devaluations by other countries.

Devaluation can also generate disadvantages. Devaluation increases the costs of imported goods and can result in imported inflation. This imported inflation can generate a wage-price spiral as workers demand higher wages to compensate for the higher costs of imported products. These disadvantages are exacerbated the more dependent a country is on imported foodstuffs and energy. A further problem is that devaluation can reduce efforts to improve competitiveness. This is because in the short term devaluation removes the need to lower costs to increase exports; in the long-run, if the "breathing space" offered by devaluation is not used to improve productivity, the country will end up with the same problems it had prior to devaluation.

See Also: Currency; Currency Speculators; Foreign Exchange Market; Foreign Exchange Reserves; Revaluation.

Bibliography. Mohsen Bahmani-Oskooee, Scott W. Hegerty, and Ali M. Kutan, "Do Nominal Devaluations Lead to Real Devaluations? Evidence from 89 Countries," *International Review of Economics & Finance* (v.17/4, 2008); Arran Hamilton, "Beyond the Sterling Devaluation: The Gold Crisis of March 1968," *Contemporary European History* (v.17, 2008); R. G. Lipsey and K. A. Chrystal, *Positive Economics*, 8th ed. (Oxford University Press, 1995); James R. Owen, *Currency Devaluation and Emerging Economy Export Demand* (Ashgate, 2005); Mriduchhanda Paul and Sajal Lahiri "The Effect of Temporary Devaluation on Foreign Investment: A Trade-theoretic Analysis and an Application to Mexico," *Journal of International Trade & Economic Development* (v.17/2, 2008).

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Development Assistance

Development assistance, (or synonyms such as technical assistance, international aid, overseas aid, foreign aid, development aid, or development cooperation) is aid given by bilateral and multilateral agencies to support the socioeconomic and governance development of developing countries. It is provided by governments through their bilateral aid agencies such as the Canadian International Development Agency (CIDA), the U.S. Agency for International Development (USAID), the United Kingdom Department for International Development (DFID), or through multilateral institutions such as the World Bank, regional development banks, or through international development nongovernmental organizations. Development assistance focuses on poverty alleviation and governance as opposed to emergency relief or humanitarian aid, which aims at alleviating suffering following crises such as war or natural disasters.

Official development assistance has three main characteristics: (1) it is undertaken by government bilateral and multilateral organizations; (2) promotion of socioeconomic development and governance is the main objective; and (3) it has favorable terms, including donations and concessional loans, which have low interest rates on a longer repayment period including a grace period for repayment. Development assistance, as a flow of resources between developed and developing countries, differs from remittances—financial transfers sent home by foreign workers—or foreign direct investments made by multinational corporations. Most recently, some have included in the definition a security-related spending component, which is debated by several nongovernmental organizations, which argue that any military expenses, for example, cannot be accounted as development assistance.

Evolution

Development assistance emerged in the post–World War II, Cold War period. Development assistance began with a "modernist" paradigm involving the transmission of technical knowledge and technology in large infrastructure projects and in "universal" programs, such as programs in public health, most often funded and led by governmental and multilateral agencies. The focus of development assistance over the decades shifted from mainly large physical capital- and technology-intensive infrastructure to human education, population control, and after the 1980s, to policy reforms in the form of the structural adjustment plans, and decentralization in the 1980s and 1990s. Overall, although large infrastructure projects have remained central in development assistance, there has been an increased recognition of the importance of smaller scale, local capacity-building projects led or managed jointly by governments and nongovernmental organizations. Different forms of partnerships, in the form of collaborations, cross-sectoral partnerships, and cooperation have emerged.

The domain of international assistance changed in the 1990s due to several factors. The first one concerns the emergence of national and international NGOs (nongovernmental organizations) also labeled "civil society" or "third sector organizations" or associations. This has been referred to as "the rise of global civil society." The second factor has dealt with the emergence of new conceptions of "development" and "poverty," especially under the influence of Martha Nussbaum and Amartya Sen.

Sen's definition of development goes beyond the economics-based definition of poverty, which often tends to misrepresent the level of well-being of an individual or of a community. Sen argued that the most important factor to human beings does not concern income or consumption per se, but rather the capacity to realize their potential as individuals and groups and to achieve what they truly value. Sen views the removal of structural "un-freedoms," or obstacles to human beings to achieving what they truly value, as a central element of poverty alleviation strategies and as a way to achieve individual and collective development. This new conception of development has been translated into measures of development including, among others, the Human Development Index.

The third factor concerns a major policy change toward aid effectiveness, which questioned the practice of international development assistance. Aid effectiveness has questioned the notions, the policies, and practice of international development, arguing that there was limited evidence of the effectiveness of its programs. It has led to rethinking the evaluation of processes and outcomes of development assistance. The fourth factor has aimed to connect aid—often operated and led by international cooperation agencies such as CIDA, Agence Française au Développement, USAID, and others—to development through trade, often led by trade departments, especially for Africa under the Clinton and Bush administrations in the United States. The fifth factor concerns the emergence of global private foundations such as the Bill and Melinda Gates Foundation.

In September 2000 the Millennium Summit was concluded by a common declaration of 191 heads of states to eight objectives on global poverty reduction for 2015 through concerted actions, which includes a reporting system to assess progress each year. The Millennium Development Goals create a template with objectives for coordinated activities to prevent duplication of efforts, which existed in parallel bilateral aid relations, and promote collaboration between sectors along commonly-defined objectives.

Quantitatively, the levels of aid funding promised by donor countries have most often not been translated into actual funding. Resolution 2626 adopted at the United Nations (UN) General Assembly on October, 24, 1970, assessed for each economically advanced country the objective of giving 0.7 percent of its gross domestic product (GDP) by 1975 in development assistance. Resolution 35/36 at the UN General Assembly on December 5, 1980, reassessed this objective. Two decades later, the 2000 Millennium Summit recognized that this objective for all the economically advanced countries to give 0.7 percent of GDP to the official public assistance had not been achieved. As of 2003, only five OECD countries were giving 0.7 percent of their GDP in foreign aid. The United States was providing 0.14 percent of its GDP to official assistance. In all, it is estimated that official development assistance has amounted to between $50 billion and $60 billion per year.

Structural and Contextual Limitations

Development assistance needs to be understood and evaluated in the broader context of North-South/international relations and country-level structural constraints. On the global level, agricultural subsidies in the United States and in Europe penalize developing countries' exports and create conditions of unfair trade, as poorer countries face high barriers to access to international markets in products such as cotton. Second, it has been argued that the effectiveness of development assistance needs to be taken into account within changes in economic policies. Third, it has been argued that international/multinational corporations in oligopolistic positions control large areas of trade and severely restrict conditions for international trade. International assistance has been criticized for not addressing structural conditions to countries such as unequal access to means of production, including land.

Development assistance has been criticized on several accounts. The first critique concerns more particularly bilateral aid. It has been argued that large amounts of funding were dedicated to supporting strategically important leaders and regimes, especially in sensitive regions and during the Cold War. A second critique concerns the form of aid; several anthropologists have contended that developed countries were projecting their own needs, values, and solutions onto other societies through development assistance, regardless of local needs. Such projections have led to increased inequalities and disruption.

A third critique has proposed that development assistance creates dependency and corruption as funding flows into developing countries. This inflow of funds may discourage local production and distort local markets. Last but not least, the final critique concerns "red tape," or the "bureaucratization" of international development assistance. It has been argued that developed countries have put so many conditions on aid that it has reduced aid effectiveness and distracted the focus from development outcomes in the countries per se to managing relations with donor countries.

New Business and Development Assistance

New forms of development assistance that connect the business sector with the aid and governmental sectors have emerged over the last few years. Several have proposed that globalization of business activities could have the potential to successfully address development issues. These new business–development assistance approaches include, among others, new market solutions, microcredit and microfinance, the UN Development Programme's Growing Inclusive Market approach, the Bottom of Pyramid, and several initiatives related to information technologies and communication in order to reduce the digital divide between technologically advanced and poor countries. In all, there is an increasing trend toward more partnerships across sectors related to development assistance.

See Also: International Development Agency; Less Industrialized Countries; Modernization Theory; Organisation for Economic Co-operation and Development; U.S. Agency for International Development.

Bibliography. A. Agrawal and C. C. Gibson, "Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation," *World Development* (v.27/2, 1999); F. Bird, E. Raufflet, and J. Smucker, *International Businesses and the Dilemma of Development, Case Studies on Global Responsibilities and the Practices of Businesses in Developing Areas* (MacMillan, 2004); M. Brzoska, "Extending ODA or Creating a New Reporting Instrument for Security-related Expenditures for Development?" *Development Policy Review* (v.26/2, 2008); Georges Casamatta and Charles Vellutini, "Clientelism and Aid," *Journal of Development Economics* (v.87/2); Emma Crewe and Elizabeth Harrison, *Whose Development? An Ethnography of Aid* (Zed Books, 1999); William Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good* (Penguin, 2006); Helmut Führer, *The Story of Official Development Assistance. A History of the Development Assistance Committee and the Development Co-operation Directorate in Dates, Names and Figures* (OECD, 1994); P. Jackson, "A Prehistory of the Millennium Development Goals: Four Decades of Struggle for Development in the United Nations," *UN Chronicle* (v.44/4, 2007); Oxfam, "Paying the Price: How US Farm Policies Hurt West African Cotton Farmers—and How Subsidy Reform Could Help," Research Report (Oxfam, 2007); C. K. Prahalad, *The Fortune at the Bottom of the Pyramid* (Wharton School Publishing, 2004); L. M. Salamon, *The Global Associational Revolution: The Rise of the Third Sector on the World Scene* (Johns Hopkins University, Institute for Policy Studies, 1993); J. C. Scott, *Seeing Like a State, How Certain Modern Schemes to Improve Human Condition Have Failed* (Yale University Press, 1996); Amartya Sen, *Development as Freedom* (Anchor Books, 1999); Joseph E. Stiglitz, *Globalization and Its Discontents* (W. W. Norton 2002); Elaine Venter, "A Work in Progress," *Finance and Development* (v.45/3, 2008); Craig Wilson and Peter Wilson, *Management Poverty Business: Increase Profits and Reduce Risks by Engaging with the Poor* (Greenleaf, 2006; James D. Wolfensohn, *A Case for Aid Building a Consensus for Development Assistance* (World Bank, 2002).

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Diffusion of Innovation

The sociological theory of diffusion of innovation analyzes the development, adoption, and success of inventions, new ideas, processes, and technologies. With globalization and worldwide interconnectedness of business, cultures, and communications steadily increasing, the spread of innovation is more often accelerated as diffusion patterns change. As the adoption or rejection of new abstract ideas depends significantly on the attitudes of individuals, groups, organizations, or nation-states, the communication and persuasion means employed to influence potential adopters are of the highest significance for the diffusion of innovation. Ultimately the adoption or rejection of innovations may initiate or accelerate structural change.

Diffusion refers to "the process in which an innovation is communicated through certain channels over time among the members of a social system." Innovations are new ideas, the new application of innovations, or an idea perceived as new. When it comes to the adoption of innovations and ideas, one of the central questions surrounding diffusion research is the identification of differences between early and late adopters.

Innovativeness refers to the willingness and ability to adopt new ideas earlier than other people or groups. Are some actors more open to innovation than others? The literature identifies six factors that characterize adopters: (1) societal entity of innovators, (2) familiarity with the innovation, (3) status characteristics, (4) socioeconomic characteristics, (5) relative position in social networks, and (6) personal characteristics. Apart from these actor-specific characteristics, the nature of the environment is also important in terms of adoption and diffusion.

Although the focus of many diffusion studies is more upon the individual and group attitudes toward innovation or the environmental context, the adoption of innovation also has consequences for the actor(s): these consequences can be differentiated into private and public consequences. The adoption of innovation that results in private consequences includes innovation that directly shapes the well-being and structures of individuals, small organizations, and communities. Public consequences tend more to involve and influence macro-structures, and societal and historical issues. In more recent years, the role of the media in the diffusion of innovation and the persuasion of actors has been recognized.

A further area of interest is the role of the perceived attribute of an innovation in the rate of adoption. Individuals may understand innovation based on (1) the relative advantage of the innovation in comparison to existing solutions and practices, (2) its compatibility with existing and potential needs and experiences, (3) its complexity in terms of the degree of understanding, (4) the trialability, that is, to experience the innovation to a certain degree and time period, and (5) the observability or degree to which an innovation or its results are observable. The thesis is that if individuals see the success of an innovation they are more likely to adopt it.

Time is a critical element in the diffusion of new ideas as it involves (a) the innovation-decision process, (b) innovativeness, and (c) the innovation's rate of adoption. The innovation-decision process is a process of learning about the innovation, the building of an attitude toward the innovation that results in the decision to either adopt or reject the innovation, the modes and extents of the implications of the innovation, and confirmation of the decision. An S-shaped diffusion curve distinguishes earlier adopters from late adopters. The curve starts slowly in line with the few early adopters, followed by an overproportional growth, followed by a stagnation phase. The five adopter categories include innovators, early adopters, early majority, late majority, and laggards.

In 1903 French sociologist Gabriel Tarde identified the "laws of imitation," that is, the diffusion of the innovation process that explains the rate of adoption or the diffusion rate. Tarde recognized that the rate of adoption follows the S-shaped diffusion curve. Years later, a number of European anthropologists in England and Germany-Austria used diffusion research to explain the consequences of innovation as they pertain social change in a society. One of the early explicit diffusion studies was conducted by Ryan and Cross in their examination of the spread of hybrid-corn use in 1943. In his seminal 1962 book *Diffusion of Innovation*, Everett Rogers identified major diffusion research traditions ranging from anthropology, sociology, education, communication, marketing and management, and geography. From then on, various disciplines used diffusion research to analyze the sequence and consequences of innovations.

Everett Rogers identified eight main types of diffusion research: Earliness of knowing about innovation, rate of adoption of different forms of innovation in a social system, innovativeness, opinion leadership, diffusion networks, rate of adoption in different social systems, communication channel usage, and consequences of innovation. The study of the diffusion of innovation is relevant for areas such as information system research, knowledge management, marketing, change management research, and social change research.

See Also: Technology; Technology Transfer.

Bibliography. Susan A. Brown, Norman L. Chervany, and Bryan A. Reinicke, "What Matters When Introducing New Information Technology," *Communications of the ACM* (v.50/9, 2007); Kenneth H. Keller, "From Here to There in Information Technology," *American Behavioral Scientist* (v.52/1, 2008); Constantinos Markides, "Rethinking Innovation," *Leader to Leader* (v.34, 2004); Everett M. Rogers, *Diffusion of Innovations,* 5th ed. (Free Press, [1962] 2003); Everett M. Rogers, "New Product Adoption and Diffusion," *Journal of Consumer Research* (v.2, 1976); Barbara Wejnert, "Integrating Models of Diffusion of Innovations: A Conceptual Framework," *Annual Review of Sociology* (v.28/1, 2002); Wa Wulf, "Changes in Innovation Ecology," *Science* (v.316/5829, 2007).

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Direct Export

Direct exporting involves personally handling every aspect of the exporting process from market research and planning to foreign distribution and collections. Therefore, a significant commitment of management time and attention is required to achieve superior results, making this the most ambitious form of exporting. Nevertheless, this approach is probably the best way to maximize profits, obtain the most control over the process, develop closer relationships to the overseas market, and achieve long-term growth.

A company usually begins exporting by treating its export sales no differently than its domestic sales, using existing personnel and organizational structures. A small firm is likely to have just a single export manager who has the responsibility for the full gamut of international activities. As international sales increase, it is likely to separate the administration of exports from that of domestic sales. Larger firms or those at advanced stages of exporting may decide to retain an international division or organize along product or geographic lines. A firm with distinct product lines is more likely to create an international department in each product division, while those that have products that have common end users are more likely to organize geographically.

Irrespective of how the firm organizes its exporting efforts, its success in foreign markets depends less on the unique attributes of its products and more on sound marketing methods. Proper channels to handle direct exporting include sales representatives, distributors, foreign retailers, and direct sales to end users.

Sales representatives are also called manufacturer's representatives or a sales agents. They use the firm's product literature and samples and present them to potential buyers. A sales representative typically handles many complementary lines that do not conflict and works on a commission basis, essentially as a broker assuming neither risk nor responsibility for servicing the product after the sale. They are usually under a contract that clearly defines the period of the agreement, their territorial jurisdiction, whether or not they will operate on either an exclusive or a nonexclusive basis, the method of compensation, and limits on legal authority of the representative to obligate the company.

Foreign distributors are merchants who purchase goods from an exporter at a substantial discount and subsequently resell it for a profit. They also generally provide support and service for the product and carry an inventory of sufficient supply of spare parts. Distributors maintain adequate facilities and personnel for normal servicing operations, and normally sell a nonconflicting but complementary range of products. They may resell the product to local dealers and retailers.

Selling through foreign retailers usually involves consumer products, and is effective in countries that have large retail chains such as the United States, Canada, the United Kingdom, and Japan. The technique relies on traveling sales representatives contacting foreign retailers or mailing them catalogs, brochures, and other literature. This approach has benefits of eliminating commissions, reducing travel expenses, and reaching a broader audience. To maximize results, companies using direct mail to reach retailers should integrate it with other marketing activities.

Companies may sell their products directly to end users in foreign countries—entities such as foreign governments, banks, hospitals, schools, or businesses. The buyers can be contacted either through trade shows, international publications, or through the Commerce Department's Export Contact List Services. Selling to end users overseas may incur additional costs such as shipping, payment collection, and product support and service.

See Also: Agents; Channels; Export; Export Assistance Program; Export Financing; Export Management Company; Export-Oriented Development; Export Processing Zone; Export Subsidy; Export Trading Company; Foreign Direct Investment, Horizontal and Vertical; Franchising; Import; Indirect Export; Joint Venture; Licensing; Voluntary Export Restraints.

Bibliography. Evangelia S. Katsikea, Marios Theodosiou, Robert E. Morgan, and Nikolaos Papavassiliou, "Export Market Expansion Strategies of Direct-Selling Small and Medium-Sized Firms: Implications for Export Sales Management Activities," *Journal of International Marketing* (v.13/2, 2005); Chol Lee and David A Griffith, "The Marketing Strategy-Performance Relationship in an Export-driven Developing Economy: A Korean Illustration," *International Marketing Review* (v.21/3, 2004); Rajiv Mehta, Trina Larsen, Bert Rosenbloom, and Joseph Ganitsky, "The Impact of Cultural Differences in U.S. Business-to-Business Export Marketing Channel Strategic Alliances," *Industrial Marketing Management* (v.35/2, 2006); Fernando Robles, "International Market Entry Strategies and Performance of United States Catalog Firms," *Journal of Direct Marketing* (v.8/1, 1994); R. Wayne Walvoord, "Foreign Market Entry Strategies," *Advanced Management Journal* (v.48/2, 1983).

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Dirty Float

"Dirty" float, also called managed float, is the result of intervention by a nation's government or central bank in the behavior of its currency on the foreign exchange market. Not a fixed exchange rate, in which the value of a currency is pegged in a static relationship to some other value (like gold or a specific foreign currency), dirty float refers to an otherwise floating exchange rate governed principally by market forces but occasionally guided—the waters dirtied—by corrective intervention.

When the international economy becomes uncertain and the exchange rate of a currency on the foreign exchange market fluctuates too wildly or in response to artificial influences like the actions of currency speculators, the consequences can be dire: the depreciation of the country's currency, rising inflation, reduced economic efficiency and growth, and the necessity for greater taxes on trade and foreign investment.

Currency fluctuations can curtail the benefits of globalization by forcing a country to shutter some of the doors between it and the outside world, in order to keep the financial weather at bay. In such a volatile environment, it becomes necessary to smooth out exchange rate fluctuations through the intervention of the central bank (or some other government authority).

Central bank intervention to manage the exchange rate can be accomplished through a variety of means. To influence daily fluctuations, the central bank can buy or sell its own currency, just as central banks have bought or sold government-issued securities to affect the supply and demand of their currencies. Short and medium-term fluctuations can be dealt with by delaying the exchange receipts and payments in exports and imports, and the movement of a currency's exchange rate can be resisted or slowed by putting restrictions on the market, like the cash reserve ratio or statutory liquidity ratio.

Furthermore, the central bank can put a ceiling on the credit extended to foreign firms, restricting the flow of currency from the country. Direct foreign investment can be limited too, restricting the flow of foreign currencies into the country, as well as domestic firms' dependence on those currencies and thus vulnerability to foreign economic mishaps. In some cases, the central bank can limit the amount of money that domestic investors can put in overseas investments, to a similar end. Borrowing and lending operations can be managed to maintain an equilibrium in balance of payments.

The exposure and outflow of the country's currency can also be limited by limiting the repatriation of dividends, interest, and royalty payments. Interest rates can be adjusted in order to impact the health of the currency, as they often are for other economic matters as well.

The sense and effectiveness of such manipulations is sometimes called into question. In the case of real calamities like the Asian financial crisis of the late 1990s, such intervention seemed limited in its positive impact; in the economic uncertainty of 2007 to the present, it is difficult to tell how much trouble central banks have saved their respective countries. The power of speculating hedge funds is vast and takes effect swiftly.

See Also: Central Banks; Currency; Currency Speculators; Currency Zone; Exchange Rate; Exchange Rate Volatility; Flexible Exchange Rate Regime; Floating Exchange Rate; Foreign Exchange Market; Foreign Exchange Reserves; Hedging; Managed Float Regime; Market Maker; Monetary Intervention.

Bibliography. Ann Berg, "Money's Sordid Tale of Dirty Floats, Debasement and Doom," *Futures* (v.35/11, September 2006); Alan Greenspan, "The Roots of the Mortgage Crisis: Bubbles Cannot Be Safely Defused by Monetary Policy Before the Speculative Fever Breaks on Its Own," *Wall Street Journal* (December 12, 2007); William Greider, *One World, Ready or Not* (Penguin Press, 1997); Peter A. McKay, "Scammers Operating on Periphery Of CFTC's Domain Lure Little Guy With Fantastic Promises of Profits," *Wall Street Journal* (July 26, 2005); Gregory J. Millman, *Around the World on a Trillion Dollars a Day* (Bantam Press, 1995); John J. Murphy, *Technical Analysis of the Financial Markets* (New York Institute of Finance, 1999); Pradip Shah, "Dirty Float Begets Dirty Trade" *Businessline* (June 3, 2004); Brian J. Stark, *Special Situation Investing: Hedging, Arbitrage, and Liquidation* (Dow-Jones Publishers, 1983).

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Disclosure Requirements

Disclosure requirements relate to the data collection, analysis, and dissemination relevant to specific transactions that is required by law. Disclosure is part of many legal regimes around the world that protect business from the indisputable temptation of corporate insiders to loot business treasuries, a phenomenon that often goes undetected. Disclosure is a way to protect investors and shareholders against self-dealing—the use of corporate assets for personal gain. It is a prerequisite for robust equity markets to develop.

To be efficient and growth-oriented, entrepreneurs require regulatory regimes that give investors such as stock markets, private shareholders, and other financial institutions the confidence they need to provide finance without the need to exercise daily control of the business. They need laws that prevent expropriation and expose it when it happens. This requires protection of shareholders and enforcement of defaults and irregularities. It means that a well-governed business should disclose ownership and financial performance information. Information on financial transactions, on board directors, and on voting agreements among the shareholders must be freely available to current and potential investors. It also means that a director should face legal liability for self-dealing, and that shareholders should be able to sue officers and directors for misconduct.

In a comparative analysis of disclosure requirements, the World Bank's *Doing Business* (DB) survey comparatively examines national disclosure requirements. For an example using a hypothetical case, say that a Mr. Singh owns 60 percent of Buyer Ltd., a commercial delivery firm, and he owns 90 percent of Seller Ltd., a retailer. Seller Ltd. is facing financial problems, recently shut a large number of its stores, and has trucks for sale. Mr. Singh proposes to Buyer Ltd. that it purchase Seller's unused trucks to expand Buyer's capability. Shareholders then sue Mr. Singh and the parties who approved the transaction. In such a case, one must ask (1) whether and in what detail Mr. Singh must make mandatory disclosures regarding his interest to Buyer's board of directors; (2) whether and in what detail disclosures regarding the Buyer-Seller transaction are legally required to be made immediately to the public, the regulator, or the stock exchange; and (3) whether and in what detail disclosures regarding the Buyer-Seller transaction are legally required in Buyer's annual report.

The World Bank's index ranges from zero to 10, with higher values indicating greater disclosure. Taking the Asia-Pacific region as an example, New Zealand and Singapore have the highest rankings in the disclosure index. In 2007 the United States ranked at seven on this index, and the lowest rating went to Laos, at zero.

Another example of disclosure requirements is often seen in an initial public offering (IPO). In this case, detailed disclosures of the company's affairs must be made public. New-venture firms often prefer to keep such information private. In an IPO, the firm usually must issue a prospectus, which is a formal written offer to sell securities that provides an investor with the necessary information to make an informed decision. If a company is raising capital by offering its shares or other securities to the public for the first time (usually called a "float" or IPO), it will issue a disclosure document called a prospectus.

In Australia, for example, a prospectus must be lodged with the Australian Securities and Investments Commission (ASIC). The prospectus will then be made available in an electronic format, called e-prospectuses, via the internet. The prospectus must fully disclose all pertinent information about a company and must present a fair representation of the firm's true prospects. All negative information must be clearly highlighted and explained. Some of the specific detailed information that must be presented includes the history and nature of the company; capital structure; description of any material contracts; description of securities being registered; salaries and security holdings of major officers and directors and the price they paid for them; holdings; underwriting arrangements; estimate and use of net proceeds; audited financial statements; and information about the competition with an estimation of the chances of the company's survival.

Disclosure (or its absence) is connected to a country's level of transparency (or corruption). The knowledge of amounts in financial transactions must be reasonably exact before they can be controlled, curtailed, or reformed. Disclosure fulfills two very important functions: Accounting and accountability, which serve as both preventive measures and monitoring tools in combating corruption. The accounting function allows for the construction of itemized reports of funds received and spent. The accountability function is the presentation of these reports so that shareholders, investors, and regulators can make more informed choices about business performance.

Benefits and Pitfalls

There are three major benefits of disclosure requirements. The first is the ability to "follow the money." Without it there is no way to keep track of—and thereby enforce—regulations. The ability to "follow the money," or construct an "audit trail," is the first defense against system irregularities and can have an impact on good governance.

The second benefit of disclosure is that it acts as a preventive measure. Disclosure serves to monitor and reveal information that can prevent conflicts of interest. It provides watchdog groups and the media with informed analysis of business finance and creates more educated shareholders. Through "name and shame" exercises, it also serves to warn corporate officials that they must act in the shareholders' interest, not for private gain.

Another benefit to disclosure is that it builds confidence in the business process. On a level business playing field, the underlying principle behind disclosure is that the more transparent and open a company's finances, the more its shareholders and investors will trust the business.

In the absence of any international standards, pitfalls that mar the disclosure process include: (1) Deceptive interpretations. Few words in finance are as overused and poorly defined as *disclosure.* (2) Limited access to data. Opening records to the public is the ideal, but some legal regimes make accessing them difficult. (3) Poor quality of data. A more subtle form of deception is the low quality of data that many disclosure laws produce. (4) Low quantity of data. Many countries claim disclosure, but fulfill only some of the variables required for full disclosure.

Full disclosure, or the maximum extent of openness in reporting political contributions, requires information on how much money a business has received; how much free or in-kind support was given to the business (e.g., goods, services, or loans); the names (and sometimes addresses) of the "givers"; how much money the business has spent and on what; and names (and sometimes addresses) of companies or persons who received the money spent on goods and services provided to the campaign. Full disclosure also requires businesses to file financial assets (ownership and debts).

See Also: Accountability; Corporate Governance; Corruption; Investor Protection.

Bibliography. S. Huddart, J. S. Hughes, and M. Brunnermeier, "Disclosure Requirements and Stock Exchange Listing Choice in an International Context," *Journal of Accounting & Economics* (v.26/1–3, 1999); Usha Rodrigues and Mike Stegemoller, "An Inconsistency in SEC Disclosure Requirements? The Case of the 'Insignificant' Private Target," *Journal of Corporate Finance* (v.13/2–3, 2007); U.S. Securities and Exchange Commission, "Current Accounting and Disclosure Issues," www.sec.gov (cited March 2009).

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Discount Rate

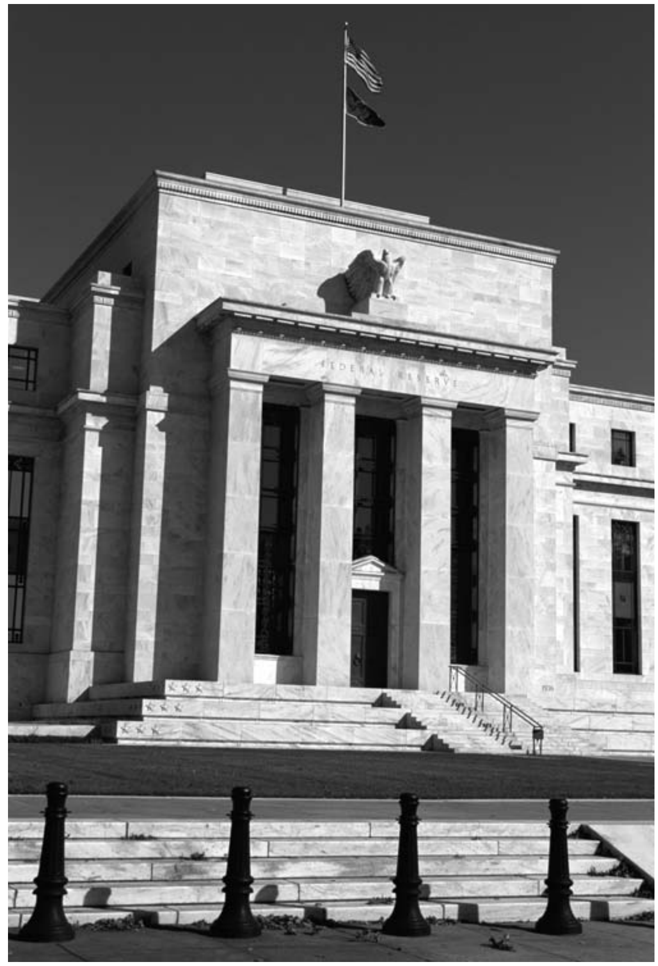
One definition of a discount rate is the interest rate the U.S. Federal Reserve (or another central bank) charges on loans to banks through the discount window. The establishment of the U.S. Federal Reserve System in 1914 was to provide a source of funds (reserves) from which commercial and depository institutions can borrow in case of a temporary shortage. The discount window is the mechanism through which each of the 12 regional U.S. Federal Reserve banks lends to commercial and depository institutions. Another definition of a discount rate is as an investor's opportunity cost of funds. It is the best return an investor can earn on investments given the risk of such investments. The borrowing rate is also referred to as a discount rate. In the money market for securities, where securities are issued at a discount from par (face) value, discount rate refers to the rate of return on a security.

The U.S. Federal Reserve (Fed) serves as the lender of last resort. When banks and depository institutions face temporary shortage of funds they can borrow from the Fed through the latter's discount window.

The Federal Reserve originally limits discount window loans to discount or rediscount activities for members of the Federal Reserve System. Thus, a borrower sells "eligible paper," such as agricultural loan documents supporting a loan to a customer to a Federal Reserve Bank. The Federal Reserve Bank in turn provides credit in the amount of the discount in the borrowing bank's account. Once the loan is paid, the Fed returns the "eligible paper" and makes a debit entry in the reserve account of the bank. Over the years, discount window loans were dominated by advances, which are loans secured by approved collateral. Such loans are paid back with interest at maturity.

In 1980, after the passage of the Depository Institutions Deregulation and Monetary Control Act (DIDMCA), discount window loans were extended to all depository institutions including banks that are nonmembers of the Federal Reserve System. In "unusual and exigent circumstances," individuals, partnerships, and corporations that are not depository institutions can take advantage of the discount window opportunities subject to approval of the Board of Governors of the Federal Reserve System.

Traditionally, the Fed extends discount loans to depository institutions through three programs: (1) adjustment credit, (2) seasonal credit, and (3) extended credit. Adjustment credit loans are the most common and they are given to cover temporary needs for funds arising from deposit outflow. These loans can be obtained with telephone calls to a regional Fed. Repayment of such loans is made fairly quickly, from a day to a few days for large depository institutions. Seasonal credit is extended to small institutions that depend on seasonal activities such as farming and tourism. The borrowing institutions also have limited access to national money markets. An extended credit can be granted to a depository institution facing special liquidity difficulties. A group of institutions can be given extended credit if they face deposit outflows because of changes in the financial system, such as natural disasters or other difficulties that are common to the borrowing institutions. The repayment of extended credit takes time. A borrowing institution needs to provide a proposal that outlines a call for credit and how and when the liquidity position of the institution will be restored. A good example involves Franklin National Bank, which borrowed about $1.75 billion from the Fed in 1974.



The Washington, D.C., headquarters of the U.S. Federal Reserve, which decides the discount rate in the United States.

In January 2003 the Board of Governors of the Fed authorized the Federal Reserve Banks to operate the following revised discount window programs: (1) Primary Credit, (2) Secondary Credit, and (3) Extended Credit. The new primary credit program involves loans that are extended for a very short term (generally on overnight basis) to depository institutions that are adjudged to be financially sound. The discount rate on primary credit is set above short-term market interest rates that include the federal funds rate. Borrowing institutions of short-term primary credit are not required to have exhausted other sources of funds before participation in the discount window activities. Each borrowing institution must meet the collateral policies as specified in the Federal Reserve Act. Those depository institutions that are not eligible for primary credit can apply for secondary credit to meet short-term liquidity needs or to resolve severe financial difficulties. Participation in the secondary credit program is contingent on a timely return to reliance on private funding sources. In the case of a severe difficulty, the Federal Reserve Bank in cooperation with the Federal Deposit Insurance Corporation must agree that granting secondary credit is a least-cost resolution of the problem. Seasonal credit is available to small and medium-sized depository institutions that experience significant seasonal swings in their loans and deposits. Seasonal credit should help to address recurring intrayear fluctuations in funding needs of small banks in agricultural or seasonal tourism communities.

In general, changes in the discount window loan rate occur infrequently. The lowest discount rate in history was 0.5 percent from 1942 through 1946. The highest rate was 14 percent in 1981. The primary credit discount rate has varied from 2 percent to 6.25 percent from 2003 through mid-2008. In order to stem the growing problems within the U.S. financial system, the Fed began a spate of cuts in the discount rate since August 2007.

Discount Rate Policy

As a part of its monetary policy mandate, the Fed controls the volume of discount loans in two ways: By controlling the price of the loan (discount rate) and by controlling the quantity of the discount window activities. Through its power over discount window activities, the Fed can influence the money supply in the economy. For example, an increase in discount loans leads to an increase in bank reserves and consequently an expansion of money supply. Conversely, a decrease in the volume of discount loans leads to reduction in money supply.

Based on the foregoing, the discount window can be used to influence the reserves of depository institutions. Another important function of the discount policy is its implied announcement effect. A change in the discount rate is perceived as a signal of the Fed's future direction in terms of monetary policy. Unlike some other monetary policy instruments, the discount rate is used irregularly. When a change is made in the direction of the movement of the discount rate, the public often interprets this as a signal of the thinking of the Fed's Board of Directors concerning the future course of monetary policy.

An increase in the discount rate after a series of reductions may indicate that the board foresees impending inflationary pressure. In order to control this, the Fed makes it harder to get credit in the near future. There may be a problem with the interpretation by the public of Fed's intentions. For example, when market interest rates are increasing relative to the discount rate, the volume of discount loans tends to rise as well. The Fed may increase the discount rate just to keep it in line with market interest rates without necessarily changing its policy to be less expansionary. Bankers may see this development as an indicator of a potential shortage of reserves and react by slowing down loan commitments.

A significant advantage of the discount policy is that it allows the Fed to perform its function as the lender of last resort. Historically, the performance of this function has provided some stability to the financial sector. The notable cases of the use of the discount window include the rescue of Franklin National Bank in 1974, Continental Illinois National Bank in 1984, and in September 2007, the Fed announced a huge cut in both the federal funds rate and the discount rate in order to facilitate borrowing by America's largest banks. This was considered necessary to facilitate the bailout of their affiliates and other operators, such as hedge funds, caught in the subprime loans crisis.

There are arguments against the use of the discount window as a tool of monetary policy. The misinterpretation of the announcement effect of a change in the discount rate can exacerbate the economic problem being addressed by the Fed. Since the use of the discount rate is rather infrequent, by setting the discount rate at a level, the spread between market interest rates and the discount rate may fluctuate widely as market interest rates change. These fluctuations may lead to unintended fluctuations in the volume of discount loans and consequently in the money supply. The use of the discount window to bail out financial institutions exerts some financial burden on the public, thereby creating negative long-run consequences on the economy. The action of bailing out large financial institutions under the guise of "too big to fail" impeded the functioning of a competitive market system.

Interest and Inflation Rates

The other concept of discount rate is as a function of both interest rate and inflation rate. There are four fundamental factors affecting the cost of money and they are production opportunities, time preferences for consumption, risk, and inflation. The production opportunities define the returns available in an economy from productive assets. The time preferences for consumption reveal consumer preferences between current consumption and saving toward future consumption. Moreover, the market interest rate accounts of risks as well. Risk represents the likelihood that investors do not realize their expected rate of return on an investment. In other words, risk consists of a possibility that an unfavorable state of nature appears to determine the variability of future financial flows, thereby making them unpredictable. The inflation rate is the rate of general increase in the prices of goods and services, making it an index of change in the purchasing power of money. A discount rate accounts for the competing forces of interest and inflation. In general, the market interest rate is associated with the cost of borrowing money and thus represents the earning power of money.

The concept of time value of money in finance and accounting is also based on the use of a discount rate. Time value of money is based on the idea that a dollar today is worth more than a dollar expected next year with all things being equal. Consider a major proposal by a business enterprise that is expected to generate $161,000 in one year. Assume that the present value of this future amount is $140,000. The present value is the amount of cash that makes the owner of the firm be indifferent between receiving $140,000 today or receiving $161,000 next year. This means that the business owner expects to receive a 15 percent rate of return from the project. Therefore, $140,000 invested at the rate of 15 percent for a year will yield $161,000. In this case, 15 percent is referred to as the discount rate.

See Also: Capital Budgeting; Capital Controls; Central Banks; Interest Rates; Money Supply.

Bibliography. Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management* (South-Western, 2009); "Fed Lowers Discount Rate; Surprise Response to Market Turmoil," *Facts on File: Weekly World News Digest with Cumulative Index* (v.67/3480, 2007); Lutz Hendricks, *How Important Is Discount Rate Heterogeneity for Wealth Inequality?* (Ifo Institute for Economic Research, 2005); B. F. Madigan and W. R. Nelson, "Proposed Revision to the Federal Reserve's Lending Programs," www.federalreserve.gov (cited March 2009); T. Mayer, J. S. Duesenberry, and R. Z. Aliber, *Money, Banking and the Economy* (Norton, 1996); Frederic S. Mishkin and Stanley G. Eakins, *Financial Markets and Institutions* (Pearson Prentice Hall, 2009).

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Distribution

In business, distribution is the process by which a good or service is made available to the consumer. Distribution is one of four elements of the marketing mix, along with pricing, product, and promotion—"the four Ps," as they are called when distribution is bent over backwards and called "place."

The idea of the marketing mix comes from the 1950s and early 1960s, the heyday of the Mad Men and marketing firms whose professions were seeing a new level of professionalism and inter-industry discussion to match the new revenue streams provided by television. Marketer Jerome McCarthy, author of the influential textbook *Basic Marketing*, was the first to propose the four Ps as a solution to the suggestion that there should be something recipe-like underlying marketing decisions. In their brevity and alliteration, the four Ps are themselves a very marketable idea, a catchy notion. Naturally the notion lends itself to expansion, and some marketing texts or gurus may add to the Ps—packaging, personnel, premium, et cetera.

The best way to define the marketing mix is by reverse engineering: that is, the primary end of marketing is the optimization of the marketing mix, and so therefore that which must be optimized is the marketing mix. The product, of course, is the good or service, and may be improved or optimized in all sorts of ways depending on its nature; the price must fit the product's place in the market, while occupying a comfortable position relative to the customer's ability and the supplier's necessity; promotion encompasses advertising, public relations, word of mouth, and point of sale. The use of the term *mix* here does not mean that these elements change in relation to each other, nor do they have a mathematical relationship to each other as in a "recipe"—that is, there is no

Forces that affect a business's distribution channels, such as a jump in fuel costs, can mean higher prices for consumers.

element that scales, the way flour does to sugar when doubling a cookie recipe. Changing the price in the marketing mix does not necessarily impact the other elements, and certainly does not represent a quantity to remove from other elements.

Channels

There are different possible channels of distribution, and a product very often (but not always) has more than one. Beginning with the channel with the fewest intermediaries, there are direct sales made by the producer—which encompasses everything from farmers selling goods on their farm to a home business selling goods on eBay or through an online store. There are agents selling goods on the producer's behalf, such as in a consignment shop or literary agents brokering deals with publishers. Wholesalers buy from the producer and resell to retail locations. Retailers sell to consumers (and may deal with a wholesaler, an agent, or directly with the producer).

Franchising impacts the distribution channels, as when a franchise restaurant prepares food at some central location, selling it to the individual franchises to be cooked or reheated for sale to the customer. Even when all food is prepared from scratch on site, if the recipes originate with the franchising company there is some sense in which the product has been distributed to the franchisee before being resold to the customer; this is true too of service franchises, like gyms, salons, and other businesses where a process, concept, or even just a brand name originates with the franchiser and is sold to the franchisee.

The question of how many intermediaries to use in distribution is an important one for every business, and is decided according to the nature and scale of the business. Although profits are shared with more parties when more intermediaries are involved, the costs of distribution are also shared. Marketing and advertising costs can be located at any level of distribution; while in most cases the producer is expected to be principally responsible for advertising, the producer may expect wholesalers or retailers to do their part to support the product as well, and this may include exclusivity agreements.

The comic book industry in the 1990s was subject to a great deal of change and shifting fortunes as the typical retail location shifted from the neighborhood newsstand to the comics specialty shop, increasing the importance of the comics distributors who worked with those shops (often referred to as the "direct market" in the industry, even though direct sales were not being made to customers). Marvel Comics, one of the two big publishers, acquired the comics distributor Heroes World to use as its exclusive distributor, resulting in similar moves throughout the industry, amidst a tulip-bulb-like collectors' mentality that encouraged the creation of distributor-exclusive editions of comics with metallic-ink covers and other gimmicks. Eventually, though, sales faltered to such a degree that the temporary bumps caused by such gimmicks—whether in packaging, like those special-ink covers, or in the form of stories about Superman's death—were necessary to keep revenues healthy.

The principles of distribution and its optimization apply to the transfer of goods and services within a company's "internal market," among its myriad departments or locations, as much as it does to the transfer of those products to customers. An apparently seamless system can sometimes become problematic when a factor changes unexpectedly. When agriculture shifted from small or medium-sized farms to multi-state businesses, for instance, the new business model tended to call for feed to be produced in one location, sometimes stored in another, and then transported to the livestock at still another location—as opposed to the zero-intermediary system previously employed, wherein a farmer would graze the livestock or raise their feed himself. This system originated when fuel was cheap enough to justify the increased cost invoked by transport, because economies of scale allowed agricultural businesses to save money in other areas and to profit from lower profit margins due to volume sales. One reason for the rise of food commodity costs in 2007–08 was the spike in fuel costs, which suddenly doubled the cost of an aspect of this distribution channel.

See Also: Channels; Pricing; Promotions; Supply Chain Management; Transportation.

Bibliography. N. H. Borden, "The Concept of the Marketing Mix," *Journal of Advertising Research* (v.4, 1964); Michael Hammer and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution* (Harper Business Books, 1993); Robert Lauterborn, "New Marketing Litany: 4 Ps Passe: C Words Take Over," *Advertising Age* (October 1, 1990); E. Jerome McCarthy, *Basic Marketing: A Managerial Approach* (Irwin, 2001).

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Diversifying Investment

Diversifying investment is a risk management technique that is used to minimize the risk of individual securities by investing in a portfolio of securities. That is, if investors reduce their reliance on particular assets, they can more easily bear a downturn on an individual security. Diversification is the cornerstone of modern portfolio theory that has seen wide applications in financial decision making. Both firms and individuals diversify investments. The former diversify by investing in individual activities, while the latter diversify by investing in portfolios rather than in individual assets.

In portfolio theory, investors are assumed to be risk averse, that is, they prefer lower to higher risk for a given return and will accept a higher risk only if they are compensated with a higher return. This creates indifference curves, lines on which risk and return combinations are offered to investors and as long as investors are on this line, they are indifferent on where to invest. Namely, as risk increases, return increases as well, so that investors are compensated for the increased risk they take on. The expected return of an investment in a single asset is the sum of the returns on that investment conditional on the probability of every return occurring. For example, if there is 60 percent probability that an investment earns a 5 percent return and 40 percent probability that it will earn 15 percent, the expected return on this investment is 9 percent, which is the weighted average of the probability of each event occurring. Furthermore, the expected return on an investment portfolio, i.e., on a combination of investments, is the sum of the weighted average of the returns of the individual holdings of the portfolio.

On the other hand, variance measures the variability of returns and is used as a benchmark for the risk of individual assets. In a single asset, the variance is the square root of the difference between the realized and the expected return on the asset. However, the variance of a portfolio of assets is proportional to the weights that are invested on each asset, to the variance of individual assets, and also to the degree of correlation between the individual assets.

Correlation

Correlation is a measure of interrelationship between assets and measures the extent to which the returns from two investments move together. If the correlation coefficient is +1 this means that the returns of the two investments always change proportionately in the same direction (perfect positive correlation). A correlation coefficient of –1 means that the returns always move proportionately in the opposite directions (perfect negative correlation). When the correlation coefficient is zero, this means that the returns have no correlation whatsoever and their returns are independent from one another.

The essence of diversification lies on the correlation coefficient of securities. Since the variance of a portfolio has two components, the individual securities' variance component and the correlation coefficient component, when two assets are negatively correlated, i.e., when the second component is negative, the portfolio variance is greater than portfolio variance. In other words, by investing in securities with negative correlation, the overall risk of the portfolio is reduced. If the correlation is zero, the second term of the portfolio variance is zero, so the variance of the portfolio is simply the sum of the individual variances of each stock included in the portfolio. The benefit of diversification is eliminated when the correlation coefficient is +1. Thus, other things equal, the smaller the correlation between two assets, the smaller the variance (risk) of the portfolio of the two assets. One can create the same risk level and higher expected returns by diversifying one's investments across a wide range of stocks. The only assumption is that as long as the individual stocks are not perfectly correlated, the risk-return combination of the portfolio will be better than the risk-return combinations of all individual stocks. The benefit of diversification increases as the degree of correlation decreases. This creates the efficient frontier, which represents the set of portfolios that give the highest return at each level of risk, or alternatively, the lowest risk at each level of return.

The above is also extended to portfolios of assets of more than two individual securities. Even though the computation of the correlation of more than two securities becomes very complex, the principle of diversification applies to complex portfolios providing that none of the securities are perfectly positively correlated. Also, as the number of securities that are included in a portfolio increases, the benefit that is derived from diversification of adding one more asset to the portfolio decreases. In other words, the benefit that is derived from the reduction in risk by increasing the number of holdings in a portfolio is outweighed by the additional costs (transaction and monitoring costs) that are associated with increasing the number of securities. For that reason, it has been studied that individual investors do not need to hold more than 1–15 assets in order to capture 90 percent of the benefits from diversification, while for individual investors the number of shares should not exceed 50.

Limits

However, there are limits to diversification. These limits are set by the two types of risk that are embedded in asset prices. The first type of risk is called unique or unsystematic risk that refers to the effect that random events may have on individual firms. These events are unique and can be diversified away. The second type of risk is called systematic or market risk and it refers to the risk that is embedded in all securities of a single market, a single industry, or even a single country. For example, the interest rate risk is a type of systematic risk that affects all securities of one country. Thus, as long as portfolios are constructed of assets that include securities from one country, the interest rate risk is nondiversifiable and will only be embedded in the total variability of the constructed portfolios.

The way to minimize the systematic risk is to create portfolios of securities that share very few common elements. For example, one can eliminate the country-specific risk by investing in assets in a wide range of countries. Also, the stock-specific risk is diversified away by maintaining a portfolio of assets that is a combination between different types of securities, i.e., bonds, deposits, works of art, real estate. As a rule of thumb, a well-diversified portfolio should not contain more than 40 percent of its value in individual stocks and the remainder should be invested in other forms according to the investor's liquidity and risk-return preferences.

In practice the portfolio theory of diversification has found computational difficulties, since, for example, for a portfolio of 300 securities more than 45,000 need to be calculated. In addition, diversifying investment theory is difficult to apply in physical investment decisions as, in contrast with financial assets, the calculation of correlation coefficients in physical investments is not always accurate. Further, some difficulties become apparent when applying the diversification theory to a multiperiod model. Also, should firms that diversify their individual activities be rewarded for their actions? In other words, should firms evaluate the correlation of each project with its portfolio of existing projects? If so, then the value of a firm's portfolio of individual projects should be greater than the value of the sum of the parts, thus the present value principle is no longer applicable.

Fortunately, diversification is very difficult to apply in firms in such a manner. This stems from the fact that individual investors are able to diversify their investments more easily. So, investors can invest in a firm this week and pull out next week, whereas a firm would find it extremely difficult to do the same with an investment project.

Applications

The theory of investment diversification has found wide applications in the construction of indexes that are designed to track the performance of individual securities. Such specific indices are the index funds that contain all stocks that are traded in an index and can be sold as a ready-made investment portfolio to individual investors. The fund's objectives are to offer simple, diversified solutions at a low cost, yet the main disadvantages of such funds are the tracking error that results from failing to replicate the index accurately and the fact that index funds can only produce the return of the index and not outperform it.

See Also: Financial Markets; Foreign Portfolio Investment; FT Index; Market Share; Markets; Stock Exchanges.

Bibliography. E. Altman, *Handbook of Financial Markets and Institutions* (John Wiley & Sons, 1987); R. Brealey and A. Myers, *Principles of Corporate Finance* (McGraw-Hill, 2003); John A. Doukas and Ozgur B. Kan, "Investment Decisions and Internal Capital Markets: Evidence from Acquisitions," *Journal of Banking and Finance* (v.32/8, August 2008); Edwin J. Elton, Martin J. Gruber, Stephen J. Brown and William N. Goetzmann, *Modern Portfolio Theory and Investment Analysis* (Wiley, 2007); R. Pike and B. Neal, *Corporate Finance and Investment: Decisions and Strategies* (Prentice Hall, 2006); K. Pilbeam, *Finance and Financial Markets* (Palgrave, 2005); J. Rutterford and M. Davison, *An Introduction to Stock Exchange Investment* (Palgrave, 2007); Laura Sether, *Online Trading* (W&A, 2007); Peter J. Tanous, *Build a Winning Portfolio: Investment Strategies for Meeting Your Financial Goals* (Kaplan, 2008); S. Valdez, *An Introduction to Global Financial Markets* (Palgrave, 2007).

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Diversity

In contrast to the equal opportunities stance, there is a growing body of work related to the need to manage what has become known as diversity in the workplace—to be responsible for and sensitive to the different types of individuals who make up an organization. Gender is an important topic in diversity, as are race, ethnicity, class, disability, and HIV status, as well as other issues less prominent in the equal opportunities literature, such as personality, value systems, working style, religion, lifestyle, education level, and so on. As Patricia Arredondo points out, the idea of managing diversity refers to a strategic organizational approach to workforce diversity development, organizational culture change, and empowerment of the workforce. It represents a shift away from the activities and assumptions defined by affirmative action (an equal opportunities tactic involving positive discrimination) to management practices that are inclusive, reflecting the workforce diversity and it potential. Ideally it is a pragmatic approach in which participants anticipate and plan for change, do not fear human differences or perceive them as a threat, and view the workforce as a forum for individuals' growth and change in skills and performance with direct cost benefits to the organization.

Managing diversity means establishing a heterogeneous workforce to perform to its potential in an equitable work environment where no member or group of members have an advantage or a disadvantage. Managing diversity includes a process of creating and maintaining an environment that naturally allows all individuals to reach their full potential in pursuit of organizational objectives. Diversity management emphasises building specific skills, creating policies and drafting practices that get the best from every employee. It assumes a coherent environment in organizations and aims for effectiveness, productivity, and ultimately competitive advantage targeting everyone within an organization, as opposed to focusing simply on less-represented groups such as women or people of color. Through effective integration of diversity management principles in the key human resource functions of recruitment and selection, training and development, performance appraisal, and remuneration, an organization can effectively manage workforce diversity.

However, traditional organizational imperatives may drive decision makers away from an affinity toward or an awareness of diversity training initiatives. Highly bureaucratic and mechanistic organizations have traditionally thrived on sameness. The principles of management in the past were generally seen as being based on the concepts of standardization and homogeneity. According to R. M. Kanter, the desire for social certainty causes decision makers to prefer to work with individuals that they perceive to be similar, revealing an unspoken, and perhaps even unconscious, drive to maintain traditional demographics in the workplace and to accept diversity only in the shallowest of terms. Moreover, the need for control and the ways in which managers achieve control in the workplace are still seen as being based on standardization of work outcomes, work processes, or skills. However, while managers may experience a need for control, this is also accompanied by a need to perform and achieve results. Building a business case for diversity is likely to be one of the most persuasive ways of promoting and encouraging diversity across occupations and hierarchical levels.

Training

Although organizations are using a broad range of initiatives in their efforts to manage diversity, training is one of the most widely used strategies in effectively managing diversity in the workplace. Diversity training has been categorized in different ways. One perspective, according to P. Nemetz and S. Christensen, looks at four different classifications: (1) sensitivity training, (2) dissonance creation, (3) cultural awareness, and (4) legal awareness.

Several types of diversity training programs can help improve both workplace culture and customer interactions.

Sensitivity training is designed to sensitize individuals to feelings provoked by discrimination. Content tactics include separating individuals by characteristics like eye color and then arbitrarily discriminating against a group to illustrate the underlying belief that all individuals are hurt by discrimination. For example, men are separated from women, and women are empowered through role-playing to sexually harass men. This strategy is used to illustrate the belief that men victimize women.

The dissonance creation approach is based on purposely creating cognitive dissonance with the hope that the target audience will resolve inconsistencies by changing attitudes and ultimately behaviors. Tactics range from requiring an individual who exhibits initial prejudice to write an essay showing the absurdities of stereotyping to requiring an individual who shows initial prejudice to debate in favor of the idea that the dominant group is oppressive.

Cultural awareness training provides an exploration of cultural differences. Tactics range from discussing stereotypes and unintentional slights to building consensus on ways to avoid stereotyping. Cultural awareness training also separates the oppressed from the oppressive while encouraging the former to express their feelings to the latter.

Finally, legal awareness training is based on explaining discrimination laws. Content includes describing various activities that violate the law with an explanation of the consequences of the violation. Content also includes discussing unfairness and bias in laws and the injustice present in white-male dominated justice systems.

A second perspective, according to M. Gentile, identifies five categories of diversity training. These include: (1) introduction to diversity, (2) focused awareness, (3) skill building, (4) sexual or other forms of harassment, and (5) integrated diversity training.

The first category, introductory training, usually includes the presentation of demographic statistics, a brief overview of historical approaches to diversity in organizations, descriptions of distinctions between affirmative action and valuing diversity, provision for basic self-awareness building, and exercises to help individuals see ways in which they may unconsciously harbor and act upon various stereotypes. The purpose of this type of program is to begin to develop a shared definition and vocabulary around diversity, to share the organization's rationale and goals, and to create a sense of positive interest in further individual training.

The second type of training is in-depth, focused awareness development. These programs feature more individual and small group interactions. They pursue an understanding of the nature, functions, and prevalence of various stereotypes in the organizational setting. Sometimes they focus on race, gender, or particular ethnic groups. The purpose of these programs is to expand individual understanding as a means to changing behavior in relation to other employees and those in the business environment.

A third type of training is the skill building workshop. It is increasingly recognized that specific competencies and skills are necessary in order to work successfully as members of a diverse group. People who are not equipped with these skills will be less able to develop the integrating group processes that are characteristic of highly effective diverse groups. This type of training workshop is designed to teach specific communication skills such as listening across differences, conflict resolution, interviewing, and mentoring with an emphasis on the ways gender, race, culture, or other differences may affect the process.

These skills could in turn be based on the existence of some key preconditions: A shared social reality between group members; ability to "decenter" or to consider viewpoints that may differ from one's own; motivation to communicate; ability to negotiate and endorse contracts of behavior and ability to attribute difficulties appropriately. Developing people's abilities to create such preconditions might form the basis of a competence and skills based training program.

Another training technique in this category targets the workshop for specific minority groups within an organization. For example, some companies have developed programs for middle-management-level women who are trying to counteract the effects of the perceived "glass ceiling." This type of program can have a negative impact if members of the targeted group are perceived as being less prepared than others to advance within the organization or if the targeted group is perceived as getting special assistance or attention. Some organizations have avoided these problems by having members of the targeted group develop these workshops for other members as a function of a special support network.

A fourth type of training is the workshop on sexual or other forms of harassment. Such programs usually focus on communicating the legal definition of harassment and the organization's policies and practices for dealing with such occurrences. Sometimes these efforts provide discussion where conflicting feelings and concerns about the definition of harassment can be aired.

Diversity training can also be provided in the form of integrated diversity training. Such programs integrate appropriate diversity issues into the course of pre-existing and new training efforts that target specific functional skills or business goals. For example, in customer service training programs the particular challenges and opportunities of serving a diverse customer base can be introduced.

Finally, some of the goals frequently mentioned by the experts related to increasing organizational effectiveness include connecting the diversity training to the organization's strategic goals; and improving organizational culture. According to diversity experts, an organizational climate that emphasises fairness and equity and promotes trust, respect, and understanding among all employees motivates individuals to maximize their individual performance and contributions to an organization's profitability and competitive edge.

See Also: Acculturation; Communication; Cross-Cultural Research; Ethnocentrism; Multicultural Work Groups & Teams; Stereotyping; Training.

Bibliography. N. Adler, *International Dimensions of Organizational Behavior* (Thomson Learning, 2002); P. Arredondo, *Successful Diversity Management Initiatives* (Sage, 1996); John Bank, *Managing Workforce Diversity* (Prentice-Hall, 2005); M. J. Davidson and C. L. Cooper, *Shattering the Glass Ceiling: The Woman Manager* (Paul Chapman, 1992); Mary C. Gentile, *Managing Diversity* (Harvard Business School Press, 1995); Carol P. Harvey and M. June Allard, *Understanding and Managing Diversity: Readings, Cases, and Exercises* (Pearson Prentice Hall, 2009); Alison M. Konrad, Pushkala Prasad, and Judith K. Pringle, *The Handbook of Workplace Diversity* (Sage, 2006); Joan Marques, "Workplace Diversity: Developing a Win-Win-Win Strategy," *Development and Learning in Organizations* (v.22/5, 2008); Michàlle E. Mor-Barak, *Managing Diversity: Toward a Globally Inclusive Workplace* (Sage, 2005); Carole Spiers, "The Business Benefits of Diversity," *Management Services* (v.52/2, Summer 2008).

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Doha Round

The Doha Round is the latest series of trade negotiations taking place within the World Trade Organization (WTO). The objective of the "round" is to further the liberalization of trade in goods and services between the 152 members of the WTO. Begun in 2001, the round has so far failed to reach agreement on controversial issues of liberalization of agricultural and manufactured goods. There are fears that failure to liberalize on a multilateral level will lead to a further regionalization of trading blocs, undermining globalization.

The Doha Round was launched at the WTO Ministerial Conference in Doha, Qatar, in December 2001. The conference came after a disastrous WTO ministerial conference in Seattle in 1999, where antiglobalization protestors disrupted the talks. There was thus a clear need to show unity and dynamism in the world trading system. Launched against the background of growing skepticism on the merits of that system for developing countries, the round was presented from the beginning as a development-oriented round. It was christened the "Doha Development Agenda" (DDA) in reference to these objectives. Fulfilling the hopes of developing countries in a manner acceptable to industrialized countries has been a constant theme in the round.

Progress on the round has been slow. This is partly a result of a wide and complex agenda that went much further than that of the preceding round—the Uruguay Round. It originally covered not only services liberalization, agricultural market access (AMA), and nonagricultural market access (NAMA), but also several "nontrade issues" including the so-called Singapore issues of investment, competition, public procurement, and trade facilitation. This heavy agenda proved difficult for developing countries to manage and, in a tense ministerial conference in Cancun in 2003, the former three themes were removed from the main agenda of negotiations, leaving only trade facilitation—an uncontroversial topic.

With the removal of the Singapore issues, the most contentious negotiating topics in the Doha Agenda are AMA and NAMA. The controversies around these issues reflect the political economy of the members of the WTO. The highest tariffs in the world trading system tend to be in agriculture in industrialized countries and in manufactured goods in the developing world, particularly in emerging markets. The key negotiating point is therefore the extent to which both will agree to reduce their tariffs in these key areas.

Within the round, developing and developed countries do not always split exactly along the lines described above. In NAMA, developing countries who wish to protect their manufacturing sectors are grouped around the G20, a group of mainly emerging nations with relatively high tariffs such as India and Brazil. In AMA, developing countries are not universally in favor of full liberalization, as some still see the need to protect their own agricultural sectors. These countries are grouped into the G33, which includes India and Indonesia. Their main objective is to secure the right to maintain their market protection through the definition of "special products" where liberalization would be limited.

Another key concern for developing countries is the issue of preference erosion. Some are concerned that extensive tariff cuts could actually work to their disadvantage. These countries, such as the Africa Caribbean and Pacific (ACP) group and the Least Developed Countries (LDCs), have extensive preferential access, with little or no tariffs for their exports to several or all industrialized markets. Their concern is that a general reduction of tariffs will erode the cost advantages that their preferences assure them. These countries are grouped together in the G90. Key products of importance in this discussion are bananas, sugar, processed fish, and clothing.

Discussions between these groups have been long and torturous. Several deadlines have already been missed. The ministerial conference in Geneva in 2008 made progress on several key points leading to optimism that the round could be concluded. However agreement was not secured on the key issue of developing countries' capacity to protect against import surges in agriculture—a major concern of the G33.

The broad lines of the agreement seem to be in place, but discussions on the numbers are the most difficult. In agriculture , there is agreement that levels of tariff cuts should vary between countries, with the EU making the highest cuts; however, the exact extent of the cuts is still at issue. The latest EU offer was for a 60 percent cut. In NAMA, there is agreement that cuts will be based on the so-called Swiss formula, an approach that results in greater cuts in higher tariff rates. The negotiations focus on the figures that decide the extent of the cuts. The latest EU offer, for example, would have left no tariff over 6 percent.

See Also: Antiglobalization; Democratic Globalization; Globalization; Uruguay Round; World Bank, The; World Trade Organization.

Bibliography. Chen Deming, "China's Top Trade Official: Don't Abandon the Doha Round," *Business Week* (Online), www.businessweek.com (cited March 2009); *Economic Implications of the Doha Round* (Kommerskollegium, 2006); Stefan Griller, *At the Crossroads: The World Trading System and the Doha Round* (Springer, 2008); Rainer Hofmann and Gabriele Tondl, *The European Union and the WTO Doha Round* (Nomos, 2007); Manu Kaushik, "Doha Round: Undead, But Not Quite Alive," *Business Today* (September 7, 2008); World Trade Organization, Ministerial Declaration, November 14, 2001, www.wto.org (cited March 2009).

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Dollar Hegemony

The U.S. dollar is the anchor currency in the international system. The dollar's hegemony depends not just on the economics of its being the major reserve currency, but also on the political condition that it is the currency of the hegemon in the international system—the United States. An economic system depends for stability on the structural/positional power of the hegemon as the leader. The hegemon has the power and capability to define the rules of the game, provide for the anchor currency, and act as the lender of last resort. It undertakes the tasks of supervision and management of the system, as this control provides it with significant economic benefits and political influence. The system continues to be stable so long as a majority of other states perceive it to be mutually beneficial. However, stability is not synonymous with equitable distribution of welfare among the states.

After World War II, the United States instituted the Bretton Woods regime as the framework for an international economy. According to the rules of this regime, a pegged exchange rate of $35 for an ounce of gold was established. This dollar-gold exchange standard collapsed in 1971 due to several reasons. First, as the United States lost its advantage in trade due to international competition, its current account deficits started to rise. The United States, however, was not interested in curbing its growth or social welfare through austerity measures.

Second, given the U.S. desire to maintain policy autonomy of expansion by exercising its privilege to print money, the peg was no longer viable. The consequence of this was that the available liquidity of currency in the system surpassed the gold reserves. Finally, with deficits on the rise in the United States, domestic inflationary pressures increased. This brought the dollar under speculative attack of investors who had lost confidence in the U.S. ability to maintain the peg, resulting in the dollar's devaluation. This galvanized countries like France to convert their dollar reserves into gold. Facing these kinds of pressures, the Nixon government found it politically expedient to rescind the U.S. commitment to the peg. The international monetary system then experienced the rise of the floating exchange rate with market exchanges determining the value of a currency.

However, even though the dollar was no longer the de jure hegemonic currency, it became the de facto hegemonic currency for several reasons. First, with the development of deep financial markets in the West, particularly the Euromarket in 1960s, the dollar had become the most traded currency. Second, the American economy provided enormous investment opportunities to the rest of the world because of its excellent regulatory institutional environment. This capital inflow from the developed and the developing world enabled the United States to finance its trade and fiscal deficits by borrowing heavily from the capital markets. It did this by selling government bonds at cheap interest rates.

Third, many countries in southeast Asia, Latin America, and the Gulf had their currencies pegged to the dollar to provide for exchange rate stability. Fourth, whenever there were windfall profits in the primary commodity market of oil, petrodollars accumulated. This provided for additional sources of liquidity in the system and countries without high rates of domestic savings, like Latin America, borrowed in hard currency at cheaper interest rates to propel growth. Since these countries had their currencies pegged to the dollar, their fortunes were tied to changes in the fortunes of the dollar. This created potential sources of financial crises as changes in U.S. interest rates and the value of the dollar created unpredictable swings in these countries' currencies and consequent capital flight. Fifth, with increasing financial crises across the world, the major emerging economies like China and India were invested in building up huge dollar reserves as a buffer against crises.

Finally, the American economy is the largest consumer economy in the world. This means that the majority of the world is dependent on exports to the United States. Consequently, major exporting economies like China are invested in keeping their currencies depreciated against the dollar to boost exports. This enables the dollar's value to be propped up by artificial measures of sterilization (buying up hard currency inflows with local currency) undertaken by these economies.

Alternatives

Over the years, two alternative currencies have emerged as contenders to the dollar—the euro and the yen. However, despite the shift in portfolio allocation by investors with changing shifts in market expectations about currency values, the dollar continues to rule for several reasons. First, Japan is dependent on the United States for strategic reasons of protection from its neighbor China. It also has huge investments in assets in the United States. Consequently, it is not in Japan's interest to allow the dollar's value to precipitate drastically (a phenomenon called "hard landing"). Second, both Japan and the EU are major trading partners of the United States, and hence, cannot afford to allow the dollar and the U.S. economy to collapse. Consequently, throughout post-1970s period, the G-7 countries' central banks have coordinated to ensure that the dollar's hegemony is maintained by propping up its value every time there is a threat of serious dollar depreciation. Third, given that the dollar represents a liquidity that cannot be parked elsewhere, most countries cannot dump their dollar reserves without significant loss of value. Finally, despite growing attempts to create currency pegs to a basket of currencies, as China has sought to do with the yuan, most countries believe that besides the dollar there is really no good alternative.

Impact

What are the consequences of dollar hegemony in terms of world welfare? Due to global interdependence of economies, other countries dependent on the U.S. economy have to bear the burden of adjustment of the spillovers of economic outcomes in the United States. Dollar hegemony enables the United States to maintain its policy autonomy, pursue inflationary policies, and externalize the burden of inflation onto others. This has often forced other countries to pursue policy austerity of high interest rates and stringent fiscal cutbacks to ensure that they can draw in capital. The curtailing of fiscal expenditure impacts distributive issues of consumption within a country. Countries have also been forced to build dollar reserves to ensure that capital flight does not affect them. This means that their gains from trade cannot be used for distributive purposes inside their countries.

A current example of the impact of dollar hegemony is the effect of an emerging recession in the U.S. economy on the rest of the world. The securitization crises, the depreciation of the dollar, and growing recession in the United States have forced countries to lower their interest rates to prevent speculative capital inflows from overwhelming the stability of their economies. This has added to the growing inflationary spiral around the world as consumers borrow and spend heavily due to the sudden increase in domestic credit. This has added to the current crises of rising food prices and emerging famines in vulnerable economies.

See Also: Capital Flight; Dollarization; Fixed Exchange Rate; Floating Exchange Rate; Globalization.

Bibliography. "Economic Focus: A Tale of Two Worlds," *Economist* (May 10–16, 2008); "Economic Focus: Policing the Frontiers of Finance," *Economist* (April 12–18, 2008); Jean Gabriel, *The Dollar Hegemony: Dollar, Dollarization, and Progress* (Writers Club Press, 2000); Eric Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Cornell University Press, 1996); Henry Liu, *US Dollar Hegemony Has Got to Go* (Asia Times Online Co. Ltd., 2002); "The Great American Slowdown," *Economist* (April 12–18, 2008).

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Dollarization

Official dollarization refers to the practice by some countries of using the U.S. dollar as their official currency. In such a system, there is no central bank, no independent monetary policy, and no independent exchange rate. By adopting the U.S. dollar, a country enjoys price stability because the job of currency production is implicitly outsourced to the United States. Moreover, the practice makes it possible for international commerce and trade to be conducted with fewer currencies.

Unofficial dollarization involves the unofficial use of a foreign currency, usually the U.S. dollar, by the residents of a country while the domestic currency still circulates alongside the foreign currency. Unofficial dollarization includes cases where holding foreign assets is legal as well as illegal. The motivation for holding foreign assets by residents is to hedge against spiraling inflation.

Proponents of dollarization argue that there are too many currencies circulating in the world today and that this can become dangerous and inefficient. All of these currencies are backed by the confidence that investors have in them. When there is too much pressure on these currencies, the monetary authorities yield to devaluation. Devaluation brings hardship to the people as a result of attendant inflation. On the other hand, dollarization results in low inflation and relatively stable interest rates.

When the focus is on the individual as a decision maker, an economic choice becomes logical. Economists argue in favor of "consumers' sovereignty" rather than a national monetary sovereignty. The question then becomes: Who should possess the power to choose what currency to use? Proponents of dollarization argue that the choice should reside with individual consumers.

The recent financial crisis in several developing countries of the world (for example, the Asian financial crisis) is an indicator of the failure of monetary management in these countries. The failure of the Argentinean currency board system is a case in point. These crises can be avoided if dollarization is adopted because the national government is removed as an issuer of currency. In most countries of the world, the central banks have performed poorly in terms of promoting low inflation, foreign exchange management, and general monetary stability.

Dollarization is not a mechanism for replacing the monopoly of a domestic monetary institution with a monopoly of a foreign monetary authority. Some scholars argue that it is an evolutionary process for selecting an appropriate currency in terms of economic strength. It gives a country the opportunity to examine several currencies from which it could abandon an inferior one for a strong one.

Another legitimate argument in favor of dollarization is based on the concept of impossible trinity. This concept is the foundation of macroeconomics of open economy. It is premised on the idea that a country cannot achieve a fixed exchange rate, free movement of capital, and an independent monetary policy at the same time. At best, a country can achieve two. A country that pursues dollarization can overcome exchange rate volatility relative to the U.S. dollar and, consequently, can avoid future currency crisis. Moreover, such a country will benefit from an increased economic integration with the U.S. economy.

There are several key arguments against dollarization. The currency of a nation is a source of national pride and sovereignty that should not be transferred to another entity. The second argument is premised on the role of a central bank in an economy. In a dollarized economy, a central bank cannot create money. Therefore, it cannot serve as a lender of last resort. Critics of dollarization argue that the banking system in any country needs a lender of last resort to guard against panics. It is also important to have a central bank with power over monetary policy. This is because a central bank is the only institution that can restrain politicians through monetary policy instruments by neutralizing negative consequences of fiscal policy.

With dollarization, a country loses the benefit of seignorage. It is a gain associated with issuing money in an economy. For example, issuing new money may reduce the value of old money as a result of inflation and consequently reduce the liability associated with old money, thus creating implicit benefits for a money-issuing government. Finally, critics argue that Panama's economic prospects, for example, have not been outstanding even though it dollarized in the early 1900s. Other nations that recently adopted dollarization include El Salvador, Ecuador, and East Timor.

See Also: Central Banks; Currency Board; Exchange Rate System; International Monetary System.

Bibliography. G. Bekaert and R. J. Hodrick, *International Financial Management* (Pearson Prentice Hall, 2008); James W. Dean and Thomas D. Willett. *The Dollarization Debate* (Oxford University Press, 2003); Jeffrey J. Fox and Richard C. Gregory, *The Dollarization Discipline: How Smart Companies Create Customer Value ... and Profit from It* (Wiley, 2004); D. Gross, "The Case For Fewer But Stronger Currencies," *New York Times* (2006); M. Livingston, *Money and Capital Markets* (Kolb, 1993); M. Melvin, *International Money & Finance* (Pearson Addison-Wesley, 2004); M. Moffett, A. Stonehill, and D. Eiteman, *Fundamentals of Multinational Finance* (Pearson Prentice Hall, 2008); T. J. O'Brien, *International Financial Economics* (Oxford, 2005); Elizabeth Spiers, "The World's Worst Inflation," *Fortune* (v.158/3, 2008); Eduardo Levy Yeyati and Federico Sturzenegger, *Dollarization* (MIT Press, 2003)

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Dominican Republic

The Dominican Republic is an island located at the core of the Antilles Archipelago in the Caribbean and it is the second in extension within the Greater Antilles. The Dominican economy is generally considered to be lower middle income with the majority of business being small and middle-sized enterprises (SMEs).

Sugarcane farmers in the Dominican Republic, where GNP grew 7.7 percent per year from 1996 to 2000.

About half of Dominicans live in rural areas and many are small landholders. More than three-quarters of the population have low educational attainment levels, reaching only a secondary level of education.

The country has a representative democratic system of government, yet antidemocratic and exclusivist processes take place at all levels within the government, which result in a political system that promotes corruption and irresponsibility and encourages a lack of governance. This affects the role of regulatory institutions and organizational dynamics in both the public and private sector, as well as the way business is generally conducted, as there is evidence of a lack of business ethics that affects both social and political life.

In terms of economic development, after processes of economic and political transformation in the 1970s and 1980s, the 1990s were a period of accelerated social transformation. Following a global and regional trend, the country moved toward the readaptation of its productive apparatus and commercial openness aimed at regional integration and global insertion. After an initial recession in 1990–91, the country adopted sound macroeconomic policies oriented at attracting and creating a new environment for direct foreign investment, which resulted in a decade of continual growth in the economy. For instance, the gross national product (GNP) grew speedily from 1993 to 2000, reaching 7.7 percent per year from 1996 to 2000. As a result, the rate of expansion of Dominican production sustained the highest levels in the Latin American region, widely surpassing the regional average. Similar rates have been maintained to the present. However, though there has been a notable economic growth, this was not balanced with the development of institutional reforms and policies needed to increase distributive equality, create long term sustainability, protect macroeconomic stability, and achieve consolidation of the state of law.

The primary bases of revenue are tourism and free trade zones. The main economic sectors are services (tourism and transportation), industrial production (sugar refining, pharmaceuticals, cement, light manufacturing, construction, and non-fuel minerals such as nickel, gold, and silver), and agriculture (sugarcane, coffee, cocoa, bananas, tobacco, rice, plantains, and beef). In addition, the economy relies heavily on transfers from Dominicans living abroad (US$1.6 billion).

In terms of trade, the Dominican economy is very active both with exports and imports. The exports are mainly from processing and free trade zones (FTZ) and include textiles, sugar, coffee, ferronickel, cacao, tobacco, meats, and medical supplies exported to the United States, Canada, western Europe, and South Korea. The country imports foodstuffs, petroleum, industrial raw materials, and capital goods from the United States, Japan, Germany, Venezuela, Mexico, and Colombia.

Economic activity has increased; for example, total imports in 2004 amounted to US$7.84 billion, and in 2007 they amounted to US$8.797 billion. This has been strengthened by the country's 2005 ratification and 2007 implementation of the Dominican Republic–Central America Free Trade Agreement (DR-CAFTA), which was signed by the Dominican Republic, Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua with the United States and is expected to promote substantial economic growth, especially in the FTZ industry.

As shown, the Dominican Republic maintains business and trade relationships with a variety of countries throughout the world. Regionally, though the country has not been successful in its attempt to become part of the Caribbean Community (Caricom), it signed the CARICOM–Dominican Republic Free Trade Agreement, which came into effect in 2001 and helps the country expand its commercial markets, especially encouraging special trading arrangements in agricultural products. In addition, the country is a member of the Association of Caribbean States (ACS), benefiting from the Association's special committees that focus on reinforcing regional policies in trade, transport, sustainable tourism, and natural disasters for the Caribbean Basin.

See Also: Caribbean Community (Caricom); Free Trade Zones; Latin America.

Bibliography. Banco Interamericano de Desarrollo, *Republica Dominicana: Documento de Pais,*idbdocs.iadb.org (cited March 2009); R. Espinal, J. Hartlyn, and J. M. Kelly, "Performance Still Matters: Explaining Trust in Government in the Dominican Republic," *Comparative Political Studies* (v.39/2, 2006); S. E. Finkel, C. A. Sabatini, and G. G. Bevis, "Civic Education, Civil Society, and Political Mistrust in a Developing Democracy: The Case of the Dominican Republic," *World Development* (v.28/11, 2000); C. F. Jaramillo and D. Lederman, "DR-CAFTA: Challenges and Opportunities for Central America" (World Bank, 2005); R. Saladin, "The Dominican Republic," in *Latin American Business*, R. Crane and C. Rizowy, eds. (Pearson Prentice-Hall, 2005); United States Agency for International Development, *Estrategias 2002–2007: Fortalecimiento de la Democracia y la Buena Gobernabilidad*, 2007, www.usaid.gov (cited March 2009).

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Dow Chemical

The Dow Chemical Company is an American chemical company with headquarters located in Midland, Michigan. Dow Chemical is a multinational firm that has a presence in over 175 countries. As of December 2007, the company was the second largest in the world in terms of chemical sales. From 2003 to 2007, net sales grew from nearly $33 billion to approximately $54 billion. The company employs 46,000 people worldwide. Dow Chemical operates in four major product categories: engineering and basic plastics, industrial chemicals, agricultural products, and hydrocarbons and energy. Dow subdivides the global market into five regions. These are, in order of importance (2007 sales): North America, Europe, Asia Pacific, Latin America, and India/Middle East/Africa.

Dow Chemical was founded in 1897 by Herbert H. Dow, a Canadian chemist. The company began as a start-up enterprise that commercially exploited Herbert Dow's invention of extracting bromine and chlorine from Midland's natural supply of underground brine. By 1902 Dow Chemical was producing mass quantities of bleach and potassium bromide. Facing stiff predatory pricing strategies by the British (in the bleach markets) and the Germans (in the bromide business), Dow Chemical early on established the tradition of diversifying its product line based on common process technology. By the early 1940s Dow had expanded well beyond bleach, chlorine, and the bromides and was a major producer of phenol and related products (e.g., dyestuffs), magnesium metal (extracted from seawater), agricultural chemicals, and resins and plastics (most notably, ethylcellulose and polystyrene), which were becoming one of the company's most important business areas.

World War II

Dow Chemical played an important role during World War II. And, conversely, the war established for Dow a foundation for its postwar expansion. First, the war demonstrated the strategic and commercial importance of the company's magnesium process. Most notably, its magnesium metal proved critical to the war efforts as it was needed for making strong yet lightweight parts for transportation equipment and for aircraft. Second, the war compelled the formation of Dow's important joint venture with Corning Glass (Dow Corning) to produce silicone and related products for military use. As with magnesium, the silicones would prove of important commercial importance in the postwar period. Third, the requirements of the war effort led Dow to establish its position in the great petrochemical complex of the Southwest.

By 1942 Dow had constructed and was operating its Freeport, Texas, complex to turn out products—heavy chemicals and ethylene-based synthetics—for the military. Over the next 60 years, Freeport would become Dow's largest site and "one of the largest integrated chemical manufacturing sites in the world." In 2003 this site alone produced nearly 30 billion tons of chemical products representing nearly a quarter of Dow's total output worldwide.

Fourth, because of Dow's ability to mass-produce styrene, a critical ingredient in styrene-butadiene synthetic rubber, the war introduced Dow as a major player in the synthetic rubber industry and, at the same time, gave Dow its first experience constructing and operating a plant in another country (i.e., a styrene plant in Sarnia, Ontario, Canada).

The Postwar Years

The postwar period has been one of great opportunities to expand upon the advances made during the war, but it also brought great challenges. In the 1960s and 1970s, Dow confronted a series of legal and public relations problems unprecedented for a U.S. chemical company. The issues surrounding such Dow products as Napalm and Agent Orange (both developed for the military during the Vietnam War), the Dow-Corning breast implant controversy, and the DBDC soil fumigant case have continued to plague the company through drawn-out lawsuits and a continued residue of taint to its image right up to the present day.

There were also challenges facing the U.S. chemical industry in general, and Dow in particular. In the 1980s, Dow, as other chemical companies, faced stiff competition from the major oil companies—Exxon, Shell, and British Petroleum (BP), who had integrated backwards into petrochemicals. The large refiners had access to cheap raw materials, deep pockets, and economies of scale that even the chemical companies could not easily match. In the 1990s, the U.S. chemical industry went through a general decline in profits. (except for a peak in 1995–96) due to high feedstock costs, "recession-induced low pricing," and increasing competition from both chemical and backward-integrated oil companies in different product markets.

Despite these issues and challenges, Dow has grown and expanded as a company over the last few decades. It has done so by retaining a growth strategy for most of the period, and up to the present day. Indeed, the company was willing to go heavily into debt in order to support this focus on growth. As a result, Dow is one of the larger chemical companies that has remained in the field as a competitor to the oil companies in the petrochemicals field. Dow's growth strategy hinged upon four major interrelated components.

First there was its commitment to an aggressive research and development (R&D) program. Dow of course looked for new products, as it did in its discovery of a commercial process for styrene. However, Dow Chemical concentrates mostly in the business of making basic chemical and intermediate commodities. This focus on improving economies of production (and finding cheap raw materials and feedstock) meant that Dow could successfully use a low-price strategy to gain markets and thus help to expand old markets, and find new ones for existing products.

Second, Dow has proven itself very flexible in changing its organizational structure as it outgrew older structures, and especially to facilitate internal communications and access expanding external markets. Restructuring in the 1960s and 1970s centralized the marketing function and linked R&D more closely with other departments in order to motivate employees to innovate solutions as they came across problems in their areas of expertise. By the 1980s Dow reorganized geographically to take optimal advantage of its growing international network.

Third, Dow Chemical has expanded and diversified through an increasingly robust program of strategic merger/acquisition and joint venture and partnering arrangements. Its first important joint partnership with Corning Glass brought Dow into silicone and its products. In 1960 Dow entered into the pharmaceutical industry by acquiring the drug company Allied Labs. Dow expanded its pharmaceutical business in 1981 with the purchase of Merrell Drug. Dow's 2001 acquisition of Union Carbide, while highly controversial, has propelled the company into a leading petrochemicals company. Dow's recent joint venture with Cargill to make polymers from renewable (agricultural) resources has introduced Dow into advanced materials and biorefinery products.

Dow has also been successful in forming outsourcing relationships to further optimize efficiencies. Regarding suppliers, by the 1990s Dow had contracts with 50 qualified suppliers to assure quantity and quality; this helped to improve the quality and cost structure of the company. Dow also has outsourced a large portion of its IT requirements to Accenture, which has helped the company reduce operating costs by $70 million annually while improving time to market by 10 percent.

Fourth, Dow has been successful in taking advantage of the post–World War II globalization movement. Dow established its first overseas subsidiary in Japan in 1952. But it was in Europe that Dow made its first major incursion. Dow was one of the first U.S. chemical firms "to establish a strong European manufacturing presence." Following the war, at the request of the German government, Dow took over, refurbished, and operated some of Germany's largest pre-war plants. Dow completely integrated these plants to form one, large complex. By 2000 Dow had a world-sized plant built at relatively low cost to itself and strategically located to the markets of both western and eastern Europe. In the 1960s, Dow built a large chemical complex in Terneuzen, Switzerland, and under the threat of an aggressive pricing strategy, Dow expanded its European presence as a supplier of chlorinated solvents including carbon tetrachloride and chloroform.

In the 1980s, taking advantage of the free trade and privatization policies of the Mercosur countries, Dow entered South America, and made important gains in Argentina. Here, in the late 1990s, Dow acquired the Bahia Blanca petrochemical complex and entered into a joint venture with Petrobas, Repsol, building a 450,000-ton-per-year petroleum cracker. These actions meant that Dow had strengthened its role as a leading player in Mercosur's petrochemical sector. The latter demonstrates that Dow exploited the advantages of joint ventures with local firms. These benefits included closer availability of raw materials and markets, the sharing of costs and risks, and access to expertise and contacts critical in doing business in a foreign market. For example, Dow (as did BASF) formed a strategic joint venture with Petronas in Malaysia and so expanded the company's presence in Asia.

Dow plans to continue its four-tiered growth strategy over the foreseeable future, including further acquisitions and joint ventures in its search for new technology and a growing market presence in Europe, Asia, and Latin America. The company is also incorporating into its strategy local environmental, social, and economic needs of the developing countries that it enters.

See Also: Bhopal Disaster; Globalization; Joint Venture; Mercosur/Mercosul; Petrobas; Petronas; Repsol YPF; Research and Development; United States.

Bibliography. F. Aftalion, A *History of the International Chemical Industry,* 2nd ed. (Chemical Heritage Press, 2001); A. Arora, E. Landau, and N. Rosenberg, eds., *Chemicals and Long-Term Economic Growth* (John Wiley & Sons, 1998); "Dioxin Cleanup: State and Federal Agencies Wrangle with Dow Chemical Over Contaminated Rivers," *Chemical and Engineering News* (v.86/32, 2008); "Dow Chemical Co., *Annual Report* (2007); A. Findlay, *A Hundred Years of Chemistry,* 3rd ed. (G. Duckworth, 1965); FundingUniverse.com, "Dow Chemical Co." (2007); L. Haber, *The Chemical Industry: 1900–1930: International Growth and Technological Change* (Oxford University Press, 1971); W. Haynes, *American Chemical Industry* (D. Van Nostrand, 1945–54); P. Spitz, *Petrochemicals: The Rise of an Industry* (John Wiley & Sons, 1989); F. Taylor, *A History of Industrial Chemistry* (Abelard-Schuman, 1957); D. Whitehead, *The Dow Story* (McGraw-Hill, 1968); "What's Next: India: Bhopal Has Cast a Long Shadow: Now the Legal Wrangling Threatens to Trip Up Dow Chemical," *Business Week* (June 9, 2008).

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Dow Jones Index

Dow Jones Index, also known as the Dow Jones Industrial Average (DJIA), or often simply the Dow 30 Industrials, is a price-weighted average of 30 U.S. blue-chip stocks. These are shares of some of the largest and most financially strong and stable companies in the United States. As the second-oldest continuing U.S. stock market index, it remains one of the most widely reported indicators of the price performance of U.S. equities.

The index was originated by Charles Dow (1851–1902), one of the founders of Dow Jones and Company, who began publishing the daily average prices of 12 "industrial" stocks in *The Wall Street Journal* in 1896. In 1916 the index sample was increased to 20 stocks, and then in 1928 to 30 stocks, where it has remained to the current day. In 1956 the DJIA became the first stock index to be made available in real time during trading hours.

In 1884 Dow began publishing an earlier index of 11 primarily railroad stocks that was published in *Customer's Afternoon Letter,* a precursor to *The Wall Street Journal*. In 1896 the last non-railroad stock was removed from this index, which became a 20-stock average of railroad stocks. As a result of the change in its composition over the years, this index was renamed the Dow Jones Transportation Average (DJTA) in 1970. The DJTA has the distinction of being the U.S. oldest continuing stock market index. Also among the most commonly referenced Dow stock indices is the Dow Jones Utility Index (DJUA), which was established in 1929 and includes 15 large natural gas and electricity utilities. Together these three indices and their combined 65 stocks comprise the Dow Jones Composite Average. Reportedly, Dow's goal in publishing stock indices was to provide market participants measures of longer-term trends in stock prices that minimized the import of daily, random price fluctuations.

Composition

The composition of the Dow 30 is determined by the editors of *The Wall Street Journal*. Changes are infrequent and are usually driven by a change to one of the component companies, such as its acquisition or a significant change in its business. Whenever a change is required, all component stocks are reviewed. Historically, the DJIA index's composition has been less "industrial" than its name suggests. Reportedly, the editors look to include large successful companies whose shares are widely held and are not represented in the separate indices for both transportation and utility companies. In general, the composition of the DJIA index has changed to reflect the changing American economy as it has developed over the past century from the dominance of agricultural and commodity production to leadership from such sectors as technology, retail, and financial. These changes are reflected in the original and recent lists of companies included in the index.

In 1896 the DJIA originally consisted of the following 12 companies: American Cotton Oil; American Sugar; American Tobacco; Chicago Gas; Distilling & Cattle Feeding; General Electric; Laclede Gas; National Lead; North American; Tennessee Coal & Iron; U.S. Leather (preferred); and U.S. Rubber. Among these companies in the original index, only General Electric remains on the current DJIA. (However, General Electric has not been in the index continuously; it was not included from 1898 to 1899 or from 1901 to 1907.)

Currently in 2008 the Dow 30 includes the following companies: 3M Company; Alcoa Incorporated; American Express Company; American International Group, Inc.; AT&T Incorporated; Bank of America Corporation; Boeing Company; Caterpillar Incorporated; Chevron Corporation; Citigroup Incorporated; Coca-Cola Company; DuPont; ExxonMobil Corporation; General Electric Company; General Motors Corporation; Hewlett-Packard Company; The Home Depot Incorporated; Intel Corporation; International Business Machines; Johnson & Johnson; JPMorgan Chase & Company; McDonald's Corporation; Merck & Company, Incorporated; Microsoft Corporation; Pfizer Incorporated; Procter & Gamble Company; United Technologies Corporation; Verizon Communications, Inc.; Wal-Mart Stores Incorporated; and Walt Disney Company. All but two of these 30 companies are listed on the New York Stock Exchange. The two exceptions are Microsoft and Intel, which are traded on NASDAQ. Both companies, the first technology stocks in the index, were added in 1999.

Calculation

In the original calculation of the index, the 30 stock prices were summed and that sum was divided by 30. The first DJIA reported on May 26, 1896, was 40.94. The divisor of 30 has had to be adjusted frequently over the years to reflect stock splits, in which the number of shares outstanding is increased by issuing additional shares to existing shareholders, spin-offs, rights issues, and large or special cash dividends. The divisor is also adjusted when the component stocks are changed so that the average is unaffected by the change. In June 2008 the prices of the 30 stocks in the index were added and divided by a divisor of 0.122834016. The resulting number is expressed in terms of "points."

As a result of its methodology, the index gives greater weight to higher-priced stocks. For any given percentage change to a stock's price, the price change to the higher-price stock will result in a larger change to the DJIA than will the same percentage change to a lower-priced stock in the index. To determine the impact of any one stock's price change on the index, the price change is divided by the Dow divisor. For example, a $5 increase in any one stock's price would increase the DJIA by 40.7 points (5/0.122834016 = 40.70534). In the years before the financial crisis of 2008, the index had risen higher than 14,000 points. In the previous decade the index rose from 2,588 in January 1991 to 11,302 in January 2000, topping 10,000 in 1999, 10 times its 1972 level.

A computer display showing the Dow Jones Industrial Average, the second-oldest continuing U.S. stock market index.

Criticisms and Theories

Although the Dow 30 is criticized as being too small a sample to be representative of the movement of the larger market, it continues to be the most closely watched and reported U.S. stock market index, even exceeding the coverage given to the S&P 500 Index and the even larger NASDAQ Composite, which includes over 3000 stocks. As an indicator of the price movement of large cap stocks, the Dow 30 has been found to be highly correlated with the much broader S&P 500. Other criticisms of the Dow include the imprecision of the selection criteria for inclusion in the index and the regular necessity of the recalculation of the divisor. Regardless, with its long history and regular publication and promotion in *The Wall Street Journal*, the Dow has stood the test of time across generations of market participants as the principal barometer of the broad price performance of U.S. equities for over 100 years.

As a broad index of common stock price trends, the Dow Index has been the basis for a number of stock market trading strategies. The most famous is the Dow Theory, a form of technical analysis developed by Charles Dow's successor as editor of *The Wall Street Journal*, William Peter Hamilton. Formally named in Charles

Rhea's 1932 *Dow Theory*, this market timing strategy seeks to offer buy or sell signals based on primary trends in the market as represented by the Dow Jones Industrial and Transportation Averages. This market timing strategy attempts to differentiate primary trends, so-called bull or bear markets that are believed to alternate regularly, from both secondary market corrections that may persist for a few months and tertiary daily random price fluctuations that can be ignored.

Another trading strategy based on the Dow Index is the so-called Dow 10 or Dogs of the Dow that involves investing equal amounts in the 10 stocks in the Dow 30 that have the highest dividend yields (the ratio of the annual dividends paid on a stock to the current market price of the stock) in any given year and then repeating the process each year as the composition of the Dow 10 changes. Debate continues on the ability of such trading strategies based on movements in the Dow Index to generate consistently high returns.

See Also: American International Group; AT&T; Bank of America Corp.; Boeing; Caterpillar; Chevron; Citigroup; Equities; ExxonMobil; General Electric; General Motors; Hewlett Packard; International Business Machines; Johnson & Johnson; JPMorgan Chase & Co.; Microsoft; Pfizer; Procter & Gamble; S&P 500 Index; Stock Exchanges; United Technologies; Verizon Communications; Wal-Mart Stores; Walt Disney.

Bibliography. H. Bernard and G. Galati, "Special Feature: The Co-Movement of US Stock Markets and the Dollar," *BIS Quarterly Review* (August, 2000); Dow Jones and Company, www.djindexes.com (cited March 2009); J. Francis and R. Ibbotson, *Investments: A Global Perspective* (Prentice Hall, 2002); S. Fraser, *Every Man a Speculator: A History of Wall Street in American Life* (HarperCollins, 2005); F. Gupta, "The Past and Present and Prologue to the Future of the Dow" (Dow Jones and Company, 2006); M. Higgins and J. Downes, *Beating the Dow* (Harper Perennial, 1992); J. Kirby, "Demise of the Dow," *Macleans* (October 23, 2006); F. Reilly and K. Brown, *Investment Analysis and Portfolio Management* (Thomson South-Western, 2005); R. Rhea, *The Dow Theory* (Barron's, 1932); R. Salomon, Jr., "The Outdated Dow Jones," *Forbes* (April 7, 1997); C. Shalen, "Another Look at Dow Theories" (Chicago Board of Trade, 2008).

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Downstream

The term *downstream* has historically been used in the natural resources and chemicals industries, and specifically in the oil and gas industry, to refer to activities that relate to the processing of crude oil and natural gas or related petroleum products to the point where the feedstock is broken down and purified into a series of products such as aviation gas (avgas) or bitumen for roads, or petrol/gasoline for cars and trucks, or even when natural gas is used as a source material for electricity generation.

The origins are in the sense of location of the deposition of minerals in a streambed, e.g., gold-panning activities (so even older than petroleum exploration and production) where heavy minerals were deposited "down stream," i.e., away from the water's source but originated "upstream." It is, however, also used today to refer to bioprocesses where it refers to the purification and quality control processes for new biological materials, data transfer speeds between host servers and clients analogous to downloading, and as a term for later activities or later elements of sequencing in manufacturing and production processes.

Petrochemical products, for example bitumen, were found to have been used in Roman camps such as Uttoxeter in the United Kingdom, but until the late 19th century, interest in downstream products was based around their roles as lubricants. Much of industrial development was coal based with interest growing in petroleum, though gas was almost an inconvenience. With the dwindling of black-coal mining, which is associated with high health and safety risks, in many countries, oil and gas-based chemical production has taken over and many downstream products are in everyday use.

While upstream companies may just concentrate on the exploration and production of oil and gas, an activity still possible on a small scale of a single oil well and with limited capital, downstream activities are large scale and hugely capital intensive. Plant design, scale, and scope (integration) are all important drivers for firms to capture as much of the added value chain for bulk low-margin products such as olefin precursors used in polymers and plastics. Many of the larger companies adopted an integrated strategy from upstream to downstream activities, a strategy still in use by national oil companies such as Petrobras and

Petronas. Indeed, ExxonMobil began life as Standard Oil of Ohio in the oil refining business—the Standard Oil companies were a cartel controlling 85 percent of the United States' oil industry and were then split into a number of companies that form the precursors of today's Western supermajors.

Downstream petrochemical activities are often split into self-explanatory areas such as bulk chemicals, fine chemicals, or fertilizers, many categories of which are traded as commodities on world markets. Key success determinants are access to cheap feedstock (upstream-generated oil and gas of the optimal quality and chemical constitution for the plants in question); other allied input costs include cheap energy and skilled labor. Plant set-up costs are high, technology is heavily protected, and there are limited numbers of world-class suppliers. However, it is the opportunity to capture added value within resource-owning host government countries that is attractive, with the result that many major downstream activities are now located closer to production sites or to major users. An example of this trend would be Saudi Arabia's development plans for further petrochemical processing and product delivery.

This drift away from Western Europe and the United States has also been affected by the consequences of plant closures in the former Soviet Union and Eastern bloc as a result of failure to meet European Community safety and health standards and also environmental pressures in the West for better emissions management and enhanced ecological expectations. This trend is also affected by events that became international incidents when systems failed and serious accidents occurred. One such event—the explosion at the Bhopal plant in India in 1984 with serious loss of life, injury, and ongoing contamination issues—focused international opinion on foreign company investments in this sector. Older plants are much more expensive to adapt to modern standards, and secondhand plants from country to country are not always as attractive a cost option as they initially appear, leaving many firms with expensive and sometimes technically challenging issues around decommissioning old plants but also facing increasingly urgent claims from a wider universe of stakeholders than in the days when the plant was the major employer and stakeholder groups felt less able to speak out about problems.

See Also: Bhopal Disaster; BP; Chevron; Concession; ConocoPhillips; Corporate Social Responsibility; ENI; ExxonMobil; Gaz de France; Gazprom; Iran; Joint Venture; LUKOIL; Marathon Oil; Middle East; Pemex; Petrobras; Petronas; Royal Dutch Shell; Saudi Arabia; Total.

Bibliography. D. Burdick and W. Leffler, *Petrochemicals in Nontechnical Language,* 3rd ed. (Pennwell Publishing, 2001); Business Monitor International, *Saudi Arabia Petrochemicals Country Report 2008* (Business Monitor International, 2008); R. Dawe, *Modern Petroleum Technology, Upstream,* 6th ed. (Institute of Petroleum, 2002); J. Gary, H. Handwerk, and M. Kaiser, *Petroleum Refining Technology and Economics*, 5th rev. ed. (CRC, 2007); W. Leffler, *Petroleum Refining in Nontechnical Language*, 3rd rev. ed. (Pennwell Publishing, 2000); J. Lipton, "Exxon Discovers Profits Downstream," *Forbes* (April, 26, 2007); A. Lucas, *Modern Petroleum Technology, Downstream*, 6th ed. (Institute of Petroleum, 2002); J. Zerk, *Multinationals and Corporate Social Responsibility: Limitations and Opportunities in International Law,* Cambridge Studies in International and Comparative Law No. 48 (2002).

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Dumping

Dumping is a predatory price practice generally used only in the context of international trade law as international price discrimination, where a company exports a product at a lower price than the price it normally charges on its domestic market or at a price that is below its own costs of production. In this case, the product is considered to be a dumped product.

In general, one can define dumping as the act of selling products in a foreign market at prices below the normal value in the country of the exporter (i.e., the comparable price for the like product consumed in the exporting country or in third countries as the case may be, in the ordinary course of trade), for the purpose of injuring competitors of the importing country, thus gaining market share and securing a monopoly in this market.

Under World Trade Organization (WTO) rules (Agreement on the Implementation of Article

VI—Anti-Dumping Agreement—of the General Agreement on Tariffs and Trade 1994 [GATT 1994]), dumping is discouraged and countries are authorized to adopt anti-dumping measures, when dumping and material injury resulting from it has occurred to the domestic industry producing the like product or one product that has mainly the same characteristics of the imported dumped product. All WTO Members have been required to bring their laws into conformity with the Anti-Dumping Agreement. In fact, one can argue that one of the major achievements of the Anti-Dumping Agreement has been the establishment of relevant rules, at the international level, governing the determination of dumping, the initiation and conduct of dumping investigations, the imposition of anti-dumping and provisional measures, and the duration and review of these measures.

Looking at dumping practices, a number of questions may arise, such as: Why do companies practice dumping? What are the effects of dumping? How can you identify dumping? When can anti-dumping measures be taken? The answer to the first question is simple. In a competitive global market where import duties are reduced, companies may intend to increase their market share, driving producers from other countries out of the market and thus securing a monopoly. Regarding the effects of dumping practice, the most relevant one is that it disturbs the market that receives dumped products and may drive local producers out of business. There is a large body of literature discussing the conditions that facilitate the practice of dumping by companies.

One identifies dumping by comparing prices in the export and the import markets. As simple as this fair comparison of prices may be at first glance, this procedure is very complex and requires an investigation conducted by the importing country to determine the normal value price at the exporting market and the appropriate price in the domestic market. For this purpose, prices are compared to those transactions that are at the same level, in general at factory level, and as close as possible to the same time of the sales transaction at stake.

Also, discriminatory price by itself is not sufficient to authorize anti-dumping measures, according to the Anti-Dumping Agreement. These measures can only be applied when dumped exported products cause or threaten damage to the domestic industry of the importing, like-product country and a material injury results therefrom. The basic requirements for determination of injury are the volume and price effects of dumped imports and the impact of dumped imports on the domestic industry.

Anti-dumping measures may take two different forms: Anti-dumping duties or price undertakings offered to exporters to avoid anti-dumping duties. Anti-dumping measures are based on a detailed investigation conducted by the import country. The investigation has to evaluate all relevant facts, not limited to economic aspects, that may prove that dumped price and material injury occurred therefrom, such as: Significant increase in dumped import products, price undercutting by dumped imports compared to the price of like product of the importing country, significant increase of volume and price effects of dumped products, actual or potential declines in sales of like products in the importing country, increase of market share by dumping producer, actual or potential effects on cash flow, inventories, employment, and wages of importing country, significant margins of dumping and other factors that may be deemed relevant. Thus, anti-dumping measures can be imposed by the importing country only after the investigation has determined that the dumping is occurring, the domestic industry is suffering material injury and, last but not least, there is a causal link between the two: Dumping price and injury.

Factors other than dumped products that may be causing injury to the domestic industry have to be excluded by the investigation in order to establish the causal link between dumping products and material injury. Provisional anti-dumping measures may be determined by the importing country as long as a preliminary determination of dumping, injury, and causality has been duly established and after initiation of the investigation.

A country's failure to respect the requirements of the Anti-Dumping Agreement can be taken to the WTO Dispute Settlement Body and may be the basis for invalidation of such anti-dumping measures. Hence, with the WTO rules, dumping has been successfully discouraged, yet dumping practices still remain.

See Also: Free Markets; Globalization; World Trade Organization.

Bibliography. Philip Bentley and Aubrey Silberston, *Anti-Dumping and Countervailing Action: Limits Imposed by Economic and Legal Theory* (Edward Elgar, 2007); Meredith Crowley, *Cyclical Dumping and US Antidumping Protection 1980–2001* (Federal Reserve Bank of Chicago, 2007), www.chicagofed.org (cited March 2009); Benjamin Eden, "Inefficient Trade Patterns: Excessive Trade, Cross-hauling and Dumping," *Journal of International Economics* (v.73/1, 2007); B. M. Hoekman and P. Mavroidis, "Dumping, Antidumping and Antitrust," *Journal of World Trade* (1996); G. Marceau, *Anti-Dumping and Anti-Trust Issues in Free Trade Areas* (Clarendon Press, 1994); P. Nicolaides, "The Competition Effects of Dumping," *Journal of World Trade* (1990); A. Pangratis and E. Vermulst, "Injury in Anti-Dumping Proceedings: The Need to Look Beyond the Uruguay Round Results," *Journal of World Trade* (1994); E.-U. Petersmann, "International Competition Rules for the GATT-MTO World Trade and Legal System," *Journal of World Trade* (1993).

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Dutch East India Company

In the mid-to-late 16th century, European enterprises began to reassert a time-honored interest in the potential rewards offered by long-distance trade. Among them was the United East India Company, or Verenigde Oost-Indische Compagnie. The VOC, as it is often referred to, developed over the next two centuries into an organization so large and powerful that it is considered to be the world's first-ever multinational corporation.

The VOC was established as a charter company in 1602 by the Dutch parliament, the States-General of the Netherlands, from a collection of smaller companies. At the time, European economy and society, especially in England and Holland, were undergoing rapid change through the growth of the merchant middle class that preferred trade rather than land as the method of income. Within that was another economic transformation: Bills of exchange emerged as a favored currency for business transactions, which, combined with the opening of banks in large cities and the first waves of colonialism, led businessmen to new concepts of investing their capital.

The Dutch had been one of the leaders in creating a structure of modern colonialism that involved merchant businessmen joining with their home states on the formation of monopolistic, imperialistic companies. One manner of effectively accomplishing such an outcome, they discovered, was to raise capital for ongoing ventures by pooling individual assets into a single company. In return, the individual investor would receive transferable shares of stock in the company. Then, at the point in time at which the venture turned a profit, the company would divide and disburse the profit based on the proportion of shares held by the investor. It was the VOC that became the first-ever company to begin—and benefit from—this practice of limited liability.

From the outset, the VOC turned a profit from its ventures and did so largely by buying low, selling high, and trading favorably in all manner of commodities across the Asian continent. The capacity to do so systematically began with the company directors, the Seventeen Gentlemen, dispatching a few VOC fleets each year to the hub outpost in Batavia (present-day Jakarta, Indonesia). These voyages had a tendency to last anywhere from seven to nine months in each direction, as the fleet sailed to Batavia and back via the Cape of Good Hope. When the fleet reached Batavia and unloaded its cargo of tradable goods and precious metals, servants, and instructions to the colonial High Indies Government, agents of the colonial government would in turn oversee the distribution of cargo throughout the commercial hierarchy and local geography.

From there, VOC merchants transported the imported goods, metals, and people to regions including India, Persia, Japan, and, later, China. The effectiveness of the land-based operation—and the monopoly itself—was settled as much in various collection posts along the trading routes as in maintaining coercive or inequitable relationships with local populations. Through whatever means, the commodities, once acquired, would be delivered to Batavia for shipment to the Netherlands on a returning fleet. Upon arrival, the cargo would be brought to a VOC warehouse until the company saw fit to release the goods to the European market through auction. The resultant profit was then used to provide dividends to shareholders and fees to directors, and to fund existing and future company operations.

As an additional part of their business, the VOC financed voyages such as those on which Henry Hudson was sent in the early 1600s to explore and discover a more efficient route to India via Greenland. In any case, the sheer magnitude and force of the overall operation—geographically, economically, organizationally, politically, and militarily—was at once the basic element in the company's early ability to reduce its risk and also precisely what led to a considerable amount of uncertainty at even the minutest step in their business processes. As time went on, for instance, the Seventeen Gentlemen experienced difficulty in obtaining accurate information about goings-on in Batavia while also mismanaging the balance of better incentives and harsher sanctions to their many agents. But these relatively internal hindrances began to emerge in larger numbers around the same time as fiercely increasing external competition, most notably from the British East India Company that had gained its footing by the mid-to-late 17th century.

By the end of the 17th century and the beginning of the next one, the centralized authority within the VOC began to seriously break down. Some conveniently-situated VOC agents found power in their positions, for these agents were situated in manners that would have allowed them to direct VOC resources through any channels they perceived to be beneficial. That is, the agents eventually recognized that they were effectively positioned to act as principals, which meant they could selectively become direct competitors of VOC principals should they so choose. Many acted on the opportunity in the interest of greater personal gain and, though the formal hierarchy remained in place, the authority of VOC principals withered away until the company was dissolved on December 31, 1795.

See Also: British East India Company; Indonesia; Netherlands; Virginia Company.

Bibliography. J. Adams, "Principals and Agents, Colonialists and Company Men: The Decay of Colonial Control in the Dutch East Indies," *American Sociological Review* (1996); W. H. Arnoux, *The Dutch in America: A Historical Argument* (private printing, 1890); R. B. Ekelund and R. D. Tollison, "Mercantilist Origins of the Corporation," *Bell Journal of Economics* (1980); F. S. Gaastra, "Competition or Collaboration?: Relations Between the Dutch East India Company and Indian Merchants Around 1680," in *Merchants, Companies and Trade*, S. Chaudhury and M. Morineau, eds. (Cambridge University Press, 1999); O. Gelderbloom and J. Jonker, "Completing a Financial Revolution: The Finance of the Dutch East India Trade and the Rise of the Amsterdam Capital Market, 1595–1612," *The Journal of Economic History* (2004); William N. Goetzmann and K. Geert Rouwenhorst, *The Origins of Value: The Financial Innovations That Created Modern Capital Markets* (Oxford University Press, 2005); Robert Parthesius, *Dutch Ships in Tropical Waters. The Development of the Dutch East India Company (VOC) Shipping Network in Asia 1595–1660* (Amsterdam University Press, 2008); O. Prakesh, "The Portuguese and the Dutch in Asian Maritime Trade: A Comparative Analysis," in *Merchants, Companies and Trade*, S. Chaudhury and M. Morineau, eds. (Cambridge University Press, 1999).

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Duty

A duty is a tax on goods imported into a country, levied by the government and paid by the purchaser. Duties are commonly called tariffs. Duties vary by country of origin, country of import, and product type. Duties are usually levied as a fixed rate per unit of good (called "specific tariffs") or as a percentage of the value of the good (called "ad valorem tariffs"). If the duty is calculated as both a rate per unit and a percentage of the good's value, it is called a "compound duty."

Duties can be distinguished by where they are levied. Most duties are "import tariffs," which are those levied as a good enters the destination country. If the duty is levied by the country of origin as it is exported, it is called an "export tariff." For example, in 2004, China imposed an export tariff on 74 textile products to promote the use of these textiles within the country. Duties can also be levied by countries through which a good passes; these are called "transit tariffs." Governments also levy duties on goods manufactured and sold within their country. For example, excise duties are commonly applied to alcoholic beverages, tobacco products, and fuel products such as gasoline, electricity, and coal.

Governments have several reasons to impose duties on products. First, duties act as indirect taxes on the consumption or the use of certain products. Duties raise the prices of imported goods, making them less competitive within the market of the importing country. As the price of these products increases, the demand decreases. By controlling price and demand, governments use duties to achieve the correct balance between supply and demand. Second, governments use duties to increase the cost of the good in an attempt to reduce consumption and importation of that good. In turn, these duties protect domestic industries producing the product by making imported goods more expensive than local. Also, by controlling the market for certain products, duties protect the cultural identity of the domestic country.

Third, duties raise revenues for the governments. Often, this revenue is used to pay for the enforcement of government regulations controlling the product and related industries. A government can also gain an economic advantage by collecting revenue from a good controlled by that country or in abundance in the country. Fourth, governments often have political motives for imposing duties. In the past, duties have been used to penalize the county of origin by effectively reducing their exports.

Lastly, duties can also be a tax to reduce the consumption of luxury (high-priced goods such as a boat) or socially forbidden goods (such as alcohol and tobacco). The efficacy of these duties is limited and some argue that they increase the likelihood of smuggling and the use of black markets. In response, some governments provide limited provisions for personal use, which has spawned the creation and growth of duty-free shops, and ports allowed personal purchase of a limited number of goods in the late 20th century.

Information about the duty amount each country levies is available from the U.S. Department of Commerce's International Trade Administration. The agency manages a Web site, www.export.gov, in collaboration with the 19 federal government agencies that provide export services. Duties are assessed using the Harmonized Commodity Description and Coding System (or Harmonized System), which is an internationally standardized system of commodity nomenclature and categorization.

See Also: Ad Valorem Duties; Country of Origin; Export; Harmonized System; Import; Tariff; Trade Barriers; Trade Bloc; Value Added Tax.

Bibliography. G. J. Faber and Jan Orbie, *European Union Trade Politics and Development: 'Everything But Arms' Unravelled* (Routledge, 2007); Thomas E. Johnson, *Export/Import Procedures and Documentation*, 4th ed. (AMACOM, 2002); Christopher Stevens, Mareike Meyn, and Jane Kennan, *Duty-Free, Quota-Free Access: What Is It Worth?* (Overseas Development Institute, 2008), www.odi.org.uk (cited March 2009).

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DZ Bank

The DZ Bank, or to give its full name, the Deutsche Zentralgenossenschaftbank (or German Central Cooperative Bank), is based in Frankfurt, Germany, with headquarters in the DZ Bank Tower; as a major commercial bank, it is one of the largest in Germany. In addition to having its own customers, the DZ Bank AG works alongside WGZ-Bank, which controls the administration for some 1,400 cooperative banks. This represents about 75 percent of all the Volksbanks and the Raiffeisenbanks in Germany and also in neighboring Austria. In some ways the history of the bank is not dissimilar to the Trustee Savings Bank in Britain, which brought together a loose "federation" of savings institutions and is now a part of Lloyds TSB Group.

The origins of the bank lie in the establishment of a range of loan institutions known as the Volksbanken, which were founded and promoted by Hermann Schulze-Delitzsch (1808–83), a politician and the founder of the commercial cooperative system in an effort to encourage thrift and saving among the urban lower middle class and also the working class. Soon after this, Friedrich Wilhelm Raiffeisen (1818–88) became heavily involved in the expansion of the rural cooperative loan associations that led to the establishment of what became known as the Raiffeisenbanks after the man most associated with the promotion of them. However, it was Wilhelm Haas (1839–1913) who, in 1883, established the Landwirtschaftliche Genossenschaftsbank AG in Darmstadt, in the state of Hesse, in the west of Germany, and the Preußische Zentralgenossenschaftskasse, which operated in Berlin to help encourage savings in the German capital.

This myriad of structures led to the creation of a three-tier banking system that was to lead to many problems in the 1920s, but also allowed the various tiers to help the others at times of major crisis. The cooperative movement managed to survive the Great Inflation of 1923; to strengthen the system, the Frankfurt Cooperative Pact of 1929 resulted in the Preußenkasse becoming the central credit institution for the entire rural cooperative system in Germany. By the outbreak of World War II in 1939, the bank had been renamed the Deutsche Zentralgenossenschaftskasse and helped provide stability for the entire Volksbanken system.

The system of tiers of banks continued, but in 1972 the Federal Association of German Cooperative Banks was established and there was a merger between the Volksbanken and the Raiffeisenbanken. Three years later the DG Bank was established to bring these cooperative banks together in a state-owned corporation. In 1975 the bank was restructured, and in 1985 it slowly eroded the three-tier system. In 2000, the DG Bank was eager to expand after a bad banking year in which its risky loans quadrupled, with problems arising from rural credit over mad cow disease and foot-and-mouth disease. Finally on June 24, 2001, the DG Bank and the GZ Bank merged to form the DZ Bank, which was at that time the sixth-largest bank in Germany; the merger was completed in September 2001.

The structure of the DZ Bank remains complicated, as it controls some 1,250 local cooperative banks and services some 30 million customers. The DZ Bank includes Bausparkasse Schwäbisch Hall, DG HYP, DZ Bank International, DZ Privatbank Schweiz, R+V Versicherung, TeamBank, Union Investment Group, and VR Leasing. As with other banking institutions, the DZ Bank Group also is involved in insurance, arranging reinsurance, and the provision of various levels of financial services to individuals and businesses. The DZ Bank also has established branches outside Germany with offices in the Cayman Islands, Hong Kong, London, Mexico City, Milan, New York, Sao Paulo, and Singapore, as well as operating subsidiaries in Hungary, the Irish Republic, Luxembourg, and Poland; and the DZ Bank International SA in Spain and the DZ Privatbank Schweiz in Switzerland. Its representatives have branches in Beijing and Shanghai, Istanbul, Moscow, Mumbai, and Tokyo. It also operates through other parts of western Europe through alliances and arrangements with banks in Belgium, France, the Netherlands, and other countries.

See Also: Deutsche Bank; Germany; Lloyds TSB Group.

Bibliography. "125 Years DZ Bank," www.dzbank.com (cited March 2009); Suzanna Kapner, "A Bank Merger Would Create the 6th-Largest in Germany," *New York Times* (June 25, 2001); Mark Landler, "5 Big Banks in Germany in Loan Pool," *New York Times* (April 23, 2003).

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EADS

The European Aeronautic Defence and Space Company (EADS N.V.) is the leading European company for aeronautic, defense, and aerospace services. EADS was set up in 2000 as a public limited-liability company under Dutch law, and it came from the merger of DaimlerChrysler Aerospace (Germany), Aerospatiale Matra (France), and CASA (Spain). EADS is the owner of Airbus, an aircraft manufacturer, which represents the core business of the company. EADS is also a world leader in the production of helicopters, space launch vehicles, missiles, military aircraft, satellite, defense systems, and electronics.

EADS is legally seated in Amsterdam (Netherlands), with the company's head offices located in Germany (Ottobrunn and Munich) and France (Paris), and locations and offices distributed around five continents. On December 31, 2007, the number of employees was 116,493.

Its shareholding structure as of June 30, 2008, is as follows: Sogeade (French company formed by Lagardère and the French state) owns 25 percent of the shares, German Daimler controls 23 percent of the shares, and the Spanish state company SEPI is the owner of 5.5 percent of the capital of the company. These companies together control 53 percent of EADS, and they have established a contractual partnership in order to run the company. The 47 percent of the remaining shares represent the free float of the company. EADS is listed in the stock exchanges of the countries of origin of the main shareholders: the Paris, Frankfurt, and Madrid Stock Exchanges.

The company is structured in five divisions, each of them responsible for one business unit: Airbus, Military Transport Aircraft, Eurocopter, Defence & Security, and Astrium. The aircraft manufacturer Airbus is a fully owned subsidiary of EADS, in charge of the production of aircraft. The headquarters of the company are located in the French city of Toulouse. The history of Airbus, from its origins to today, parallels that of European economic and political integration, with moves forward, periods of stagnation, and slight backward steps.

In 1967, the United Kingdom, France, and Germany signed a memorandum of understanding to launch a new European aircraft that was due to reduce the dependence of European airlines on American aircraft and which could eventually compete worldwide with American Boeing, who was at that time the major manufacturer able to produce commercial aircraft on a profitable and sustainable basis. The final agreement

French, German, and Spanish companies control 53 percent of EADS, whose Airbus division competes directly with Boeing.

(1969) was ratified only by the French and German ministers, though it also involved the British and the Dutch. Other countries, such as Spain, entered the consortium in subsequent years.

From its early stages Airbus has striven to seize the leadership of aircraft manufacturing from American Boeing. This commercial battle has been one of the most interesting business issues in the aviation industry of last quarter of the 20th century, with success for the Europeans in the last years, although this situation could be reversed.

At present Airbus manufactures five families of aircraft: A300/A310, A320, A330/A340, A350, and the largest passenger aircraft in the world, the Airbus A380. The final launch of Airbus A380 was preceded by several delays with regard to scheduled delivery dates, which caused an increase in costs due to compensations to clients, and gave rise to a financial scandal involving top management and shareholders. These were suspicious of executing trades before the delay of the Airbus A380 was announced to the market in June 2006.

The Military Transport Aircraft division is in charge of the production of the A400M, a military air transport developed at the request of eight European NATO members. First delivery of the plane is due in 2010. Eurocopter is the world's largest helicopter producer of both civil and military aircrafts. The Defence & Security division provides military aircraft, airborne weapons and defense systems, and electronics. Its most renowned product is the combat aircraft Eurofighter.

Astrium is the company providing space services and products, among which are the Ariane launchers, used in space transport, and the satellite navigation system, Galileo, which is destined to compete with American GPS.

According to company financial statements, the EADS group reported in 2007 a total revenue of 39,123 million euros (US$58,685 million, approximately), which was allocated among its divisions as follows: Airbus, 64 percent; Military Transport Aircraft, 3 percent; Eurocopter, 11 percent; Defence & Security, 14 percent; Astrium, 9 percent. The company in 2007 lost 33 million euros mainly due to the unfavorable euro/dollar movements, the negative impact of the revised delivery schedule for the A400M, and the costs of the new A350.

See Also: Boeing; Currency Exposure; European Union; Globalization.

Bibliography. Airbus, www.airbus.com (cited March 2009); EADS, www.eads.com (cited March 2009); Manfred Knappe, *On the Wings of Time: A Chronology of EADS* (Résidence-Verl, 2006).

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Earnings Management

Earnings management is an accounting process whereby managers manipulate reported earnings to obtain some private gain. As an indicator of opportunistic managerial behavior, investors and regulators are both concerned with the deliberate use of generally accepted accounting procedures to arrive at a desired level of reported earnings. However, the term *earnings management* now has a wider connotation and embraces every kind of striving in earnings manipulation. The purpose may be to increase management's compensation, or to meet earnings forecasts, but employment practices such as "revolving door," where a company hires senior finance executives such as a chief financial officer (CFO) or controller from its current external audit firm are also studied under the canopy of earnings management. The practice is also associated with managers using their discretion in financial reporting to smooth earnings, to reduce the likelihood of violating lending agreements, and to window-dress financial statements prior to initial public offerings (IPOs).

While earnings management is used to provide private benefits to managers, it is the firm that bears the cost of conducting it. Traditional literature has thus focused on investigating the nature and significance of unexpected accruals. More recent work has instead looked at the distribution of reported earnings for abnormal discontinuities such as declines in earnings. There are many interesting examples of how earnings are manipulated upward by changes in current asset and liability items such as accounts receivable and payable. These include bringing forward credit sales or deferring recognition of expenses. Managers may report accruals that defer income when the earnings target in their bonus plan is not met. When firms cap bonuses, managers may also defer income when that cap is reached. Other accrual options or accounting method choices that are susceptible to abuses of management's reporting judgment include banks' use of loan loss provisions, insurers' use of claim loss reserves to meet regulatory requirements, and IPO firms' use of bad debt provisions or income-increasing depreciation policies to increase the offer price.

Managers are compensated on the basis that they will act in the interest of firm owners. There are a large number of studies that find that managers use incentive pay plans to increase their payouts. One particular example is earnings-based bonus awards. Managers maximize the value of their bonus award by increasing (or decreasing) reported earnings. In some situations, payouts from a bonus pay plan are made only when earnings exceed a specified threshold or "hurdle" rate. Depending upon the total cash flows from operations and nondiscretionary accruals, managers then have the incentive to select the level of discretionary accruals that maximizes the expected value of their bonus award.

Weak corporate governance practices are also associated with managers' incentives to use discretionary accruals to maximize their compensation. This is the case when manager compensation is tied to stock price performance through options. Chief executive officers (CEOs) and top executives can then profitably exercise their stock options by exaggerating firm earnings that support higher stock prices. When job security is a paramount concern, managers could engage in smoothing earnings, thereby reducing the likelihood of dismissal. Managers may also attempt to develop a favorable reputation of their competence by managing earnings that show a steady growth in firm performance.

Capital market environments are particularly ripe settings for earnings management. Managers may be tempted to avoid reporting losses or reporting an earnings decline in the midst of a business downturn. To reduce earnings fluctuations, they will add or remove cash from reserve accounts. Consequently, they will keep the figures that match a predetermined target and that also meet market expectations. Market expectations are generated when investors and financial analysts use accounting and market signals of performance. If there is a gap between firm performance and investors' or analysts' forecasts, managers may try to smooth earnings to meet their expectations.

Changes in corporate control such as management buyouts and IPOs are also the likely settings in which managers exercise accounting discretion to paint a favorable picture. Valuations in management buyouts involve earnings information and managers of buyout firms may have an incentive to "understate" them. Managers may "overstate" or inflate earnings using income, increasing abnormal accruals in periods prior to equity offers or merger proposals. However, empirical research has frequently noted that firms with such unusually high accruals perform relatively poorly after their flotation.

There is some evidence to suggest that at least in some situations investors see through earnings management. Construction of reputational rankings on the basis of the extent of earnings management and the higher numbers of class action suits seen in recent years against individual company managers and directors of fraudulent corporations suggest that investors and other stakeholders are aware of suspected incidences of earnings management. Investor activism on these lines inevitably increases the cost of earnings management. Moreover, any suspicion of earnings management is likely to result in significant stock price declines, as when earnings management prior to equity issues impacts share prices, which may ultimately put the future of the firm in jeopardy.

See Also: Corporate Accounting; Corruption; Earnings Quality; Financial Reporting; Opportunistic Behavior.

Bibliography. P. Dechow, R. Sloan, and A. Sweeney, "Detecting Earnings Management," *The Accounting Review* (1995); P. Healy, "The Effect of Bonus Schemes on Accounting Decisions," *Journal of Accounting and Economics* (1985); R. Holthausen, D. Larcker, and R. Sloan, "Annual Bonus Schemes and the Manipulation of Earnings," *Journal of Accounting and Economics* (1995); Tao Jiao, Gerard M.H. Mertens, and Peter Roosenboom. *Industry Valuation Driven Earnings Management*. ERIM Report Series Research In Management (Erasmus University, 2007); Thomas E. McKee, *Earnings Management: An Executive Perspective* (Thomson, 2005); Lin Nan, "The Agency Problems of Hedging and Earnings Management," *Contemporary Accounting Research* (v.25/3, 2008); Joshua Ronen and Varda Yaari, *Earnings Management: Emerging Insights in Theory, Practice, and Research* (Springer, 2008).

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Earnings Quality

Generally, earnings quality is the degree to which earnings (also known as net income) accurately reflect the economic performance of an enterprise for the particular period of time to which the earnings apply. Earnings quality (also known as quality of earnings*)* is also a measure of the usefulness of the earnings number. It is reasonable to assume that a more accurate report of a firm's performance would be more useful than a less accurate report. Earnings that can be sustained—expected in the future—are more useful, and hence of higher quality, than those that appear transitory. The real debate is about the specific factors that influence earnings quality and how we can measure earnings quality.

Measures of earnings quality may include (1) the number of estimates embedded in the earnings calculation, (2) the choices in accounting methods, (3) significant changes in discretionary expenditures, (4) the relationship between cash from operations and earnings, and (5) the adequacy of disclosure and degree of transparency in the financial statements.

The calculation of earnings is fraught with estimates. For example, the useful lives of assets and the assets' salvage values must be estimated to calculate depreciation expense. All else equal, a firm with more long-term assets would have lower earnings quality than a firm with few long-term assets because the former would have many opportunities to influence the level of depreciation expense with these estimates. Management judgments create opportunities for errors. In general, more estimates involved in the calculation of earnings suggest lower earnings quality.

Firms must choose the appropriate method of accounting for certain transactions, and these choices can influence the quality of earnings. For example, under U.S. generally accepted accounting principles, a firm may use FIFO (first-in, first-out) or LIFO (last-in, first-out) for the calculation of cost of sales. If the cost of the inventory has been rising, LIFO may result in higher earnings quality because the more recent costs will be matched with the period's sales. That means the resulting earnings amount may be more useful in predicting the future than earnings calculated using FIFO costs, which match old inventory costs with the period's sales. On the other hand, a firm's earnings quality could be reduced if the firm liquidated old LIFO layers, which would result in the inclusion of illusory profits in the earnings calculation. This example shows how difficult it is to measure the quality of a firm's earnings, even on a single dimension like the cost of sales.

A reduction in expenditures on research and development (R&D) or on maintenance could have a positive effect on the size of earnings, but in some cases it could mean a reduction in earnings quality. Any reduction in discretionary expenditures should be investigated to see whether the firm is increasing its efficiency (which would increase earnings quality) or simply trying to keep earnings high while sacrificing maintenance and R&D.

Because earnings are calculated using accrual-basis accounting, we know that earnings are not the same as cash. However, even with accruals and deferrals for such items as credit sales or credit purchases, eventually firms are interested in generating cash from the operations of the firm. Some people view earnings as higher quality when there is a strong relationship over time between elements in the calculation of earnings and elements in the calculation of cash from operations. Suppose, for example, that a firm's net sales revenue was always larger than its cash collected from customers. This may signal a pattern of underestimating uncollectible accounts, which reduces earnings quality. Overall, a positive correlation between earnings and cash from operations is often seen as an indication of higher earnings quality.

The more the users of financial statements know about the financial transactions and accounting choices made by a firm, the more useful the information is. When it is difficult to understand a firm's financial statements (as in the case of Enron, for example), the quality of the earnings may be called into question. In general, disclosure and transparency in the financial reports are positively associated with earnings quality.

There is no universally accepted definition of earnings quality. Conceptually, there is some agreement that earnings quality is associated with accurate representation of economic events and also associated with usefulness. However, measuring the quality of any specific earnings number is complicated and difficult.

See Also: Auditing Standards; Corporate Accounting; Earnings Management; Financial Reporting; Financial Statement Analysis; International Accounting Standards Board.

Bibliography. Richard Barker and Shahed Imam, "Analysts' Perceptions of 'Earnings Quality,'" *Accounting and Business Research* (v.38/4, 2008); J. Duncan, "Quality of Earnings and Accounting Estimates: A Case of Decisions," *Issues in Accounting Education* (2002); F. D. Hodge, "Investors' Perceptions of Earnings Quality, Auditor Independence, and the Usefulness of Audited Financial Information," *Accounting Horizons* (2003); Sharon Katz, *Earnings Quality and Ownership Structure: The Role of Private Equity Sponsors* (National Bureau of Economic Research, 2008); Kin Lo, "Earnings Management and Earnings Quality," *Journal of Accounting and Economics* (v.45/2–3, 2008); K. Schipper and L. Vincent, "Earnings Quality," *Accounting Horizons* (2003).

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Eastern Europe

Economic conditions in eastern Europe have varied considerably since early modern times, and the region has been devastated by a number of wars: the War of Polish Succession, the Napoleonic Wars, World War I, and World War II. During these conflicts, the boundaries of many countries changed, altering the nature of inter-country trade.

Historically, the vast majority of the people in eastern Europe—as elsewhere in the world—were involved in agriculture, although traders did operate along land routes of commerce and along rivers. A considerable part of eastern Europe was never occupied by the Romans, but archaeologists have discovered evidence of extensive trade with parts of the Roman Empire. In medieval times, traders along the Baltic Sea started to establish what became known as the Hanseatic League. Its origin goes back to 1159, when Duke Henry the Lion of Saxony rebuilt the town of Lübeck. Other ports soon became associated with Lübeck, and it was not long before a trading agreement tied the various ports together. In an account of a storm in the Baltic Sea in 1351, it was recorded that there were 61 English ships taking refuge in the port of Danzig alone, giving some idea of the trade even at that early stage.

With the start of the Agricultural Revolution, and later the Industrial Revolution, there was great interest in the minerals in eastern Europe, with Frederick the Great annexing Silesia in 1740 in order to get control of the iron ore there. However, developments in eastern Europe during the Industrial Revolution badly lagged behind western Europe, as can be seen by the mission of the Swedish businessman and industrial spy Reinhold Rücker Angerstein (1718–60), who took little interest in eastern Europe. And it was to western Europe that Peter the Great had looked when he sought to build up the Russian economy.

Trade between countries in eastern Europe continued to increase during the 18th and 19th centuries. By the start of the 20th century, Russian businesses tended to dominate eastern Europe—indeed, the Russian Empire then covered more of eastern Europe than at any stage other stage in history. The other eastern European countries, as they became independent—Greece in 1821, Romania in 1859 (as Wallachia and Moldavia), Serbia in 1867, Bulgaria in 1878, Albania in 1912—became heavily reliant on German and Russian business expertise and technology as they sought to erode the previously heavy Turkish economic influence. The railway network helped tie the economies of these countries closer together.

World War I and II

The fighting in World War I left the region devastated, but also led to the creation of new countries. Poland was re-created and was given access to the sea along the Polish Corridor, in the hope of making the country more viable and less susceptible to attack from Germany. The formerly German city of Danzig (now Gdansk) was turned into a free port. The Austro-Hungarian Empire was split to form Austria, Czechoslovakia, Hungary, and parts were given to Poland; other parts of Serbia became the Kingdom of the Serbs, Croats, and Slovenes (and from 1929, the Kingdom of Yugoslavia).

During the 1920s and the 1930s, the countries of eastern Europe started improving their trade, with telegraph and then telephone lines connecting the various capitals. To connect Istanbul (formerly Constantinople) with Berlin, lines ran through Sofia, Bucharest, and Budapest. However, during this interwar period, the isolation of the Soviet Union meant that many of the countries of eastern Europe started closer economic interactions with each other, and the newly independent Baltic States of Lithuania, Latvia, Estonia, and Finland started trading with each other, with Sweden, and with Germany. German companies were also involved in investing in these countries, and in the Soviet Union. There were German and British capitalists who used Latvia as a point of entry into the Soviet Union as some trade links were expanded in the mid-1930s. Romania managed to develop its economy through its oil, with the Ploesti Oilfields being important in the German war effort.

During World War II, the whole of eastern Europe was, once again, devastated by war, and after the war, Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and Yugoslavia all had communist governments with centrally planned economies dominated by state corporations. They were all part of COMECON, as was the Soviet Union, which meant that trade between all these countries increased, but at the expense of any trade links that had been established with western Europe. Some foreign companies did operate in eastern Europe during the Cold War, but these were heavily restricted in their scope and largely involved in selling or buying products to and from eastern Europe, rather than any significant investment in either country's economies. There were exceptions in Yugoslavia, especially when Australian industrialist Lang Hancock managed to establish a barter deal with Romanian communist leader Nicolai Ceaucescu. There was also the controversial gas pipeline that took gas from the Soviet Union to Poland, East Germany, and Czechoslovakia, and from there to western Europe, enabling the Soviet Union to earn desperately needed hard currency.

The Fall of Communism

The fall of communism in 1989 and the collapse of the Soviet Union transformed eastern Europe considerably. All the countries had had their economies dominated by large state corporations, many of which were inefficient and wasteful. Some, like the Gdansk shipyards, had to be phased out, in spite of their role in ending communist rule in Poland. The coal miners from the Jiu Valley in Romania flexed their muscle in ensuring that former communist Ion Iliescu managed to keep in power in 1990. The industrial workers of Ukraine were able to exert their political power from time to time.

The end of communism usually is associated with non-communist governments coming to power in eastern Europe. Some managed to rule well, but many others were stymied by their own inexperience and by the communist bureaucrats, many of whom remained in their old positions. Others were involved in fraud or allowed fraudulent operators to operate schemes that would not have been allowed in western Europe. Taking advantage of the now unregulated economic climate in eastern Europe, and the large savings that many people had accumulated during the period of communist rule, inflation devalued the savings of many people, and some "pyramid" investment institutions managed to defraud people out of what was left of their money. Albania was the worst hit, and in the economic crisis of 1996, large numbers of people lost their life savings in a matter of months, causing rioting in parts of the country. There have also been problems over restitution for property seized by the Nazis during World War II from the Dutch and from those in other countries.

Gradually the economic situation in many of the eastern European countries settled down, and respected western companies started to invest heavily in infrastructure. The telephone system in most countries was overhauled and modernized. Public transport systems were often updated and made more efficient. The nature of power generation was also changed for greater efficiency, and safer environmental standards were enforced. Some countries started to return to having former communists running the country, and others ended up with technocrats.

During the communist period, tourism in eastern Europe had been heavily restricted, but after 1989 many tourists visited many parts of eastern Europe, encouraged by cheaper package holidays, and the opportunity to travel to new countries, both of which coincided with the introduction of cheaper air fares. Independence for the former Baltic States of Estonia, Latvia, and Lithuania, as well as independence for Belarus, Moldova, and Ukraine, and the "velvet divorce" between the two parts of Czechoslovakia to form the Czech Republic and Slovakia, all led to the creation of a number of "new" countries. Travel has become much easier with some eastern European countries joining the European Union: the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia in 2004; and Bulgaria and Romania in 2007.

War in the former Yugoslavia also led to Slovenia, Croatia, Macedonia, and Bosnia-Herzegovina all becoming independent countries, and Montenegro split from Serbia in 2006. The war also saw the wrecking of the economy and much of the infrastructure of former Yugoslavia, a situation partially ameliorated by the availability of foreign aid.

Although the Russian Federation no longer dominates eastern Europe in the way it had, it still has a major influence. This can be seen in threats over the use and cost of Russian gas. When countries elect pro-Moscow governments, the Russians often permit gas to be sold at cheap rates to that country. However, if a leader is elected who wants to move away from Russian influence, such as Viktor Yushchenko in Ukraine, Russia threatens to force that country to pay the market rate for the gas or to reduce the gas output. Part of this has been because of the expansion of the European Union and NATO and resurgent nationalism in Russia. However, in spite of occasional political problems, the amount of international trade between all the countries of eastern Europe has continued to increase.

See Also: Company Profiles: Eastern Europe; European Union; Russia.

A street in the formerly German city of Danzig, which is now Gdansk, Poland, an important port city on the Baltic Sea.

Bibliography. Nina Bandelj, *From Communists to Foreign Capitalists: The Social Foundations of Foreign Direct Investment in Postsocialist Europe* (Princeton University Press, 2008); T. Iván Berend, *From the Soviet Bloc to the European Union: The Economic and Social Transformation of Central and Eastern Europe Since 1973* (Cambridge University Press, 2009); Paul Blokker and Bruno Dallago, eds., *Youth Entrepreneurship and Local Development in Central and Eastern Europe* (Ashgate, 2008); Martin J. Bull and Mike Ingham, eds., *Reform of the Socialist System in Central and Eastern Europe* (St. Martin's Press, 1998); Marise Cremona, ed., *The Enlargement of the European Union* (Oxford University Press, 2003); William Dillinger, *Poverty and Regional Development in Eastern Europe and Central Asia* (World Bank, 2007); Jan Drahokoupil, *Globalization and the State in Central and Eastern Europe: The Politics of Foreign Direct Investment* (Routledge, 2009); Karen Henderson, ed., *Back to Europe: Central and Eastern Europe and the European Union* (UCL Press, 1999); Paul Robert Magocsi, *Historical Atlas of Central Europe: From the Early*

Fifth Century to the Present (Thames & Hudson, 2002); Grigore Pop-Eleches, *From Economic Crisis to Reform: IMF Programs in Latin America and Eastern Europe* (Princeton University Press, 2009); Frank Schimmelfennig and Ulrich Sedelmeier, eds., *The Europeanization of Central and Eastern Europe* (Cornell University Press, 2005); L. L. Sowinski, "Eastern Europe Capitalizes on Growing EU Membership," *World Trade* (v.21/5, 2008).

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Economic Development

The meaning of economic development (ED) has broadened over time with the progress of the study of ED. One can claim that the study of ED may have originated in the writings of Adam Smith or the Classical School of Economics, but the subject as it is known today began only in the 1930s. There is a general agreement that the systematic study of ED focusing on a large number of developing countries (in Africa, Asia, and Latin America) emerged only after World War II. As the understanding of ED as a phenomenon broadened over time, the meaning of ED also changed, gaining in breadth, clarity, and precision. As a result, there have been many views and definitions for ED in the related literature. Researchers have used the term in three different senses. Most of them seem to have used it to refer to a desirable state of a society such as a modern industrial society, while others have used the term to refer to processes of transformation by which such a state is reached over time or to actions undertaken by various local, national, and international actors to improve quality of life in societies at various levels.

Traditionally, prior to the 1970s, the term ED referred to the capacity of an economy to increase and sustain total output or income. This essentially meant what is defined as economic growth today and improvements in such factors affecting economic growth as technology, productivity, and structural changes. Economic growth can be defined as an increase in total real output or real income measured by real gross domestic product (GDP) or real gross national product (GNP). Some references are found in the literature that define economic growth as increases in real GDP per capita or real GNP per capita, rather than real GDP or real GNP. The terms GDP, GNP, GDP per capita, and GNP per capita are described in the next section. However, prior to the 1970s, ED was seen as an economic phenomenon in which economic growth was at the center.

The experience of many developing countries in the 1950s and 1960s clearly indicated that economic growth did not necessarily improve the overall standard of living and general well-being of people in those societies. This led to the understanding that ED is not merely an economic phenomenon and it encompasses a much broader spectrum of factors that represent both economic and noneconomic dimensions. Dudley Seers, for example, argued that ED goes beyond economic factors and includes noneconomic factors such as basic human needs and equity. Further, he argued that economic growth does not necessarily guarantee decreases in poverty, unemployment, or inequality in income distribution. Contributions of Seers and others who emphasized the importance of noneconomic factors gave rise to the much broader view of development that came to be known as Human Needs–Centered Development as opposed to Growth-Centered Development. According to this view, ED implies such noneconomic aspects as equality, democracy, true national independence, high levels of literacy, and education, equal status for women, human security, and sustainable ability to meet future needs, in addition to low levels of poverty and unemployment.

Sen's Capabilities Approach

In the 1980s and 1990s, dismal growth performance combined with serious problems of poverty and fiscal and external deficits in many developing countries highlighted the fact that ED must be thought of as a multidimensional phenomenon requiring fundamental changes in entire social systems. At present, many believe that Amartya Sen, the Nobel laureate in economics in 1998, is the leading thinker on the meaning of ED. His views on economic development are sometimes referred to as Sen's capabilities approach. According to this approach, ED has to be about enhancing basic human capabilities and freedoms of people to live the lives they choose to lead. Income is only one factor that affects human capabilities and freedoms, and therefore, ED goes far beyond reducing income poverty. He argued that economic growth is not an end in itself, and that development has to do more with enhancing the lives people lead and the freedoms they enjoy. He further argued that poverty cannot be properly measured by income. In his view, the well-being of people depends on what people can and do make of commodities and not on the characteristics of commodities they consume.

Sen has identified five broad factors apart from income that affect capabilities of people to live the lives they choose to lead. They include (1) personal heterogeneities in such terms as age, gender, and disabilities; (2) environmental diversities such as differences in climate and clothing requirements; (3) variations in social climate in such terms as the crime rates and rates of violence; (4) differences in relational perspectives (i.e., differences in relative deprivation); and (5) distribution within the family (distribution of family resources among family members by gender, age, etc.). In his view, the goal of ED is to enhance capabilities and freedoms enabling people to live the lives they desire.

Other Definitions

As stated earlier, there are many definitions for the term ED in the related literature. There has been no consensus on any particular one of them except for the broad agreement that ED must mean something much broader than economic growth or mere improvements in favorable economic conditions. Many argue that economic growth is necessary but not sufficient for development. Some argue that the emphasis placed on growth is too much and there is no evidence to support that growth increases happiness. And therefore, ED is possible even without economic growth in certain contexts. However, many others (for example Lewis) argue that economic growth is essential for developing countries as a means of increasing choices and advancing human freedoms.

Michael P. Todaro's definition of development is a good example for the broad view of development that exists today. He defines development in very broad terms as "the sustained elevation of an entire society and social system toward a 'better' or more humane life." He identifies three core values of development: sustenance (being able to meet basic needs), self-esteem (being able to live a life with a sense of worth and self-respect), and freedom from servitude (being able to choose). He also identifies three broad objectives of development: to increase the availability and widen the distribution of basic life-sustaining goods, to raise levels of living, and to expand the range of economic and social choices available to individuals and nations.

A set of internationally committed development goals for the early decades of the new millennium has been developed in the United Nations (UN) Millennium Declaration adopted in September 2000. This set, widely known as the Millennium Development Goals (MDGs), includes the following eight goals: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (4) reduce child mortality; (5) improve material health; (6) combat HIV/AIDS, malaria, and other diseases; (7) ensure environmental sustainability; and (8) develop a global partnership for development. A comprehensive set of targets to achieve each these goals and indicators by which progress can be judged have also been developed. In total, there are 18 such targets and 48 indicators.

Measuring Economic Development

Traditional measures are the national income measures derived from GDP and GNP, which can be considered broadly as measures of economic growth rather than ED. GDP is the total value of all final goods and services produced within the borders of a country during a specified period of time, in general a year. GNP is the value of final goods and services produced by resources belonging to the nation (citizens and permanent residents), both in and out of the country. GNP is the sum of GDP and the net factor income from abroad. Net factor income from abroad is the difference between factor incomes, such as dividends, earned from abroad and factor payments made to foreigners. It can be positive when incomes exceed payments or negative when payments exceed income during the given period. As a result, GNP can be smaller than GDP when the net factor income from abroad is negative. In such cases, GNP may be a better measure of national income than GDP. However, GDP and GNP are measures of both the level of output and the level of income. International organization like the World Bank (International Bank for Reconstruction and Development, [IBRD]) refer to GNP as the Gross National Income (GNI).

The national income measures include real GNP per capita, real GDP per capita, and their annual growth rates (annual percentage changes). Real GDP and real GNP are the GDP and GNP measured at constant prices (prices in a year selected as the base year), respectively. They can be computed by deflating nominal GDP (GDP measured at current prices) and nominal GNP (GNP measured at current prices) by an appropriate price index, such as GDP deflator or Consumer Price Index (CPI). Thus, real GDP and real GNP are the values of GNP adjusted for inflation, respectively. Real GDP per capita and real GNP per capita values are computed by dividing real GDP and real GNP by total population, respectively. These GDP-based per capita measures have been used for measuring national levels of ED and criteria for their comparison over time and across nations.

International Comparisons

For international comparisons, GDP or GNP per capita measured in national currencies of different countries must be expressed in a common currency. Earlier, the standard practice was to convert the national values into U.S. dollar values using official exchange rates. The use of official exchange rates in conversion has been criticized for the fact that official exchange rates in developing countries are not competitive market exchange rates and are thus unrealistic. They are distorted by direct and indirect trade and exchange controls and the existence of multiple exchange rates, including illegal black market exchange rates.

In addition, the rankings of GDP per capita converted using official exchange rates do not necessarily portray the true rankings of per capita incomes in terms of their purchasing power among the countries ranked, because the purchasing power of one dollar differs in different countries due to differences in the prices of goods and services. The method of using Purchasing Power Parity (PPP) exchange rates in conversion takes these differences into account and produces better rankings of international per capita incomes as measures of ED. Estimates of GDP and GNP in terms of PPP are reported in the publications of various agencies of the United Nations, the World Bank, and the International Monetary Fund (IMF), among others. However, one can argue that GNP per capita values thus calculated are still not comparable for reasons such as practical difficulties of measurement and the inclusion of certain goods and services in GDP by some countries but not by others.

Measurement Shortcomings

GDP is considered as the best measure of total output and economic growth, yet it suffers from many shortcomings as a measure of total output. GDP may underestimate total output for various reasons. It includes only the values of market activity (goods and services that are traded in markets) and the values of such nonmarket activity as subsistence farming, and unpaid household production activities are excluded. Developing countries have significantly large informal or subsistence sectors in which a substantial proportion of production is not directed toward markets or traded through barter. The values of some goods and services traded in markets, particularly in rural areas, are also excluded as they are not formally recorded. Some values of market activities such as illegal activities (underground economy) are unreported or underreported to avoid taxes. The value of excluded activities can be estimated, but finding accurate prices for goods and services untraded or traded through barter may be difficult for many reasons. Based on the above mentioned shortcomings, it has been argued that GDP is not an accurate measure of economic growth.

As measures of ED, real GDP per capita and real GNP per capita have also been widely considered as indicators of the standard of living and general well-being of people in a country. Standard of living and general well-being depend not only on the availability of goods and services brought about by economic growth but also on their quality and many other economic and noneconomic factors such as the composition and distribution of total output, changes in the rates of crime and violence, environmental quality, and changes in the number of hours of leisure, etc. GDP ignores the negative effects of economic growth such as environmental degradation, pollution, and congestion. It also ignores the qualitative changes in produced goods and services over time. Any changes in the quantity and quality of leisure enjoyed by people are also not incorporated into GDP. As a result, real GDP per capita and real GNP per capita cannot be considered as accurate indicators of standard of living or general well-being of the people.

Recently, attempts have been made to refine GDP statistics to eliminate some of these shortcomings. For example, measures called Green GDP and Net Economic Welfare (NEW) have been developed to take into account the negative effects of economic growth such as environmental degradation and crime. Notwithstanding their shortcomings, real GDP per capita and real GNP per capita have been found to be correlated with many other economic and noneconomic indicators, such as rates of literacy, mortality rates, and rates of educational attainment. And therefore, they are still widely regarded as important comprehensive measures of standard of living, general well-being, and ED.

Alternative Measurements

Realization of many shortcomings of national income measures, and the understanding that ED is a much broader phenomenon than economic growth, led to the search for alternative and complementary indictors such as social indicators of development identified by the United Nations Research Institute on Social Development in 1970. In the mid-1970s, Morris David Morris developed the Physical Quality of Life Index (PQLI), which summarizes infant mortality, life expectancy at age one, and basic literacy on a zero to 100 scale. International rankings based on PQLI differed from the rankings based on GNP per capita as some high income countries (for example, Middle East oil-producing countries) ranked low in terms PQLI and some low-income countries (for example, Sri Lanka) ranked high in terms of PQLI. However, the practice of assigning equal weights to the three indicators included in PQLI in calculations has been cited as a shortcoming of the measure.

Many believe that the Human Development Index (HDI) developed by the UN Development Program (UNDP) to be the most comprehensive measure of ED developed so far. HDI is a composite index that combines three important dimensions of human development: living a long and healthy life (measured by life expectancy), knowledge (measured by adult literacy and enrollment at the primary, secondary, and tertiary level), and standard of living (measured by per capita income adjusted for purchasing power differences). The index, which was developed in 1990 and subsequently refined, taking criticisms into account, ranks countries on a scale of 0 (lowest human development) to 1 (highest human development). Rankings of different countries have been reported by UNDP in its annual Human Development Reports since 1990.

At present, the countries with an HDI below 0.5 are included in the category of "low human development" and the countries with an HDI of 0.8 or greater are included in the category of "high human development." The rest of the countries ranked belonged to the category of "medium human development." UNDP itself acknowledges that HDI is not in any sense a comprehensive measure of human development, because it does not include, for example, such important indicators as gender or income inequality, human rights, and political freedoms. Yet, it provides a broadened prism for viewing human progress and the complex relationship between income and well-being. However, recently UNDP has developed other indexes such as the Human Poverty Index for Developing Countries (HPI-1), the Human Poverty Index for Selected OECD Countries (HPI-2), the Gender-Related Development Index (GDI), and the Gender Empowerment Measure (GEM).

The fact that ED is a complex multidimensional phenomenon makes it impossible to develop a single comprehensive measure that can fully capture both quantitative and qualitative changes in all of the economic and noneconomic dimensions of ED. All of the measures that have been developed so far have their strengths and shortcomings as well. Therefore, measurement of ED does necessarily require use of many complementary indictors representing all of the economic, social, political, cultural, and other dimensions of social welfare. Information about such indicators can be found in annual reports of several international organizations such as the United Nations, World Bank, and the IMF.

Models of Linear Stages of Growth

As mentioned earlier, there are disagreements among researchers about the origin of ED thought. For some, it dates back to Adam Smith's *The Wealth of Nations* (1776). For others, it began in the 1930s. Many agree, however, that the systematic study of ED began only after World War II. During this period, many models and theories have been developed to explain the process of ED and factors affecting the process. These theories can be categorized in many ways. Broadly, four major views dominate the post–World War II literature on ED. They are the models of linear stages of growth, models of structural change, models of international dependence, and neoclassical models of market fundamentalism.

Models of linear stages of growth viewed faster economic growth as ED, and the process of development as a series of successive stages of economic growth. Savings and capital formation are the crucial determinants of economic growth. For example, according to Rostow's stages of growth theory, a country passes through five stages of ED:

1. Traditional society: Subsistence activity dominates the economy. Production of output is mainly for producers' consumption and not for sale. Direct exchange (barter) is the most widely practiced form of trade. Traditional agriculture that depends on labor-intensive technology is the most important sector.
2. Pre-conditions for take-off: A stage of transition characterized by increased specialization that generates surpluses for trading, emergence of economic infrastructure such as transport in support of trade, emergence of entrepreneurs, considerable growth of income, savings, and investment. External trade also occurs, concentrating on primary products.
3. Take-off: A stage of increased industrialization that is characterized by rising industrial employment as workers switch from the agricultural sector to the manufacturing sector. Growth, however, is not widespread and concentrated in a few regions and a few (one or two) manufacturing industries. The rate of investment exceeds 10 percent of total income. New political and social institutions evolve in support of the industrialization and economic transition taking place. Higher levels of investment lead to increased incomes which, in turn, generate higher levels of savings for further investment required for self-sustaining growth.
4. Drive to maturity: A stage of increased diversification of economy in terms of the structures of output and employment, technological innovations, and investment opportunities. The dependence on imports decreases as a result of output growth.
5. Age of high mass consumption: The highest stage of development in which the economy is geared toward mass consumption. As a result, the industries producing consumer durable goods flourish and the tertiary (service sector) becomes increasingly dominant.

Walt Rostow's model emphasizes the importance of preconditions and substantial increases in investment (domestic or foreign) in capital for achieving a successful stage of take-off. However, many development economists argue that Rostow's model has only limited applicability to developing countries for various reasons. The fact that the model was developed by generalizing the experience of the developed West limits the model's applicability to a large number of developing countries which are diverse in many ways and different from the comparable historical stages of the developed countries. Some argue that the model does not explain in sufficient detail the nature of the preconditions for growth. It has also been pointed out that in practice policy makers are unable to clearly identify various stages as they merge together. The fact that the model is clearly a model of growth rather than a model of development also limits its applicability.

Roy Harrod (1939) and Evsey Domar (1946) developed the Harrod-Domar Model in the 1940s mainly to explain the relationship between growth and unemployment in developed countries. It has been extensively used to investigate the relationship between growth and capital requirements in developing countries. Also known as the AK model, the Harrod-Domar model uses a simple production function, with constant returns to scale, in which output linearly depends on capital (i.e., the level of output is always a constant times the capital stock). According to the model, economic growth rate (g) depends on the national savings ratio (s) and the capital-output ratio (k) or the productivity of capita (i.e., $g=s/k$).

This model highlights the necessity of generating more savings and investments for faster economic growth. One can argue that higher savings and productive investments are necessary but not sufficient for economic growth or development in developing countries. The model ignores the role of technology and other social, political, and institutional factors. The assumptions of fixed capital-to-output, capital-to-labor, and labor-to-output limit the applicability of the model to only very short periods of time.

Influenced by the Marshall Plan and the Cold War, the model fails to recognize the crucial differences between developing countries and the developed countries.

Models of Structural Change

Models of structural change gained popularity in the 1960s and 1970s. These models viewed ED essentially as a process of structural transformation from a traditional subsistence economy to a more diverse modern industrial economy. The surplus labor theory developed by Sir Arthur Lewis and later extended by John Fei and Gustav Ranis, and the empirical studies that focused on the patterns of structural changes in developing countries, are among the best known examples for models of structural changes.

The Lewis model (1954) assumes a dual economy with a traditional agriculture sector and a modern industrial sector. The traditional sector is characterized by low levels of productivity, savings, income, and a surplus of labor. The modern offers relatively higher wages that help attract surplus labor from the traditional sector without causing any loss of output in that sector. The progress of the modern sector depends directly on investment and capital formation in that sector. The growth in the modern sector generates demand and also provides funds for investment. Higher incomes generated by the modern sector trickle down throughout the economy. Based on the empirical experiences of developing countries, the model has been criticized mainly for its assumptions such as the existence of surplus labor in agriculture while there is full employment in the industrial sector, the existence of constant demand for labor from the industrial sector, the existence of constant real wages in the industrial sector until the surplus labor is completely exhausted, and the existence of diminishing returns in the industrial sector.

Models of International Dependence

Models of international dependence became very popular in the 1970s. Some of them have their origins in developing countries. The names of Raul Prebisch, Paul Baran, Andre Gunder Frank, Samir Amin, and Arghiri Emmanuel are closely associated with this class of theories. These models viewed a set of international and domestic institutional, political, and economic rigidities and the dependence on developed countries which dominate international power relations as responsible for underdevelopment in developing countries. The emphasis was placed on the need for terminating political, economic, and cultural dependence of developing countries for their development.

Broadly, this class of models includes three different models: neocolonial dependence model (exploitation of developing countries (the periphery) by developed countries (the center) is largely responsible for underdevelopment in the periphery, false-paradigm model (faulty and inappropriate advice from the experts representing the interests of the developed countries is responsible for underdevelopment), and dualistic-dependence model (existence of dual societies and persistence of widening gap between the rich and the poor at national and international levels are responsible for underdevelopment). Models of international dependence have been criticized for failing to offer clear insights into how countries initiate and sustain development. The experience of some developing countries shows that their policy prescriptions such as import substitution have not produced expected favorable outcomes for development.

The Neoclassical Models

The neoclassical models of market fundamentalism gained popularity as models of ED during the 1980s and 1990s. Their emergence has been identified closely with the neoclassical (or neoliberal) counterrevolution in economic theory. The economists like I. M. D. Little, Harry G. Johnson, Bela Balassa, and Deepak Lal are among the leading thinkers in this class of models. According to these models, market imperfections and distortions created largely by excessive government involvement and regulations that result in inefficient allocation of resources are responsible for underdevelopment in developing countries. Economic liberalization, privatization and downsizing the government, deregulation of markets, and promoting free trade and foreign direct investment are seen as crucial for efficient allocation of resources and economic development.

Three different variants can be found among the neoclassical models: free-market analysis (which assumes that markets in developing countries are efficient and effective in resource allocation and the effect of existing imperfections are negligible), new political economy approach (or public-choice theory which argue that the actions of politicians, governments, bureaucrats, and citizens driven solely by self-interest result in misallocation of resources), and market-friendly approach (which recognizes the existence of certain market imperfections in developing countries and that governments have a responsibility to play certain roles in a market-friendly manner).

The traditional neoclassical growth models grew out of the Harrod-Domar model and the Solow neoclassical growth model. Robert Solow uses an aggregate production function model in which the level of output depends on the capital stock, labor, and technology. The Solow model assumes diminishing returns for both capital and labor inputs. Technology is assumed to be exogenously determined. According to the traditional neoclassical growth models, economic growth depends on the quantity and quality of labor, capital, and technology. They argue that capital inflows from developed countries make it possible for open economies to grow faster than regulated closed economies. Therefore, economic liberalization and deregulation are favorable for ED.

These policy prescriptions were widely adopted by a large number of developing countries during the 1980s and the 1990s, paving the way for an increased international integration of their economies. However, there has been strong opposition to the adoption of neoclassical policy prescriptions both in national and international levels. Neoclassical models have been criticized for using assumptions that are unrealistic in the context of developing countries, such as the existence of competitive markets. They are also criticized for failing to recognize social, economic, institutional, and cultural differences between developing countries and developed countries on the one hand and the differences among developing countries themselves on the other.

Many influential models, which are considered as modern models of development and underdevelopment, have been developed since the late 1980s. Among them are the models of endogenous growth, such as Paul Romer's model of endogenous growth, Michael Kremer's O-ring model, and many other models which differ from classical models to offer better explanations for the current states of ED in developing countries. For some of these models, the reader is referred to Todaro's popular text book on ED.

See Also: Asian Tigers; Capitalism; Comparative Advantage; Dependency Theory; Development Assistance; Emerging Markets; External Debt; Food and Agriculture Organization; Globalization; Gross National Product; Import Substitution; Infant Industry Argument; International Development Agency; International Monetary Fund; Less Industrialized Countries; Millennium Development Goals; Modernization Theory; Neocolonialism; Neomercantilism; Newly Industrialized Countries; Periphery (Dependency Theory); Purchasing Power Parity; Socialism; Sustainable Development; Terms of Trade; Underdevelopment; United Nations Conference on Trade and Development; World Bank, The; World Trade Organization.

Bibliography. Tim Allen and Alan Thomas, eds., *Poverty and Development into the 21st Century* (Oxford University Press, 2000); Hollis B. Chenery and T. N. Srinivasan, eds., *Handbook of Development Economics* (Elsevier, 1989); Ramón López and Michael A. Toman, *Economic Development and Environmental Sustainability: New Policy Options* (Oxford University Press, 2006); Bill McKibben, *Deep Economy: The Wealth of Communities and the Durable Future* (Times Books, 2007); E. Wayne Nafziger, *Economic Development* (Cambridge University Press, 2006); Thomas Odamtten and Jeremy Millard, "Learning From Others within the Landscape of 'Transitional Economies' and the Challenge in ICT Development for African Countries," *AI and Society* (v.23/1, January 2009); Dwight H. Perkins, Steven Radelet, and David L. Lindauer, *Economics of Development* (W. W. Norton, 2006); Walt W. Rostow, *The Stages of Economic Growth: Non-Communist Manifesto* (Cambridge University Press, 1960); Dudley Seers, "The Meaning of Development," in *Development Theory: Four Critical Studies,* D. Lehmann, ed. (Frank Cass, 1969, 1979); Amartya Sen, *Development as Freedom* (Knopf, 1999); Robert Solow, "A Contribution to the Theory of Economic Growth," *Quarterly Journal of Economics* (v.70, 1956); Michael P. Todaro and Stephen C. Smith, *Economic Development* (Pearson, Addison-Wesley, 2006); United Nations Development Program, *Human Development Report, 2003* (Oxford University Press, 2003); World Bank, *World Development Report, 2006* (Oxford University Press, 2006).

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Economic Indicators

An economic indicator is a relatively simple or straightforward variable that, on the basis of past experience, can act as a signal for changes in a set of other, often more complex variables in the economy. To some extent a single economic indicator can act as a "proxy" for a combination of other variables. New business start-ups, for instance, can indicate a whole set of interconnected changes in the business sector and the wider economy. In the United States in the 1920s and 1930s, "freight car loadings" were reported on the business pages of newspapers, and these were avidly read by investors, business managers, politicians, and others, as the movements of raw materials and finished goods around the American railway system was, at that time, believed to be a reliable indicator of the general health of the economy.

In business terms, an economic indicator can be used as a piece of information that assists in managerial decision making. Indicators can also be used by governments in order to guide future policy, such as plans for raising revenue and the setting of priorities for the allocation of government expenditure.

Leading and Lagging Indicators

A "leading" indicator is a variable or a series of statistical data that can be expected to anticipate changes in some related areas of the economy, and which usually precedes the changes by a fairly consistent time period. A leading indicator can therefore be used to make predictions and forecasts. For example, if demographic trends show that there is likely to be a significant expansion in the relative size of the 16–25 age group among the male population in a few years' time, then it is reasonable to predict that the country in question is going to experience a "crime wave." This is because, in many countries, most crime is committed by young men. Such information would be of interest to, among others, government departments concerned with crime and justice, companies supplying private sector prison facilities, and the insurance industry that can expect to be called upon to underwrite and compensate for the financial costs of crime to individuals and businesses.

Leading indicators such as investment plans, orders for machine tools, and new house-building starts can be combined to construct a measure of "business confidence," which in turn can help predict cyclical changes in gross national product. Similarly, "consumer confidence" is linked to variables such as future spending, output, and incomes, through economic mechanisms such as the multiplier principle.

A "lagging" indicator is a variable or a series of statistical data that can be expected to reflect earlier changes in some related areas of the economy, and which usually follow the changes by a fairly consistent time period. A lagging indicator can therefore be used to make an analysis of previous trends in the economy, or a diagnosis of previous problems with a view to avoiding similar problems next time around. The inflation rate, for example, is calculated using recent historic data concerning price movements within a statistically constructed "basket" of typical goods and services. If an analysis of the inflation rate shows that its causes are demand led, then an appropriate policy response (such as an adjustment of the interest rate) can be prescribed as a solution.

If, on the other hand, the diagnosis is that inflation is imported due to higher world commodity process (a cost factor rather than a demand actor), then the interest rate approach might be inappropriate or even damaging to the wider economy. Since government policy makers are not noted for their infallibility, knowledge of lagging indicators is as important as leading indicators as a piece of managerial intelligence, because this knowledge can help business people to be prepared in advance for changes in the wider business environment, some of which will come from government policy adjustments, whether appropriate or inappropriate.

It is quite possible for a particular indicator to be interpreted as being both leading and lagging simultaneously. A country's unemployment rate, for example, tells us something about the performance of the economy in recent history, and shows the end result of many contributing factors including the efficiency of the business sector, the state of the labor market, and the efficacy or otherwise of government policies concerning both the "hard" economy of variables such as interest rates and taxation, and the "soft" economy of education, training, and investment in human capital. However, the unemployment rate can also be used to make forecasts of likely future trends in directly affected variables such as saving and consumer spending, together with more indirect knock-on effects on other variables such as investment, output, and national income.

When economists analyze "leads and lags" they are referring to the timing differences that exist between, on the one hand, the peaks and troughs of leading indicators and lagging indicators and, on the other hand, peaks and troughs in the general business cycle. If, for example an 11-year cycle can be discerned in the level of economic activity, with a peak in the growth rate of gross national product in year four and a trough in year eight, it could be that manufacturing investment acts as a leading indicator that peaks in year two and troughs in year six, while house-building acts as a lagging indicator that peaks in year six and troughs in year ten. It should be noted that indicators of this sort can work quite differently in different countries.

The state of the manufacturing and house-building sectors can have quite different significance in Germany, say, compared with the United Kingdom (UK) and United States, depending on factors such as the structure of their business sectors, and the role played by different types of industry in contributing to national output and employment.

Variables

When using economic variables as indicators, it is worth distinguishing between independent and dependent variables. Economic theory is largely built upon hypotheses about and observations of functional relationships between variables. If, for example, we suggest that "consumption is a function of income," then we are saying that income is an independent variable, while consumption is a dependent variable. We are saying that what people spend depends on their income, rather than vice versa.

Economists use the following equation (1) to show a basic relationship between a large set of variables:

$$Y = C + I + G + (X - M) \tag{1}$$

Here, Y stands for "national income," which in economic theory is equal to the value of planned national output, which in turn is equal to planned total national expenditure on goods and services. Income, output, and expenditure are also obviously linked to employment, since higher levels of employment will tend to coexist with higher levels of income, spending, and output, whereas a fall in these three variables can be expected to reduce employment and hence increase unemployment. If it is believed that inflation is demand led, then higher levels of economic activity can be expected to coexist with higher levels of inflation, if it is the case that there is any difficulty in utilizing spare productive capacity, due to such problems as inadequate infrastructure, or the existence of skills gaps.

C stands for "consumption," or consumer spending on goods and services. I signifies "investment," or spending on capital goods (as opposed to consumer goods). Capital, or investment goods, such as factory buildings and manufacturing infrastructure, is used in order to produce consumer goods and services.

G stands for government spending, and (X – M) signifies the net effect of export earnings and import spending—in other words, it indicates the net effect of international trade, or the balance of trade surplus or deficit. Economists use a model known as the circular flow of income to show how the variables linked in the above equation relate to each other, and also to show that injections into the circular flow (investment, government spending, and export earnings) tend to increase the level of economic activity, while withdrawals or leakages from the circular flow (saving, taxation, and import spending) tend to reduce the level of economic activity. This also follows from the alternative way of expressing the macroeconomic equilibrium condition (equation 2):

$$I + G + X = S + T + M \tag{2}$$

This tells us that if the sum of planned investment, government spending, and export earnings (i.e., total planned injections) equals planned saving, taxation, and import spending (i.e., total planned withdrawals), then there is no reason for economic activity either to increase or decrease.

Implications

In business, the uses to which economic indicators such as these are put can be complex and sophisticated, or they can be relatively straightforward but no less valuable for their simplicity. For example a sudden change in interest rates will have implications for many business enterprises. Those implications can be predicted by making reasonable deductions from the basic models outlined above. In equation 1, interest rates can be assumed to have a direct effect on consumption (C), since many major individual spending decisions (for example, the decision to buy a car or another major household item) are influenced by interest rates, if they tend to be bought using borrowed money. Households repaying a mortgage can also be assumed to adjust their consumption expenditure, at least to some extent, in response to changed interest rates, since a change in their monthly mortgage repayments will, in effect, alter their disposable income. Interest rates will also affect investment (I) in the equation, since it is reasonable to assume that investment decisions are sensitive to interest rate changes, depending in part on the extent to which investments are financed by borrowing, as opposed to sources of finance such as shareholding or ploughed-back profits.

The same principles can be applied to equation 2, where a change in interest rates will have direct effects on saving (S) and investment (I). Similarly, changes in other indicators, such as the exchange rate, can be applied to these equations and predictions made about their likely effects on variables such as export earnings (X) and import spending (M). The effects of variables under direct government control, government spending (G) and taxation (T), can also be predicted. From experience, businesses should be able to extrapolate the knock-on effects of changes in the level of economic activity. There are, of course, differential effects on different types of business, with sectors such as tourism, house-building, and car manufacturing often acting as weather vanes, and in turn being used as indicators for the likely future level of activity in the rest of the economy.

Use and Interpretation

Companies that offer economic forecasting services will, of course, use models of the economy that are highly sophisticated and complex, and some will attempt to replicate the high-powered computer models used by government departments and agencies such as the Federal Reserve and the Bank of England; but the basic models on which these programs are based will be similar in their fundamentals to the relationships shown in the equations above. The "average" business person should not fall into the trap of believing that the implications of changes in economic indicators are too complicated to be understood and interpreted by the everyday practitioner.

If business people are to use economic indicators to help in managerial decision making, however, it is important that they take care not to react to changes that might be one-off "blips." Some indicators are more volatile than others, and in general terms the more volatile ones reflect what might be called the "virtual" economy rather than the "real" economy.

Medium to long-term trends in share prices are more reliable indicators of economic trends than day-to-day prices of monetary instruments such as "futures" and "options" for the simple reason that these variables are not indicating the fundamental activities of wealth creation; rather, they are reflecting short-term profit making based on the hopes and fears of speculators. During the oil price hike of 2008, for example, some experts estimated that the activities of speculative traders added as much as 25 percent to the price of a barrel of oil and the vast majority of these traders were, in effect, gambling on a rise or fall in future oil prices, rather than having any intention of ever possessing an actual barrel of oil. Similarly, it is possible that well over 90 percent of the transactions that take place on the currency exchanges of the world are led by speculation, rather than being connected to the desire to actually exchange a sum of money in one currency for real notes and coins in another denomination.

In the mid-1990s, British unemployment statistics underwent an interesting and relatively sudden change. The main reason given for individuals being long-term unemployed due to chronic health problems and claiming welfare benefits changed from "muscular-skeletal" to "mental health" problems, or to put it more simply, from "back pain" to "stress." This could have been ignored by employers and policy makers as a statistical blip, but in fact it turned out to signal a sustained trend, which is likely to continue to be a feature of the UK labor market for some time to come, as well as being reflected in many other economies, especially those adopting the Anglo-Saxon model of "flexible labor markets." As a long-run trend rather than a blip, it requires a policy response, in terms of occupational health and welfare benefit strategies. This particular indicator reflects wide-ranging changes in industry and the economy, including the trend in employment from secondary (manufacturing) toward tertiary (service) industries, and employment conditions leading toward a more "flexible" and inherently more insecure workforce.

Economic indicators extracted from time-series data can show four basic types of variation that can be used for the purposes of forecasting:

1. Secular trends, which show relatively smooth development over the long term, e.g., the growth of gross national product in established economies, and the tendency for economic development to result in a decline in the proportion of national income and employment accounted for by the primary sector, initially to be replaced by an expanding secondary sector, with the tertiary sector ultimately becoming the major source of economic activity.
2. Cyclical patterns, e.g., the short-term variations in actual growth around the long-term trend rate of economic growth, with "output gaps" (overstretched capacity) occurring during an "upturn" phase and "negative output gaps" during a "downturn." This is the classic "sine-wave" pattern that is associated with the trade cycle or business cycle. Output gaps are used as a major indicator in the anti-inflation regime that has been adopted in various forms in the UK and the Eurozone, for example, where interest rate setting has been delegated to a quasi-independent central bank.
3. Seasonal variations, which are short term but regular and reasonably predictable, e.g., the low-season activity in large parts of the tourist industry in winter; retail sales in Western economies prior to Christmas.
4. Exogenous shocks, which tend to be unpredictable, wrongly predicted, or unexpected, and which result in irregular changes to established trends. An example would be the ramifications of the collapse of the U.S. subprime market in 2008 and the resulting global credit crunch; or rapid increases in food prices arising partly as an unintended consequence of the use of land for biofuels, which in turn was a response to faster-than-expected increases in energy prices and commodity costs, especially the price of oil.

See Also: Business Cycles; Economic Development; Economic Statistics; Exchange Rate; Forecasting; Gross National Product; Interest Rates.

Bibliography. Bernard Baumohl, *The Secrets of Economic Indicators: Hidden Clues to Future Economic Trends and Investment Opportunities* (Wharton School, 2005); The Economist, *Guide to Economic Indicators: Making Sense of Economics* (Economist Books, 2006); Manfred Gartner, *Macroeconomics* (Prentice Hall, 2006); *Guide to Economic Indicators: Making Sense of Economics* (Bloomberg Press, 2007); John Sloman, *Economics* (Pearson, 2007); C. Pass, B. Lowes, and L. Davies, *The Collins Dictionary of Economics* (HarperCollins, 2005); Anne Dolganos Picker, *International Economic Indicators and Central Banks* (John Wiley & Sons, 2007).

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Economic Integration

The agreement among countries or regions to establish links through the movement of goods, services, capital, and labor across borders is known as economic integration. Economic integration includes at the far end a truly global economy in which all countries share a common currency and agree to a free flow of goods, services, and factors of production. At the other extreme would be a number of closed economies, each independent and self-sufficient. Each of the various integrative agreements in effect today involves some sacrifice of national independence and autonomy to enjoy the benefits of free trade and stable exchange rates. Levels of economic integration include the free trade area, the customs union, the common market, and the economic union.

Free trade agreements account for about 90 percent of the economic integration across groups of countries or regions (REI). While the primary function of REIs is to eliminate tariff and non-tariff barriers, open border controls to increase capital, increase resources, increase spending power by citizens, generate more jobs and profit between the countries engaged in the agreement, countries outside the agreement are subject to high tariffs, which may be set by the group as a whole (customs union, common market, and economic union) or set by the individual country (free trade area).

The free trade area is the least restrictive and loosest form of economic integration among countries. In a free trade area, all barriers to trade among member countries are removed. No discriminatory taxes, quotas, tariffs, or other trade barriers on free trade area members are permitted. The most notable feature of a free trade area is that each country continues to set its own policies in relation to nonmembers, including tariffs, quotas, or other restrictions that it chooses. The most notable free trade area is the North American Free Trade Agreement (NAFTA). Sometimes a free trade area is formed only for certain classes of goods and services; For example, an agricultural free trade area is restricted to agricultural goods only.

The customs union is one step further along the spectrum of economic integration. Like the members of a free trade area, members of a customs union dismantle barriers to trade in goods and services among themselves. In addition, however, the customs union establishes a common trade policy with respect to nonmembers. Typically this takes the form of a common external tariff, where imports from nonmembers are subject to the same tariff when sold to any member country. Tariff revenues are then shared among members according to a prescribed formula. The Southern African Customs Union and Andean Community (Comunidad Andina de Naciones or "CAN") are examples of this model of economic integration.

Further still along the spectrum of economic integration is the common market. Like the customs union, a common market has no barriers to trade among members and has a common external trade policy. In addition, however, factors of production are also mobile among members. Factors of production include labor, capital, and technology. Thus restrictions of immigration, emigration, and cross-border investment are abolished. The importance of factor mobility for economic growth is very important. Mercosur, or the "Common Market of the South," is an example of this form of economic integration.

Despite the obvious benefits, members of a common market must be prepared to cooperate closely in monetary, fiscal, and employment policies. While a common market will enhance the productivity of members in the aggregate, it is by no means clear that individual member countries will always benefit.

Economic union requires integration of economic policies in the addition to the free movement of goods, services, and factors of production across borders. Under an economic union, members would harmonize monetary policies, taxation, and government spending. In addition, a common currency would be used by all members. This could be accomplished de facto or in effect by a system of fixed exchange rates. The formation of an economic union requires nations to surrender a large measure of their national sovereignty to supranational authorities in community-wide institutions.

The Americas

The North American Free Trade Agreement (NAFTA), the free trade bloc of the United States, Canada, and Mexico, removed export tariffs in several industries, reduced tariff barriers on agricultural products, put in place intellectual property protections, created mechanisms to resolve commercial disputes, and facilitated the trade in illegal drugs. The economies of all three countries have grown since the agreement was signed in 1994, with Canada growing the fastest and Mexico the slowest. Most economists see a favorable impact of NAFTA, but this may be influenced by the general "theoretical" disposition, which typically favors free trade and views the adverse consequences as outweighed by long-term benefits. Under NAFTA, Canada, Mexico, and the United States are permitted to set and apply their own labor and environmental standards as these standards pertain to trading among member nations.

The Central American Free Trade Agreement (CAFTA) represents a trade pact to promote free trade among the United States, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic. CAFTA proports to eliminate barriers to trade among the member nations, eliminate barriers to foreign investment, and protect intellectual property, in addition to increasing transparency in corporate governance, legal systems, and due process for member nations. CAFTA is a trade agreement that is patterned after the North American Free Trade Agreement between Canada, Mexico, and the United States.

The Mexico–Northern Triangle Trade Agreement represents a trade agreement governing regional economic integration among Mexico and the Central American countries of Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. The objective of the Mexico–Northern Triangle Agreement is to create a free trade zone among its member countries.

A train being inspected on the Canadian border in Montana. The Canadian economy has grown the fastest with NAFTA.

The Group of Three (G-3) Trade Agreement represents a multilateral trade agreement formed originally among the countries of Colombia, Mexico, and Venezuela. The principal goal of the G-3 agreement is to eliminate tariffs in trades among its member countries. Since the signing of the G-3 agreement in June 1994, Panama joined the G-3 as a signatory in 2004, and Venezuela announced its intension to withdraw from the G-3 in 2006.

Asia Pacific and Europe

The Association of Southeast Asian Nations (ASEAN) was established on August 8, 1967, in Bangkok by the five original member countries, namely, Indonesia, Malaysia, Philippines, Singapore, and Thailand. Brunei Darussalam joined on January 8, 1984; Vietnam on July 28, 1995; Lao PDR and Myanmar on July 23, 1997; and Cambodia on April 30, 1999. China joined these 10 Southeast Asian countries in November 2004.

ASEAN is intended to lay the groundwork for the world's biggest free trade zone by 2010—the group would cover a total population of nearly 2 billion people. The agreement includes a promise to liberalize tariff and non-tariff barriers on traded goods and to establish a trade dispute mechanism. Importantly, the agreement includes full liberalization of the services sector, which for developing countries is a more significant force for growth than traditional agricultural and light industrial goods. In addition to its economic impact, the agreement will increase China's role as the growth engine for ASEAN's export-led economies, because of China's huge need for raw materials, finished goods, and components.

The European Free Trade Agreement (EFTA) currently unites Iceland, Norway, Switzerland, and Liechtenstein in a free trade agreement. There are now several EFTA and other countries, such as Mexico, Korea, Israel, and Singapore. Emphasis has been placed on the free trade of industrial goods. Agriculture was left out to allow member countries the flexibility to determine what they needed. Member countries also determine the trade barriers applied to goods coming from outside EFTA.

Customs Unions

The Southern African Customs Union (SACU) consists of Botswana, Lesotho, Namibia, South Africa, and Swaziland. The SACU secretariat is located in Windhoek, Namibia. SACU was established in 1910, making it the world's oldest customs union. The economic structure of the union links the member states by a single tariff and no customs duties between them. The member states form a single customs territory in which tariffs and other barriers are eliminated on substantially all the trade between the member states for products originating in these countries; there is a common external tariff that applies to nonmembers of SACU.

The Andean Community (CAN), composed of Bolivia, Colombia, Ecuador, and Peru, joined together for the purpose of achieving more rapid, better balanced, and more autonomous development through Andean, South American, and Latin American integration in order to contribute effectively to sustainable and equitable human development, to live well, with respect for the diversity and asymmetries that agglutinate the different visions, models, and approaches and that will converge in the formation of the Union of South American Nations (Unasur).

Common Markets

Mercosur, also known as the Southern Common Market, comprises Argentina, Paraguay, Uruguay, and Brazil, and represents a total population of nearly 200 million individuals. It objectives include the free transit of production goods, services, and factors between the member states, the elimination of customs rights and lifting of non-tariff restrictions on the transit of goods or any other measures with similar effects; the fixing of a common external tariff (TEC) and adopting of a common trade policy with regard to nonmember states or groups of states, and the coordination of positions in regional and international commercial and economic meetings; the coordination of macroeconomic and sectorial policies of member states relating to foreign trade, agriculture, industry, taxes, monetary system, exchange and capital, services, customs, transport, and communications, and any others they may agree on, in order to ensure free competition between member states; and the commitment by the member states to make the necessary adjustments to their laws to allow for the strengthening of the integration process.

Economic Unions

The European Union (EU) is the most highly integrated regional entity, and if you add up its members' gross national incomes, the EU is probably also the regional entity with the greatest wealth and intra-system trade. The EU's intended function is to create a uniform system, including currency, that facilitates the most frictionless and efficient transfer of goods, services, people, and factors of production while limiting the risks of currency conversion and fluctuation arising from vastly different country situations with respect to debt as a percentage of gross domestic product, unemployment levels, tax rates, industrial policy, etc. The point is not to have a uniform standard but to narrow the range of differences. As of 2008, there were 27 members, including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. Croatia, Macedonia, and Turkey were still candidate countries in June 2008.

See Also: Association of Southeast Asian Nations; Caribbean Community; Central American Common Market; Common Market; Customs Union; Economic Union; European Union; Free Trade Area of the Americas; Free Trade Zone; Mercosur/Mercosul; North American Free Trade Agreement.

Bibliography. Bradly J. Condon, *NAFTA, WTO and Global Business Strategy: How Aids, Trade and Terrorism Affect Our Economic Future* (Quorum Books, 2002); Cleopatra Doumbia-Henry and Eric Gravel, "Free Trade Agreements and Labour Rights: Recent Developments," *International Labour Review* (v.145, 2006); Ole Elgstrom and Christer Jonsson, *European Union Negotiations: Processes, Networks and Institutions* (Routledge, 2005); Francesco Farina and Ernesto Savaglio, *Inequality and Economic Integration* (Routledge, 2006); Mark J. Holmes and Nabil Maghrebi, "Is There a Connection Between Monetary Unification and Real Economic Integration? Evidence From Regime-Switching Stationary Tests," *Journal of International Money and Finance* (v.27/6 October 2008); Joseph A. McKinney and H. Stephen Gardner, *Economic Integration in the Americas* (Routledge, 2008); Helen E. S. Nesadurai, *Globalisation, Domestic Politics and Regionalism*: *The Asean Free Trade Area* (Routledge, 2006); James D. Sidaway, *Imagined Regional Communities: Integration and Sovereignty in the Global South* (Routledge, 2002); Paulo Sotero, "Common Market for the Southern Cone: The Promise of Mercosur," *Foreign Policy* (v.140, 2006).

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Economic Statistics

Economic statistics is composed of two interrelated fields, those related to data collection and those to data analysis. In fact, economic statistics is differentiated from other fields of applied statistics due to its unique data collection methods, and because of the scope/scale of analysis.

Most economic data is collected by governmental or large-scale pseudogovernmental agencies. These include the United Nations, the World Bank, and International Monetary Fund (IMF), and the various regional development banks. These are often compilations of data provided by the various countries' central banks. By its nature, macrolevel data is nearly impossible for individual researchers to collect. However, the governmental provision of economic data is increasingly extended to microeconomic data. In the United States, for example, the most comprehensive individual, or microlevel, data is compiled by the Census Bureau and the Bureau of Labor Statistics.

Economic statistics have traditionally been centered upon directly measurable concepts, or to concepts that are potentially well defined. For example, there is less ambiguity in the definition or proper measurement of "income" than there is in defining the concept of "happiness." For this reason, the statistical problems implied by large measurement errors require less attention in economics than in fields such as marketing or psychology.

Many economic phenomena can be measured in different ways; in fact, they are often defined in different ways as well. Some countries, for example, compute the inflation rate by adjusting each good's price by a quality improvement factor; others do not. For this reason, several agencies and companies have specialized in producing datasets that are internationally comparable. These include the Penn World Tables, the International Financial Statistics database compiled by the IMF, much of the data reported by the Organisation for Economic Co-operation and Development, and several databases compiled by the United Nations.

Methods

Econometrics is the application of statistical techniques to the analysis of economic data and their interrelationships. Physical scientists, and some social scientists, can often rely upon carefully crafted, controlled experiments with which to collect data and test competing theories. Because large-scale controlled experiments are not feasible on a national level, econometrics required a unique set of tools.

In earlier statistical research using the regression methodology, the role of regression was to estimate the correlation between an exogenous variable X on an endogenous variable Y, while holding the other exogenous variables constant. This is accomplished in a statistical sense, since controlled experiments are rare in economics. This is done simultaneously for many endogenous variables within a single equation: Y is a function of Xs.

The concept of General Equilibrium, however, required that the economic variables of interest are jointly determined. That is, X causes Y, but Y also causes X. This phenomenon is often termed the "endogeneity problem." Since all economic data in the United States, for example, are determined within the same national economy, the analysis is significantly complicated. Such endogeneity is, in fact, the cornerstone of economics, as embodied in the Supply and Demand graphs, a system of two, not one, equations. Market prices and quantities are determined by the interaction (indeed, intersection) of supply and demand. Thus, one cannot hold price constant in order to isolate the effects of X on quantity.

Econometrics, as a unique field of study, arguably began with the formation in the early 1930s of the Cowles Commission, the Econometric Society and their journal *Econometrica*, and in the 1940s with the Department of Applied Economics at Cambridge. As fitting the world's preoccupation with the global macroeconomic problems of the time, economic theory and economic statistics became understandably macro-oriented. Especially at Cowles, the aim was to study systems of equations much larger than the simple two-equation supply-and-demand system. Rather, dozens of such systems were incorporated into large-scale models of economies, with each sub-market influencing and being influenced by all other markets. During this time, the mainstream economic school of thought was Keynesianism, according to which there is a large role for government in controlling the economy. Thus, measurement and analysis were prerequisites to control. The Keynesian macroeconometricians sought to estimate the parameters of their many economic equations. These parameters were thought to be constants just as there are physical constants in the hard sciences. Once all of the economies' parameters were estimated, fine-tuned economic prediction and control could be exercised.

Governmental institutions became engaged in developing truly massive systems of hundreds of equations with which to model their home economies; this, in an attempt to predict the likely outcome of proposed economic policies. This method of analysis remained the dominant technique until the 1970s, when very simple time-series models were found to outperform their large-scale brethren. These simple models, developed largely by George Box and Gwilym Jenkins, were usually univariate time-series models which leveraged the inertia in economies by putting lagged dependent variables as the key terms used for prediction.

In 1976, an influential paper by Nobel Prize–winning economist Robert Lucas introduced what is now known as the "Lucas Critique." This critique, in effect, pulled the theoretical rug out from under large-scale econometric modeling. Lucas argued that even the estimated parameters were the results of the economic process; the parameters were not unchanging and structural, they were also endogenous. From that point onward the systems approach has been largely abandoned in favor of a return to single-equation models, though these are considerably more complex than the univariate time-series models of Box and Jenkins. (Interestingly, this occurred at largely the same time that other social sciences turned from single-equation models to multiple "structural equations" models.)

Econometrics is at the intersection of economic theory and economic data, where the priority of one over the other remains in dispute. For some economists, the primary role of econometrics is to test the validity of economic theories. In the physical sciences, where theory is well established, the functional forms of the equations to be estimated are well defined. These well-defined forms have not been found in the social sciences. For many econometricians, proper practice requires developing a formal model with microfoundations (utility functions, production functions, etc.) as a necessary step prior to estimation. If one theory, for example, maintains that there is a positive relationship between X and Y, but it is estimated that the relationship is negative, then it can be argued that the theory has been falsified. On the other hand, a completely different conclusion can be drawn.

There is often little testing that can be done regarding whether the equation that is estimated is properly specified in the first place. Thus, many researchers advocate using economic theory as a guide to model selection. In this vein, if an equation is estimated and it is found that there is a negative relationship between X and Y, this has not falsified the theory, but rather, it has called into question the equation that was said to represent the theory. Thus, a competing use of econometrics is the illustration, not testing, of economic theory. These researchers adopt a more intuitive approach to model selection. Finally, adherents to Chris Sims' theory-free approach eschew theory altogether, preferring the "data to speak for themselves." Sims' approach recognizes the endogeneity of all economic variables, and estimates all of their interrelationships, without placing restrictions on what these relationships would be (regardless of what economic theory may imply).

While much of this entry has been devoted to macroeconometrics, this is not to say that micro-level econometrics was not practiced throughout this time. However, most of this data was at the industry level, and so the data were necessarily aggregated to some extent. Increasingly, truly microlevel data—that is, data collected at the individual level—are being examined. In the United States, for example, popular microlevel datasets are collected by the Bureau of Labor Statistics and the Census Bureau. Moreover, under the guidance of Vernon Smith, experimental economics has established controlled experiments as a valid means of collecting microeconomic data. Increasingly, economists have become freed of the governmental macrolevel databases, and have begun generating their own microlevel data, tailored to their own research needs.

From the 1930s to the present, econometrics has been shedding its macroeconomic roots, and is largely indistinguishable from the other branches of applied statistics that use the regression approach. The differences lie in the questions that are asked, not in the techniques they use to answer these questions.

See Also: Economic Indicators; Forecasting; Macroeconomics; Research Methods: Quantitative.

Bibliography. John Abowd and Lars Vilhuber, "The Sensitivity of Economic Statistics to Coding Errors in Personal Identifiers," *Journal of Business and Economic Statistics* (v.23/2, 2005); Bernard Baumohl, *The Secrets of Economic Indicators: Hidden Clues to Future Economic Trends and Investment Opportunities* (Wharton School, 2008); George E. P. Box and G. M. Jenkins, *Time Series Analysis: Forecasting and Control* (Holden-Day, 1970); Adrian C. Darnell and J. Lynne Evans, *The Limits of Econometrics* (Edward Elgar, 1990); Norman Frumkin, *Guide to Economic Indicators* (M.E. Sharpe, 2006); David F. Hendry, *Econometrics: Alchemy or Science?: Essays in Econometric Methodology* (Blackwell, 1993); Robert Lucas, "Econometric Policy Evaluation: A Critique." *Carnegie-Rochester Conference Series on Public Policy* (n.1, 1976); Edward F. McKelvey, *Understanding US Economic Statistics* (Goldman Sachs Economic Research Group, 2008); Chris A. Sims, "Macroeconomics and Reality" *Econometrica* (v.48, 1980).

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Economic Union

An economic union is the deepest form of economic integration between two or more countries that allows the free movement of capital, labor, and all goods and services. It also involves the harmonization and unification of social, fiscal, and monetary policies as well as labor market, regional development, transportation, and industrial policies. An economic union is also a common market with provisions for the harmonization of certain economic policies, most notably macroeconomic and regulatory policies. Since all countries would essentially share the same economic space, it would be counterproductive to operate divergent policies in those areas. The Latin Monetary Union in the 1800s, the Benelux Custom Union in 1944, and the European Union in 1957 can be given as examples for the existing economic unions. International institutions would be required to regulate economic, political, and social interaction within the union to ensure uniform application of the rules. These laws would still be administered at the national level, but countries would abdicate individual control in this area.

Any established economic union frequently includes the use of a common currency and a unified monetary policy. According to Paul De Grauwe, eliminating the national currencies and moving to a common currency is expected to lead to gains in economic efficiency for two main reasons. One of the reasons is to eliminate transaction costs associated with the exchanging of national money and to allow businesses to choose their locations freely. The other reason, for Ali El-Agra, is to eliminate the risk of uncertain future movements of the exchange rates. Eliminating exchange rate uncertainty improves the functioning of an economic union by allowing trade to follow economically efficient paths without being disproportionately affected by exchange rate considerations.

European Economic Union

Jorgen Hansen stated the ultimate goal for the European Economic Union was to create a European identity based on common values and a common desire to develop a Europe free of wars and to organize economic, political, and social relationships between the European member states and their peoples in a coherent manner. In order to create a dynamic framework for the European economies and to foster economic growth in that zone, a kind of economic interdependency among member states had to be created.

To be able to create the economic interdependence between countries, the first key goal was security. To be able to avoid the excesses of nationalism and of the nation-state system, in particular after two devastating world wars, establishing economic union in Europe was considered the best strategy. To protect countries from each other's destructive attacks, having similar goals was the best policy for common security. The second key goal was economic. Because of World War I (1914–18), economic depression in the 1930s, and World War II (1939–45), countries adopted protectionist trade policies to protect their economies and to stand on their feet. Nevertheless, after their initial recovery, they later examined the benefits of establishing a single market to minimize the damages of wartime destruction and to keep alive their economic ideology. Therefore, it was commonly believed that building the economic union would benefit all member states in Europe once all trade barriers were lifted gradually. The third and the final goal was political. To protect Europe from the Soviet threat and its political ideology was the main deterministic goal in establishing an economic union.

The first six member states—Belgium, Germany, France, Italy, Luxembourg, and the Netherlands—came together in 1951 with the intent to establish the economic union. Then, in 1973, Denmark, Ireland, and the United Kingdom joined, although not as full members. In 1981 Greece, in 1986 Spain and Portugal, and in 1995 Austria, Finland, and Sweden joined the European Economic Union club. Since then the enlargement has continued and other nations have applied for membership.

The GATT (the General Agreement on Tariffs and Trade), the OEEC (the Organization for European Economic Cooperation), and the EPU (the European Payments Union) were also established to increase trade liberalization and economic integration. The GATT was established in 1947 to reduce tariffs between countries and later in 1995 was transformed into the World Trade Organization (WTO). The OEEC was established in 1948 to coordinate financial assistance to rebuild European countries after World War II. The third organization, EPU, was established in 1950 to secure convertibility of currencies when countries engage in trade. Initializing the Single Market in 1986 was the next step toward influencing the economic structure of the countries involved.

See Also: Economic Integration; Euro; European Union; Free Trade.

Bibliography. Ali El-Agra, *The European Union: Economics and Politics*, 7th ed. (FT Prentice Hall, 2004); Paul De Grauwe, *Economics of Monetary Union*, 5th ed. (Oxford, 2003); Daniel S. Hamilton and Joseph P. Quinlan, *Globalization and Europe: Prospering in the New Whirled Order* (Center for Transatlantic Relations, Johns Hopkins University, 2008); Jorgen Hansen, *European Integration: An Economic Perspective* (Oxford, 2001); Wolf Sauter and Harm Schepel, *State and Market in European Union Law* (Cambridge University Press, 2009); E. Wistrich, *After 1992: The United States of Europe* (Routledge, 1990).

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Economies of Scale

Economies of scale refers to reduction in unit costs associated with producing large volumes of a product. Reductions in cost in this manner arise in a number of ways. First, by producing in volume, more of the fixed costs involved can be distributed over a larger number of final products. Then, too, large-scale producers can take advantage of specialized equipment and manpower that are highly productive due to increasing returns of specialization. Economies of scale play a critical role in global business today, with respect to government policy, regional integration, and business strategy. It is a central component of strategic trade policy (otherwise known as the new trade theory) and in the strategic profiles of multinational firms. A growing concern for multinationals is the increasing difficulties implementing economies of scale strategies in the 21st century.

The origins of economies-of-scale production can be traced to the early phases of the industrial revolution in the United States, and particularly in the second half of the 19th century. The ability to efficiently turn out products in large volumes was in part due to the growing pool of labor-saving machines designed and built by American inventors and machinists. A turning point in this progression was the shift from batch and semi-continuous production to fully continuous operations. The moving assembly line and the division of labor into specialized tasks carried out at specific workstations along that line to produce standardized products was a culmination point in this effort to place production on an economies-of-scale basis. The automotive industry—and Ford Motor Co. in particular—spearheaded this mass production revolution. Other industries soon adopted the technology in its various incarnations suitable to the particularities of their production processes.

Achieving economies of scale in production depended also on seamlessly integrating these machines and systems into the organizational fabric of the factory and ultimately the corporate structure as a whole. The close structural interlinkages formed between corporate divisions through managerial and organizational innovations by the third decade of the 20th century assured a smooth and timely flow of materials and components upstream into the plant and the readiness of the distribution network and market demand at the appropriate time downstream. All this contributed to a steady high-volume output of final product and the essential economies that attended large-scale production.

Since the 1980s, economies-of-scale production has diffused into many industries, including electronics and information technology. Economies of scale are also an important force in the evolution of the European Union and the rise of the "Single Market." The fact that much of Western Europe is a monetary union, for example, leads to economies of scale in financial markets and, in turn, greater availability of cheaper capital for multinationals.

Global Strategies

Economies of scale play an important role in global business strategy. Supporters of neomercantilist policies stress that governments that support certain industries, especially those burdened by high capital costs—which can include high research and development (R&D) costs—to achieve first-mover advantage in global markets actually produce a net positive impact for all countries. Such strategic trade policy is relevant in high–fixed cost industries, such as aircraft production, in which total market demand globally is limited and can support only one or two multinational companies (MNCs) efficiently. Government subsidies to these companies, including tax incentives, R&D support, and so forth, allow them to take early control of global markets. This assures them that they serve sufficiently large demand to produce in volume and, through economies of scale, at reduced costs. In turn, the market receives a greater variety of products at low prices. But government support is by no means a sine qua non of achieving such first-mover advantage.

An MNC that, through its own resources, attains economies-of-scale production can take control of global markets through appropriate pricing strategies. From the 1930s through the 1960s, the U.S. petrochemical industry proved particularly adept in this sort of strategy. They rapidly scaled up production of new products discovered in their R&D departments, thereby quickly securing a lock on markets within the United States and internationally. When competition eventually filters in—as it did in petrochemicals in the 1970s and aircraft production in the 1980s—the market becomes segmented and the minimum output required for the benefits of economies of scale to kick in cannot be achieved within any competing company. Inefficiencies then infect the industry as a whole, profits erode, and economic activity in the industry as a whole contracts.

The appropriate strategy to be taken by a multinational firm in increasingly globalized markets depends to a large extent on the degree of cost pressures it faces relative to pressures to be locally responsive. A specific type of strategy that is most effective in negotiating cost pressures is often referred to as a "global" strategy. These pressures can arise from companies having to bear high costs of production (fixed costs, R&D, etc.), face stiff competition in strategic markets, or both. At the same time, such MNCs make, sell, or distribute standardized, commodity products—e.g., bulk chemicals, petroleum, steel, sugar, and many industrial and consumer products—or services that have a universal need, and therefore are not concerned with redesigning products for different local markets. In these situations, MNCs can take full advantage of economies of scale by building and operating of a few large plants designed along mass production lines and located in strategically sensitive positions—near critical raw materials, central to its markets, optimal access to suppliers and subcontractors, and so on—around the world. Further, global industries that rely extensively on economies-of-scale strategies tend to be more difficult for outside firms to enter due to the high capital costs involved.

Transnational Strategies

In fact, most MNCs must realistically consider both cost and local pressures when devising and carrying out their business strategies. Differences in customer tastes and preferences, traditions and beliefs, infrastructure and distribution channels, and laws, regulations, and standards between countries compel MNCs to adjust—or customize—products and services to the specific requirements of local demand and conditions; at the same time, they must compete in both quality and price. The type of business strategy that must balance and coordinate these two types of pressures is called a "transnational" strategy.

Since an "economies of scale" or "global" strategy depends on the mass production of standardized products and services, and since a "localization" (otherwise known as "multidomestic") strategy functions by custom-designing products and services for smaller than mass production markets, a transnational strategy appears to require the balancing of competing and highly inconsistent demands. Nevertheless, recent organizational, logistical, and technological innovations have introduced crucial flexibilities in production and distribution functions that facilitate the effective implementation of transnational—or "mass customization"—strategies. Organizationally, the innovative global matrix structure differs from traditional architectures in that the control of a product or service is the shared responsibility of two managers, one specializing in geographical regions ("localization" expert) and the other in the global production and distribution of the product or service ("economies of scale" expert). These managers work together to simultaneously handle localization and cost pressures.

Logistically, transnational firms handle cost pressures by designing its products to use standardized components that are then assembled into a basic machine in a few large, strategically placed plants (thus meeting the "economies of scale" requirement). The MNCs then deal with local pressures by sending the mass-produced product to smaller finishing facilities for modification to regional demand and distribution requirements. Technologically, the incorporation of information technology and computer-aided design into mass production plants allow rapid model changeovers (to meet local demands) at low economies-of-scale costs. Industries that employ transnational strategies include pharmaceuticals, agricultural equipment, textiles and apparel, and automotive.

In general, business strategies that require consideration of economies of scale—whether global or transnational—are more difficult to implement than multidomestic strategies in terms of need for coordination of information and resources, integration of functions and skills, and cultural controls.

See Also: Barriers to Entry; Competition; Economies of Scope; Matrix Structure; Neomercantilism; New Trade Theory; Productivity; Standardization.

Bibliography. C. A. Bartlett and S. Ghoshal, *Managing Across Borders* (Harvard Business School Press, 1989); D. Besanko, D. Dranove, and M. Shanley, *Economics of Strategy* (John Wiley & Sons, 1996); A. D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Belknap Press, 1993); M. Goold and A. Campbell, "Structured Networks: Towards the Well-Designed Matrix," *Long Range Planning* (October 2003); C. W. L. Hill, *International Business: Competing in the Global Marketplace,* 6th ed. (McGraw-Hill/Irwin, 2007; D. Hounshell, *From the American System to Mass Production, 1800–1932: The Development of Manufacturing Technology in the United States* (Johns Hopkins University Press, 1985); T. Hout, M. E. Porter, and E. Rudden, "How Global Companies Win Out," *Harvard Business Review* (September–October 1982); Sarah Lloyd, *The CJC Guide to Service Sharing and Economies of Scale* (CIPFA, 2007); Richard W. T. Pomfret, *Lecture Notes on International Trade Theory and Policy* (World Scientific, 2008); M. Porter, *The Competitive Advantage of Nations* (Free Press, 1991); C. K. Prahalad and Yves L. Doz, *The Multinational Mission: Balancing Local Demands and Global Vision* (Free Press, 1987).

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Economies of Scope

Economies of scope refers to the cost savings and efficiencies generated by the joint production or distribution of final goods and services. Rather than specializing in a single product, a firm can promote its profitability as well as control some of its market risks by diversifying its product line to take advantage of inherent and acquired economic, technical, and organizational advantages. In the late 19th and early 20th centuries, large firms noticeably began to develop into multibusiness firms; but less conspicuously and often on a much smaller scale, other individual manufacturers with comparable incentives became multiproduct firms. Profit maximizing remains a core assumption in standard business models and firms that produce related products can often do so at lower average production costs.

The basis for the joint production of goods, or economies of scope, can vary in the particular but generally it occurs when a manufacturer utilizes common material inputs (including specialized labor skills) within existing production and managerial facilities to fabricate related final goods. Consequently, a particular firm can become more efficient and more profitable in production without necessarily altering the size or scale of its operations.

Since multiproduct firms have the capability to start and stop production relatively quickly, it also suggests that even in situations where there are a limited number of firms, a market may nevertheless be fairly competitive in practice. However there are situations where there are trade-offs between economies of scale and scope, so the relative mix and number of specialized and integrated establishments and/or firms can be influenced by relative market conditions. Efficiency is ultimately promoted by improved coordination and managerial advances, but given that technological variances persist across various sectors of the economy, there will likely not be a standardized model of firm specialization and integration.

The ability of a particular operating unit to engage in joint production will be inhibited by any inadequate and undependable flows in the inputs needed in the production process, but given sufficient resources and market conditions, a firm could reliably use its assets to manufacture, market, and distribute different but related goods. There are technical and market benefits for producing different yet related goods, since the manufacturer's advantages are centered in its abilities to employ its existing and often specialized resources at full capacity and thus cost efficiency as well as to diversify its product offerings enough so the firm might avoid or at least delay market saturation. A manufacturer operating below capacity can reduce its variable or operating costs somewhat but its fixed or overhead costs remain even with idle production facilities. The firm's relative efficiency (its average cost of production) can be measured by summing its fixed and variable costs relative to its level of output.

Firms with sizable fixed costs cannot realistically afford to underutilize production capacity. For instance, consider the example of an electronics manufacturer that develops an integrated circuit to be used in a line of high-quality and long-lasting handheld electronic calculators. The technical expertise needed to design and build their integrated circuitry may well have required significant overhead (fixed) costs, but if the firm intends to manufacture only electronic calculators, it faces higher average costs once they have saturated the existing calculator market. On the other hand, the manufacturer's available workforce, production facilities, and technical innovations may find application in any number of related products (such as electronic watches, musical instruments, cameras, and other digital devices) that could be efficiently and profitably manufactured, marketed, and distributed by the firm within its existing resources and organization.

Economies of scale and scope played a significant role in the years from around 1880 until the start of World War I as big business began to dominate several industries including oil, steel, chemicals, electricity, machinery, automobiles, and tobacco. Several of these industries had been transformed not only by the adoption of continuous-process production techniques and more functional interchangeable parts but also by the implementation of more sophisticated and professional forms of business organization. Economies of scale, cost savings, and efficiencies related to the same activity, often get more widespread notice than do economies of scope, but this may be due more to the sensationalism of bigness rather than the realization that it is more practical for many firms to consider scope ahead of scale as a means to reduce costs.

See Also: Economic Development; Economies of Scale; Productivity.

Bibliography. Elizabeth Bailey and Ann Friedlaender, "Market Structure and Multiproduct Industries," *Journal of Economic Literature* (September 1982); Alfred D. Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism* (Harvard/Belknap, 1990); Mary E. Edwards, *Regional and Urban Economics and Economic Development: Theory and Methods* (Auerbach Publications, 2007); G. Hajargasht, T. Coelli, and D. S. Rao, "A Dual Measure of Economies of Scope," *Economics Letters* (v.100/2, 2008); John Panzar and Robert Willig, "Economies of Scope: In Sustainability Analysis," *American Economic Review* (May 1981); Burkhard Schwenker and Stefan Bötzel, *Making Growth Work: How Companies Can Expand and Become More Efficient* (Springer, 2007); David Teece, "Economies of Scope and the Scope of the Enterprise," *Journal of Economic Behavior and Organization* (September 1980).

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Ecuador

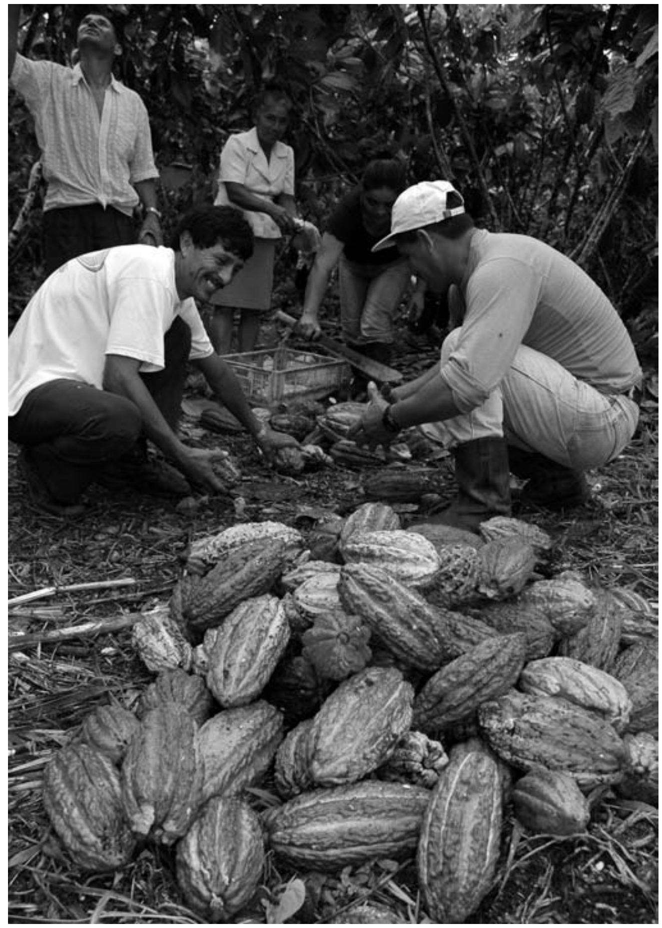
Located on the west coast of South America, sharing borders with Colombia and Peru, Ecuador has a population of 13.7 million. It was a part of the Inca Empire until the arrival of the Spanish in the 16th century. Ecuador gained its independence as a part of Gran Colombia in 1822, and as an independent country in 1830. Historically, the economy of the country has relied heavily on agriculture with the export of primary products including bananas, flowers, and shrimp. However, for many years the major export was cacao, used to make cocoa. There was also a substantial export economy in sugarcane, tobacco, and cotton. Some of the latter was turned into clothes in workshops known as *obrajes*, where many locals, in poor working conditions, would make woolen and cotton clothes. Sugarcane was often used to make pure sugar, and also molasses and rum. Most of this came from "Costa," the coastal region of the country that developed at the expense of the "Sierra," the Andean highlands. The Spanish also established a large shipyard at the main port, Guayaquil, and it soon became one of the biggest in Spanish America.

With independence in 1830, much of Ecuador's population of about 500,000 was working in agriculture as sharecroppers. Labor was cheap and the country's cash crops, which were grown for export, were able to be produced more cheaply than in most other countries. As a result, Ecuador's economy was very much linked into the world economy by the middle of the 19th century. This meant that at times of economic slump overseas, the Ecuadorian economy would suffer. To increase the amount of foreign income, in the second part of the 19th century, the production from cacao was tripled—it became the mainstay of the economy and also Ecuador's principal source of foreign currency—and the total exports of the country increased 1,000 percent. Although Quito remained the capital, Guayaquil came to be the commercial center of the country, and for imports and exports.

During the 1930s and the 1940s, pestilence caused a major diminution of cacao production throughout the country, and the government sought to revitalize the economy by promoting the growing of bananas. This started in 1948, but there was a sudden increase in demand for cacao, and although bananas had started to replace cacao as the major export crop by the mid-1950s, Ecuador remained the sixth largest exporter of cacao in the world in 1958. The banana industry, however, was successful with help from the United Fruit Company, although demand began to fall in the late 1960s, and by 1972 the country had to, once again, restructure itself.

By the 1980s, agriculture and fishing were still the largest employers in the country, and made up nearly half the country's foreign currency earnings. In 1986, bananas, coffee, and cocoa combined made up only 2.4 percent of the country's total gross domestic product. By this time Ecuador also started to benefit from the tourist industry, with many people visiting the Galapagos Islands, and there was coastal fishing from Guayaquil, the country's largest city and a major port. Guayaquil now has a population of over 2 million, compared to just less than 1.5 million for Quito.

The discovery of petroleum in the early 1970s and its exploitation have transformed the country. This coincided with a major increase in the world demand for petroleum, and with the oil crises of 1973–74 and 1979, petroleum rapidly became one of the major sectors of the Ecuadorian economy. This helped finance increasing government expenditure and in May 1992 about 1.1 million hectares were handed back to indigenous communities. To ensure that the economy continued to remain strong, in 1992, Argentina had pegged the local currency, the Sucre, to the U.S. dollar, and Ecuadorian president Jamil Mahuad decided in 2000 to adopt the U.S. dollar as the official currency of his country. Although there were initial political problems, the U.S. dollar was adopted in 2001.



Farmers sorting cacao pods as part of a USAID project in Ecuador, where oil has overtaken cocoa production.

In 2008, Ecuador was decried for attempting to wrongly get billions of dollars from Chevron through legal maneuvers over what some saw as bogus pollution charges against Chevron.

See Also: Chevron; Banana Wars; Latin America.

Bibliography. "Banana Republic Behavior," *Wall Street Journal* (August 18, 2008); Carla Calero, Arjun S. Bedi, and Robert Sparrow, *Remittances, Liquidity Constraints* *and Human Capital Investments in Ecuador* (Institute of Social Studies, 2008); Carlos de la Torre and Steve Striffler, *The Ecuador Reader: History, Culture, Politics* (Duke University Press, 2008); Vicente Fretes Cibils, Marcelo Giugale and Eduardo Somensatto, *Revisiting Ecuador's Economic and Social Agenda in an Evolving Landscape* (World Bank, 2008); Gerhard Drekonja, "Ecuador: How to Handle a Banana Republic Turned Oil State," *Boletín de Estudios Latinamericano y del Caribe* (v.28, 1980); *The Europa Year Book* (Europa Publications, 2008); Jörg Faust, *Political Fragmentation, Decentralization and Development Cooperation: Ecuador in the Latin American Context. Studies* (Deutsches Institut für Entwicklungspolitik [German Development Institute], 2008); Carlos Larrea Maldonado, "Transnational Companies and Banana Exports from Ecuador 1948–1972," *North-South* (v.7/14, 1982); John D. Martz, *Politics and Petroleum in Ecuador* (Transaction Books, 1987).

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Education Allowance

An education allowance is broadly understood as a stipend or other payment made by public funds or from an employer to an employee undergoing training for a certain period, usually outside the normal place of work. More narrowly understood and as used here, it is a stipend or other payment program where the target employees are mid-career or late-career, and the practice thus not part of initial education and training.

In general, an education or training allowance (EA and TA, respectively) may be regarded as attempting the implementation of knowledge society–oriented policies at corporate, national, and international levels. This means that the extent and contents of the practice, including terminology, varies greatly. Overall the practice tends to follow the philosophy inherent in the conventional International Labor Organization (ILO) definitions of lifelong learning used as encompassing all learning activities undertaken throughout life for the development of competencies and qualifications, and by the European Commission (EC) as encompassing all purposeful learning activity, whether formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills, and competence.

Prominent examples of public EA and TA implementation include Denmark's financial support systems within the Adult Education Reform Act of 2001 and Sweden's new adult education recruitment grant scheme introduced in 2003. The latter is aimed at people aged 25–50 with relatively little initial education. In Finland an adult education subsidy is available to employees and self-employed persons who have a work history of at least 10 years and wish to go on a study leave. Ireland's expenditures for adult literacy programs increased approximately nineteenfold during 1998–2003.

In theory EA may benefit both employers and employees by securing continuous learning for the individual employees and the corporation. From the perspective of the employers, there is a certain risk that employees receiving continued education might leave the corporation in spite of or because of newly attained education levels. It is, in addition, a challenge to determine what kinds of education and training should be deemed as relevant and eligible. A narrow and focused approach could be perceived by employees as too instrumental and hence lack the motivating factor, whereas too-broad approaches may lead to distractions from the necessities of operations. For managers operating in multiple countries an additional challenge is to familiarize oneself with the legal requirements and possibilities regarding the practice. For employees the benefits of continued education may on the one hand be self-evident, whereas the implementation may be seen as coming at the expense of executing day-to-day responsibilities.

One should be aware of the lack of consensus regarding vocabulary within this field. Some countries (e.g., Australia, Finland, Norway, and Sweden) usually refer to EA or TA broadly, much in accordance with the definition and examples rendered here, whereas other countries may use the EA and TA concepts mostly for specific situations or target groups, such as the U.S. public programs targeted specifically at military veterans, United Kingdom programs for young persons, Irish programs for disabled persons, and several countries using the concept with reference to continued education programs for unemployed persons. Individual sectors sometimes operate with specific concepts, e.g., the health sector and its concept of postgraduate EA (PGEA).

See Also: External Labor Market; Internal Labor Market; Social Pact; Training.

Bibliography. D. N. Aspin et al., *International Handbook of Lifelong Learning* (Kluwer, 2001); European Commission, *Implementing Lifelong Learning Strategies in Europe* (2003); International Labor Organization, *The New ILO Recommendation 195* (2006); P. Jarvis *The Theory and Practice of Learning*, 2nd ed. (Routledge, 2003); "More Improvements to Continuing Education Allowance," *Lamp* (v.64/11, 2008); J. J. Phillips, *Return on Investment in Training and Performance Improvement Programs*, 2nd ed. (Butterworth-Heinemann, 2003).

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Effective Rate of Protection

Protection of domestic industries from international competition is a common policy of many countries. Tariffs on imported goods (and services) are just one form, albeit the most common one, of such protection. A tariff of 10 percent (for example) allows domestic industry an "inefficiency cushion," that is, it allows the domestic firms to be about 10 percent less efficient in their production costs and still be able to compete with imported products. If, however, domestic firms have to obtain their inputs at higher prices than their international competitors, their "inefficiency cushion," more precisely their effective rate of protection, is reduced. Government's efforts to protect the input producing industries, in this case, reduce (or even negate) the protection that the government wishes to provide the downstream industries. Generally the effective rate of protection for an industry will be higher than the nominal tariff rate when its input producing industries are not protected, and lower when its input producing industries are protected even more.

Effective rate of protection can be calculated by isolating the value added of an industry. Consider the case of the barbed wire industry. Assume that the international price for barbed wire is $1,200/ton and, for the sake of simplicity, that the only input required to produce barbed wire is steel. Further assume that the international firms can purchase steel at $1,000/ton and need one ton of steel to produce one ton of barbed wire. Given this price structure, international firms add a value of $200/ton to steel to produce barbed wire. Now consider the domestic industry in a country where the government wishes to protect its barbed wire industry and imposes a tariff of 10 percent on imports. If there were no tariffs on steel, domestic firms would import steel at $1,000/ton and could compete with imports as long as they could produce and sell barbed wire at $1,320/ton. This allows them a margin of $320/ton compared to a margin of $200/ton for international producers. Their effective rate of protection is, therefore, 60 percent, much higher than the nominal protection rate of 10 percent.

Suppose now that the government also wishes to protect the steel industry and imposes a tariff of 20 percent on steel imports. Domestic producers of barbed wire now have to pay $1,200/ton for their raw material and have to convert steel into barbed wire at a maximum cost of $120/ton. They have to be more efficient than their international competitors. Their effective rate of protection is minus 40 percent.

In a situation where the only protection is provided in the form of tariffs, the effective rate of protection (ERF) can be calculated as follows:

$$\mathrm{ERP} = (t_f - i \,.\, t_i) \,/\, (1 - i)$$

Where t_f is the tariff on the finished products, t_i is the tariff on inputs and "x" is the proportion of the value of the finished product accounted for by the inputs in the international (tariff-free) environment.

The difference between nominal and effective rates of protection helps in understanding the arguments behind imposition and lifting of tariffs on steel by the U.S. Government. The steel industry in the United States used to have significant political clout and since the early 1970s, it had successfully lobbied for protection. The last round of tariffs on steel was approved by President George W. Bush in March 2002 and all tariffs were finally removed in December 2003. The removal of these tariffs was cheered by steel importing firms that needed steel as an input. Higher cost of one of their imports had required them to be more efficient than their international competitors.

Effective rates of protection are notoriously difficult to calculate. Last known estimates were quoted by Giancarlo Gandolfo (1994). In the United States, the soft drink industry had a nominal tariff rate of 1 percent but an effective rate of minus 9.5 percent. Similar numbers for the soybean oil industry were 22.5 percent and 253 percent. In the European Economic Community the median tariff rate of 12.1 percent resulted in an effective rate of 33.1 percent. Similar numbers for Japan were 16.5 percent and 45.4 percent. These examples merely highlight the importance of examining effective rates of protection rather than making policy based solely on the nominal rates.

See Also: Countervailing Duties; Dumping; Generalized System of Preferences; Most Favored Nation Status; Multi-Fiber Agreement; Tariff; Terms of Trade; World Bank, The; World Trade Organization.

Bibliography. Giancarlo Gandolfo, *International Economics I: The Pure Theory of International Trade*, 2nd ed. (Springer Verlag, 1994).

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Egypt

Egypt is situated in the northern region of Africa, bordering the international frontiers of the Mediterranean Sea to the north, Libya to the west, Sudan to the south, and the Red Sea to the east. It encompasses the Asian Sinai Peninsula and enjoys the rich flow of the Nile River. Egypt is a major player in Middle Eastern geopolitics, stemming from its strategic position as a transcontinental nation. Arabic is the official language, and English and French are widely understood by educated classes and used in business activities.

Egypt has a total area of 1.01 million sq. km. Since 1953 and after independence from British control, it became a republic and currently encompasses 26 governorates, with Cairo as the capital. The population was estimated at 81.714 million in August 2008; the great majority live near the banks of the Nile River, an area of about 40,000 sq. km making up only 5.5 percent of the total land and constituting Egypt's only arable agricultural land. Egypt's currency, the Egyptian pound (L.E.), is 5.331 to the U.S. dollar in August 2008. In terms of religion, Islam is practiced by 90 percent of the population; the remainder are Coptic/Christians.

Over time Egypt has embraced the Pharaonic, Greco-Roman, and Coptic civilizations, in addition to its historic role as a satellite for the Islamic civilization. It contains some of the world's most famous monuments, including the Pyramid complex and Sphinx. The southern city of Luxor possesses numerous ancient relics, such as the Karnak Temple and the Valley of the Kings. Egypt was the first country in ancient times to introduce writing with the creation of the hieroglyphic signs and letters used in recording historical episodes and activities.

It is endowed with rich natural resources such as iron ores, phosphates, manganese, limestone, lead, and zinc, in addition to petroleum and natural gas. Its main industries include textiles, food processing, tourism, chemicals, pharmaceuticals, hydrocarbons, construction, and cement. The economy depends mainly on income from agriculture—key agricultural products include cotton, rice, corn, wheat, beans, fruits, and vegetables. Egypt controls the Suez Canal, a navigable waterway that presents a sea link between the Indian Ocean and Mediterranean Sea.

After a harsh period of stagnation, Egypt's economy began considerable development in recent years after the adoption of more liberal economic policies by the government. The stock market boomed and gross domestic product (GDP) grew by about 6.9 percent per year in 2005–06, and topped 7 percent in 2007. Foreign direct investment (FDI) into Egypt also has increased considerably in the past few years due to recent economic liberalization measures. With favorable costs of land and labor as well as competitive prices of electricity and gas, the government offers generous incentives to invest in Egypt's private sector, including investment laws revolving around tax incentives, customs exemptions, and many new investor protections and guarantees.

FDI reached US$6.1 billion in 2005/2006, increasing 50 percent from 2004, and with a significant boost in 2006/2007, it set the stage to reach about US$10 billion in 2007. Egypt also takes part in a number of trade and investment agreements with different countries, such as COMESA and GAFTA

A factory in Egypt that was funded in part by a line of credit from the African Development Bank to the National Bank of Egypt in 2005 in an attempt to improve employment opportunities in over 200 small and medium-sized enterprises in the country.

with Libya and Sudan, QIZ with Israel, AGADIR with Jordan, Tunisia, and Morocco, and TIFA with the United States. It has a market capitalization amounting to 65 percent of GDP and recently had a 30 percent increase in non-oil exports; net foreign reserves recorded US$28.6 billion in May 2007, up from just US$14 billion in 2003/2004. Export sectors, especially natural gas, represent a promising potential for the economy.

However, the internal economic situation for citizens has recently been rather dismal. This is because, despite its achievements, the government has failed to raise living standards for the average Egyptian, and has had to continue providing subsidies for basic necessities. Such subsidies have contributed to a sizable budget deficit of approximately 7.5 percent of GDP in 2007, which represents a significant drain on the economy. Therefore, the government needs to continue its aggressive pursuit of reforms in order to sustain the spike in investment and growth and begin to improve internal economic conditions for the greater population.

Egyptian companies are successfully competitive overseas and have expanded regionally and internationally; a particularly productive example is the information technology (IT) sector that has witnessed rapid growth in recent years with 30 billion Egyptian pounds invested in information and communication technology companies. Illustrating a favorable economic climate, many of those companies conduct business with giant corporations in North America and Europe. Such moves aim to increase exports from US$250 million in 2005 to US$1.1 billion in 2010.

See Also: Africa; Economic Development; Middle East.

Bibliography. Sufyan Alissa, *The Political Economy of Reform in Egypt: Understanding the Role of Institutions* (Carnegie Endowment for International Peace, 2007); John R. Bradley, *Inside Egypt: The Land of the Pharaohs* *on the Brink of a Revolution* (Palgrave Macmillan, 2008); CIA, "Egypt," *World Factbook*, www.cia.gov (cited March 2009); *Egypt Recent Economic and Political Developments Yearbook* (International Business Publications, 2007); William Mark Habeeb, *Egypt* (Mason Crest Publishers, 2008); Afaf Lutfi Sayyid-Marsot and Afaf Lutfi Sayyid-Marsot, *A History of Egypt: From the Arab Conquest to the Present* (Cambridge University Press, 2007); Organisation for Economic Co-operation and Development, *Egypt. OECD Investment Policy Reviews* (OECD, 2007); Denis Joseph Sullivan and Kimberly Jones, *Egypt. Global Security Watch: A Reference Handbook* (Praeger Security International, 2008).

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Eléctricité de France

Eléctricité de France (EDF) is an energy operator involved in the generation, distribution, and transmission of electrical energy. It operates globally to provide energy and services to 38.5 million customers. EDF mainly operates power plants (hydro, thermal, nuclear, and other renewable) and distribution systems. For the fiscal year ended December 2007 the company recorded revenues of $81,702.7 million. The company controls about 84 percent of France's electricity market. Top direct competitors of EDF include E.ON, RWE, and Enel.

EDF was established in 1946 and nationalized by the French government. As a public undertaking of an industrial and commercial nature, EDF replaced more than 1,000 private companies that up until then had been responsible for generating, transmitting, and distributing electricity. By 1950, the rationing of electricity had stopped and distribution networks had been completed or rehabilitated. EDF remained a national company focusing only on the French market until 1992. In 1992, EDF created the holding company Eléctricité de France International and expanded into many global markets, gaining presence in Africa, Asia, North America, and the Middle East. Further strategic developments included the acquisition of London Electricity by EDF's United Kingdom subsidiary.

Since the creation of EDF International, EDF has increased their presence in the global energy arena. In 2003, through a French-Japanese consortium, EDF began construction of a power plant in Vietnam. In the same year, EDF was involved in the first gas pipeline constructed in Mexico, providing experience in gas transport. Simultaneously, through increased investment in research and development (R&D), EDF inaugurated a farm of eight wind generators in France. EDF continued their rapid global expansion through joint ventures, alliances, and acquisitions of local providers of electricity and energy. In 2005 they acquired 100 percent stake of the generation company Laibin Electric Power in China. EDF expanded in Europe as well, acquiring organizations in Poland, Italy, Greece, and Switzerland.

EDF demonstrates capacity for innovation, offering customers services through energy savings, renovation advice, and decentralized renewable energy generation solutions. One of the main strengths of EDF is their R&D capabilities. The group's R&D aims at developing tools and methods to improve operations and optimize the life span of facilities without compromising safety. The dedication of EDF to product and system innovation is reinforced by the strong portfolio of patented products, which consists of 375 patented inventions.

Another strength of EDF is their strong financial position. Through expansion in the global energy arena, EDF has managed to accumulate strong financial growth. There has been a steady increased in profits since the establishment of EDF International. The company's margins are also higher than its main competitors' in 2007. The operating profit margin of EDF was 17 percent as opposed to 15.2 percent of E.ON, 13.7 percent of RWE, and 16 percent of Enel. This increase in margin reflects the efficient cost structure of the company. It also shows the success of EDF's management in controlling costs despite fierce competition and pricing pressures in the energy sector. This cost control is also associated with the heavy investment in R&D that lies at the heart of EDF's organizational culture.

Moreover, EDF is a vertically integrated company with a diversified presence. This diversity of businesses offers a competitive advantage for EDF as it provides cross-selling opportunities to the company and enables it to spread its revenue base.

However, EDF has experienced problems in recent years. The company was charged with involvement in market manipulation in 2007. The European Commission charged that its long-term supply contracts with industrial users have blocked other electricity providers from offering their services. EDF has also been criticized about the condition of their hydroelectric dams. In 2006, 450 dams showed signs of decay and posed a risk to the environment. EDF announced that they will invest $685 million in improving the conditions of the hydroelectric dams.

Overall, EDF has shown a steady increase in their profits, continuous improvement of their operations, and efficient management of their dynamic capabilities. EDF has managed to establish themselves as key players in the global energy industry through extensive organic growth as well as strategic acquisitions and alliances.

See Also: Enel; E.ON; France.

Bibliography. Business Insights and Samantha Massey, *Green Energy Strategies in European Utilities Renewable Growth, Green Tariffs and R&D in New Technologies* (Business Insights, 2007); EDF Group, www.edf.com (cited March 2009); B. Keerthi, "EDF: The French Electricity Giant's Privatisation Woes," ICFAI Business School Case Study Number 205-088-1 (2005); V. Strauss Khan and D. Traca, "Deregulating Electricity Markets: The French Case," INSEAD Case Study Number 204-068-1 (2004); "Special Report: A Very Big French Turn-Off—Eléctricité de France," *Economist* (v.372/8382, July 3, 2004).

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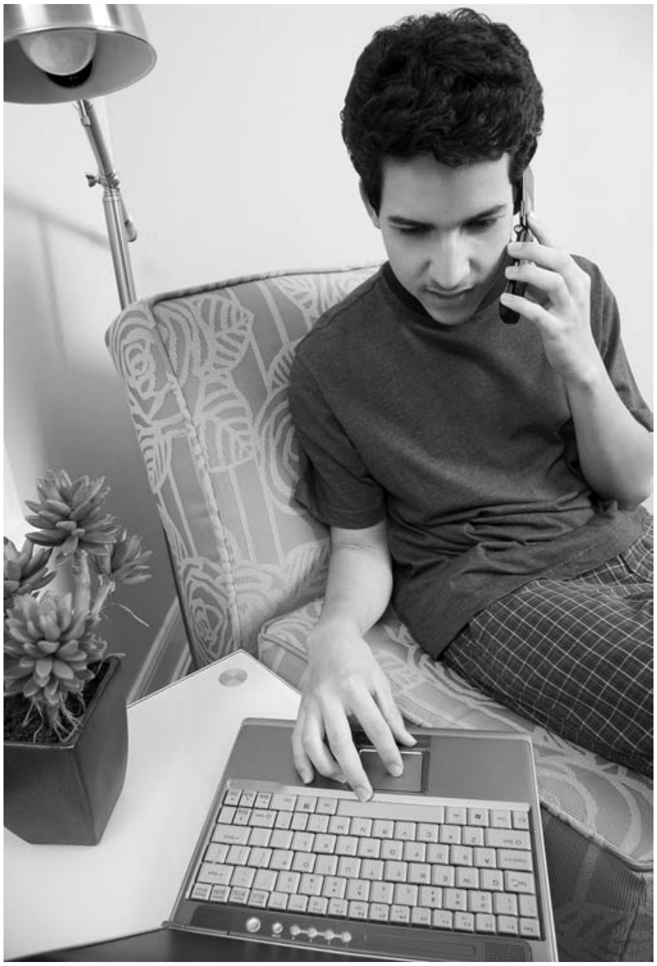
Electronic Commerce

Electronic commerce, or ecommerce (sometimes conducted by online "etailers"), is the selling of products and services online and through other electronic services. Since the 1990s, it has been a growing sector of the American economy, with significant impact both on the economy in general and on specific industries. It is especially associated with online stores located on the World Wide Web, which for many people is metonymous with the internet itself.

The earliest electronic commerce was enabled by the development of electronic funds transfer—the shifting of money electronically from one account to another, whether in the form of online banking, direct deposit and debit, or the use of credit and debit cards at ATMs and points of sale. In that sense, the first ecommerce consumers were aware of was the use of electronic systems to facilitate credit card purchases, in the 1970s and early 1980s. ATMs and telephone banking spread throughout the 1980s, allowing more and more access to one's money without needing to go to the bank; by the end of the decade, debit cards were in use at many supermarkets and gas stations, and through the 1990s debit cards became more universally useful as Visa and MasterCard branding was attached to them and regional interbank networks such as MAC and Pulse adopted mutual agreements.

Visa- and MasterCard-branded debit cards soon assisted online ecommerce as well, by enabling online purchases without the use of a credit card and without the delays or security concerns of an electronic checking balance transfer. Early online marketplaces were bulletin board system (BBS) based, predating the arrival of internet access in most homes. The Boston Computer Exchange—BCE or BoCoEx—was the first of these, enabling the buying and selling of used computers and computer parts in 1983, arriving at the same time as the IBM XT (the successor to IBM's original PC).

A precursor to eBay, BCE allowed home users to browse inventories uploaded by sellers; but in these early marketplaces, only the shopping was done online, and purchases were conducted over the telephone. BCE realized an early side benefit to running its marketplace, issuing each week the BoCoEx Index, listing the high, low, and closing prices for the most popular items in its marketplace. The Index quickly became the "blue book" for used computers, used in asset valuation and court cases, and was published by the major industry magazines. Within a few years, BCE was licensing its software and technology to computer exchanges in other cities—and in Chile and the Soviet Union.



As home internet access spread, online shopping grew rapidly, becoming a $200 billion business in the United States by 2008.

1994 was the big year for home internet. Though available through dial-up internet service providers for years in many cities, the popularity of the internet was slim compared to online services like America Online and Prodigy—in no small part because those services offered graphics and a single program interface, while internet access was spread out among multiple protocols like telnet, email, and FTP, with limited or no graphics. But in 1994, Netscape's browser for the World Wide Web was introduced; through the use of hypertext, the Web (as proposed by Tim Berners-Lee at CERN) unified multimedia content in an experience much like using America Online, with far more content. Commerce arrived quickly: Pizza Hut instituted online ordering in some markets, online banking began, and online pornography and flower delivery were introduced within months of each other. Netscape soon upgraded its browser to provide encrypted communications, making credit card transactions more secure. The following year, Amazon and eBay—still the two giants of ecommerce—launched.

The dotcom boom shortly followed, even before DSL and cable internet access made highspeed home internet access commonplace. Companies like Amazon, eBay, PayPal, Google, Yahoo, and YouTube became household names, introduced by and associated with a technology adopted as fast as radio and television had been. The bubble burst in 2000, in part because of exuberant overspeculation, venture capitalists who didn't understand the marketplace well enough because it was too new to be known, and too many big ideas that didn't clearly lead to profit; but the internet quickly showed that it would become more and more integrated into everyday life rather than fading like a fad, and ecommerce was no less integral a part of the economy when the boom died off. In 2003, Amazon posted its first profits. By 2008, American ecommerce accounted for over $200 billion in sales.

Newer, robust protocols and systems have been developed to process online transactions, for the protection of privacy and financial data, in an environment of increasing concerns over identity theft and other fraud. Whole industries have emerged around or developed in response to ecommerce. Even more than catalogue mail order, ecommerce has enabled the success of niche direct-to-consumer companies, from barbecue shacks selling their sauce online to independent record labels making their albums available for purchase. The mp3 has become the common commercial unit of music, and billions of dollars of ringtones are purchased each year, directly from cellular phones. Amazon has introduced its Kindle, an ebook reader revolutionary not in its design—competing models are similar—but in its integration with Amazon's inventory and the ability to purchase ebooks wirelessly without need of a home internet connection.

Companies like Netflix, which rents a flexible number of DVDs a month for a flat fee, have successfully competed with their "brick and mortar" counterparts. Blockbuster soon found it necessary to offer a DVD-by-mail subscription service as well, while Movie Gallery, the second-largest American movie rental chain, filed for bankruptcy in 2007.

See Also: Consumer Behavior; Customer Relationship Management; Electronic Data Interchange; Emerging Markets.

Bibliography. Abijit Chaudhury and Jean-Pierre Kuilboer, *e-Business and e-Commerce Infrastructure* (McGraw-Hill, 2002); Henry R. Cheeseman, *Contemporary Business and Online Commerce Law: Legal, Internet, Ethical, and Global Environments* (Pearson Prentice Hall, 2009); Jonathan D. Frieden and Sean Patrick Roche, "E-Commerce: Legal Issues of the Online Retailer in Virginia," *Richmond Journal of Law & Technology* (v.13/2, 2006); Mark Graham, "Warped Geographies of Development: The Internet and Theories of Economic Development," *Geography Compass* (v.2/3, 2008); Mehdi Khosrowpour, *Consumer Behavior, Organizational Development and Electronic Commerce: Emerging Issues for Advancing Modern Socioeconomies* (Information Science Reference, 2009); In Lee, *Emergent Strategies for E-Business Processes, Services and Implications: Advancing Corporate Frameworks* (Information Science Reference, 2009); Roger Miller, *The Legal and E-Commerce Environment Today* (Thomson Learning, 2002); Daniel Nissanoff, *FutureShop: How the New Auction Culture Will Revolutionize the Way We Buy, Sell and Get the Things We Really Want* (Penguin, 2006); Kamel Rouibah, Omar Khalil, and Aboul Ella Hassanien, *Emerging Markets and E-Commerce in Developing Economies* (Information Science Reference, 2009); Gary P. Schneider, *Electronic Commerce* (Course Technology, 2006); Pat Seybold, *Customers.com* (Crown Business Books, 2001); Efraim Turban, David R. King, and Judy Lang, *Introduction to Electronic Commerce* (Pearson Prentice Hall, 2009).

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Electronic Data Interchange

Electronic Data Interchange (EDI) refers to the linking together of channel member information systems to provide real-time responses to communication between channel members. For example, a retailer's computerized inventory management system is connected with and monitored by a wholesaler's computerized inventory management system. Ordering of merchandise can then take place automatically when the retailer's inventory level of that wholesaler's products reaches certain minimum re-order points. Thus, the retailer's computer orders the products from the wholesaler's computers without human intervention or paperwork of any kind. The more sophisticated EDI systems can also forecast demand based on sales history. In the case of the wholesaler-retailer relationship the wholesaler's computers will initiate the order for the retailer by predicting what quantity of the product the retailer will need during a specific accounting period. EDI systems can also be linked to production scheduling, allowing production to be determined by sales patterns in the different retail outlets. That is, merchandise that is being sold on a given day in retail outlets around the country will provide the necessary information to guide a manufacturer's production process taking place on the same day.

The emergence of the internet has enhanced the potential of EDI because the internet enables firms to be connected and communicate in a similar manner to EDI but with less investment in computer hardware and software. As such, firms linked via the internet will be able to enjoy the benefits of EDI at a significantly reduced price.

EDI technology enhances distribution efficiency, resulting in substantial benefits to all channel members, including the final customer and consumer. The manufacturer benefits through more accurate production scheduling, while wholesalers and retailers benefit via savings on order processing and inventory carrying costs. The final customer benefits from the reduced distribution costs made possible by EDI and by the higher probability of finding the items they are seeking on retailers' shelves. The obvious primary barrier of EDI is that all channel members must share information openly for the EDI system to work. For those channel members who feel they need control of what they believe to be sensitive or confidential information about the sales of their products, EDI does not have a great deal of appeal.

There are also other barriers to adopting EDI. One of the most significant of these is the necessary change in business processes. Existing business processes built around slow paper handling may not be suited for EDI and would require substantial changes to accommodate automated processing of business documents. For example, a business may receive the bulk of their goods by one- or two-day shipping and all of their invoices by mail. The existing process may, therefore, assume that goods are typically received before the invoice. With EDI, the invoice will typically be sent when the goods ship and will therefore require a process that handles large numbers of invoices whose corresponding goods have not yet been received.

Another significant barrier is the cost in time and money in the initial set-up. The preliminary expenses and time that arise from implementation, customization, and training can be costly and therefore may discourage some businesses from adopting EDI. The key is to determine what method of integration is right for the particular company, which will in turn determine the cost of implementing EDI. For a business that only receives a small number of orders on a per annum basis from a client, fully integrated EDI may not make economic sense. In such a case, a business may use outsourced EDI solutions provided by EDI "service bureaus." For other businesses that have relatively large volumes of orders from a particular client, the implementation of an integrated EDI solution may be necessary as increases in trading volumes brought on by EDI force them to re-implement their order processing business processes.

The key disadvantage to successfully implementing a fully integrated EDI system is the perception of the nature and format of EDI. Many view EDI from the technical perspective that EDI is in a data format. It would seem to be more beneficial and accurate to adopt the perspective that EDI is a system for exchanging business documents with external entities, and integrating the relevant data from those documents into the company's internal systems and records. Successful implementation of EDI takes into account the effect that externally generated information will have on their internal systems and validates and verifies the information and data received. For example, enabling a wholesaler to reorder product for a retailer without appropriate checks and balances would be a recipe for disaster leading to overstocking in certain product lines and possibly stock outs in others. Businesses new to the implementation of EDI should take pains to avoid such pitfalls.

Increased efficiency and cost savings drive the adoption of EDI for most trading partners. EDI has revolutionized traditional ordering practices and has dramatically reduced the occurrence of stock outs among retailers and wholesalers. Instead of having to write an order, phone it in and wait for confirmation, a channel member simply inputs the order on a computer terminal and it is electronically transferred to the manufacturer's computer system almost instantaneously. Once the order is received by the manufacturer, products are picked from inventory, delivery documents are prepared, a carrier is notified to pick up the order and a proforma invoice is issued. Most systems also make adjustments to invoices, confirm orders, provide shipping advice, and present information on new products, price changes and promotional programs.

In the most sophisticated EDI systems, the wholesaler's computer does not wait for orders to come in from retailers but takes the initiative by interrogating the retailer's computer to check inventory levels. If the retailer is low on any items, the wholesaler's computer automatically places an order for the retailer.

See Also: Distribution; Electronic Commerce; Retail Sector; Supply Chain Management; Wholesale Sector.

Bibliography. B. Rosenbloom, *Marketing Channels: A Management View*, 7th ed. (Thomson-South Western, 2004).

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El Salvador

El Salvador is the smallest country in Central America, bordering the north Pacific Ocean between Guatemala and Honduras. The total land area is approximately 20,720 sq. km (about the size of the U.S. state of Massachusetts). According to estimates in June 2008, over 7 million people inhabit the country; the population growth rate is 1.68 percent and the median age is 22.2 years. The country achieved independence from Spain in 1821 and from the Central American Federation in 1839. A civil war between 1979 and 1992 ended with the government and the leftist rebels signing a treaty that provided for political and military reforms.

Almost 90 percent of the population belong to the mestizo ethnic group, 9 percent are white, and the remaining 1 percent are classified as Amerindians. Approximately 83 percent are Roman Catholic, but there is no official religion. Spanish is the official language, although some Amerindians speak Nahua and other native languages. Culturally, according to Geert Hofstede's analysis, El Salvador scores very high on "uncertainty avoidance," indicating a high concern for rules, regulations, controls, and issues of career security and risk averseness. On the other hand, they rank fairly low on "individualism," indicating a propensity toward collectivist tendencies, i.e., manifesting in close long-term commitments to family, extended family, or extended relationships, and everyone taking responsibilities for fellow members of their group.

El Salvador has the third-largest economy in Central America, yet growth has been modest in recent years. The country's gross domestic product (GDP) was $41.65 billion in 2007 and was growing at the rate of 4.7 percent a year. It exported $3.85 billion worth of commodities to the United States (50 percent), Guatemala (14 percent), Honduras (9 percent), and Nicaragua (5 percent), primarily in the form of offshore assembly, coffee, sugar, shrimp, textiles, chemicals, and electricity. The commodities imported were valued at approximately $8.2 billion (2007) in the form of raw materials, consumer and capital goods, fuels, foodstuffs, petroleum, and electricity, primarily from the United States (32 percent), Guatemala (9 percent), Mexico (7 percent), Germany (6 percent), and China (5 percent).

Approximately 2.5 million legal and illegal Salvadorans, equivalent to more than a third of the population of El Salvador, live in the United States and remit an estimated $2.5 billion annually, or 17.1 percent of the GDP, back to their family members. The remittances have grown at the rate of over 6 percent per year over the last decade and currently almost one in four households receives money from relatives in the United States, the most of any Latin American country. Three-quarters of the money goes to paying for household expenditures—with a 13 percent sales tax, the remittances in many ways subsidize the government budget.

The country lost control over its monetary policy with the adoption of the U.S. dollar as the currency in 2001, and is now focused on maintaining a disciplined fiscal policy. It was the first to ratify the Central America–Dominican Republic Free Trade Agreement (CAFTA-DR) in 2006, thus strengthening an already positive export trend. The current focus has been on economic diversification in the form of promoting textile production, international port services, and tourism through tax incentives. Another trend is the growth of privatization, including industries such as telecom, electricity, distribution, banking, and pension funds. In 2007, the government signed a five-year $461 million agreement with the Millennium Challenge Corporation to alleviate poverty and stimulate economic growth in the country's less-developed areas, particularly in the northern region, through investments in education, public services, enterprise development, and transportation infrastructure.

See Also: Central America; Central American Common Market; Company Profiles: Central America and Caribbean; Costa Rica; Dollarization; Guatemala; Hofstede's Five Dimensions of Culture; Latin America.

Bibliography. Paul Almeida, *Waves of Protest: Popular Struggle in El Salvador: 1925–2005* (University of Minnesota Press, 2008); Esteban Brenes, Vince Ruddy, and Rene Castro, "Free Zones in El Salvador," *Journal of Business Research* (v.38, 1997); CIA, "El Salvador," *The World Factbook,* www.cia.gov (cited March 2009); Andres Maldonado and Alejandra Robledo, "Sending Money Back Home," *The McKinsey Quarterly* (November 2002); Igor Oleynik and Natasha Alexander, *El Salvador: Country Study Guide* (Minnesota Press, 2008); Angelika Rettberg, "The Private Sector and Peace in El Salvador, Guatemala, and Colombia," *Journal of Latin American Studies* (v.39, 2007); Nina Rohe, "Update: The Central American Free Trade Agreement—A Survey and Comparison to the Treaty of the European Community," *Law and Business Review of the Americas* (v.12, 2006); Helen Rupp, *Agricultural Trade Liberalization and Gender: A Case Study on Small Farmers in El Salvador Facing CAFTA* (Verlag Dr. Müller, 2008); Carol M. Sanchez, "Motives for Corporate Philanthropy in El Salvador: Altruism and Political Legitimacy," *Journal of Business Ethics* (v.27, 2000); Christopher M. White, *The History of El Salvador* (Greenwood Press, 2008).

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Embargoes

A nation or group of nations can make trade with a particular country or countries difficult or impossible. The main types of trade restrictions are tariffs, quotas, embargoes, licensing requirements, standards, and subsidies. A trade embargo is a ban on trade with another country (called target country) or group of countries. This restriction can be on exports and/or imports, and it can be a total ban on trade or be limited to specific products. An embargo can restrict exports of certain products to the target country (i.e., a ban on export of defense articles or services, as in U.S. economic sanctions against China imposed as a U.S. response to the Chinese government's crackdown against a fledgling democracy movement in the spring of 1989).

Usually, embargoes are declared against a specific country to isolate it, pressure its government, and cause it to reverse a specific policy. Embargoes, and other economic sanctions, are widely seen as a less violent alternative to war and as a tool for coercive foreign policy. U.S. president Woodrow Wilson called sanctions a "peaceful, silent, and deadly remedy" that no nation can resist. Embargoes are a tool of economic warfare—the use of economic means against a country in order to weaken its economy and thereby reduce its political and military power.

Embargoes can take shape as either unilateral or multilateral. In the first case, sanctions are imposed by only one country against a target country. In the second case, sanctions are imposed by more than one country. The United States is the country that has most frequently applied unilateral economic sanctions after World War II. Well-known examples include those meted out to punish Cuba (1962), the Iraqi dictatorship, Chinese antidemocratic actions, and the Yugoslavian government in the 1990s. In a parallel way, several measures imposed by the United Nations (UN) Security Council have taken place in recent years. The UN Charter grants the Security Council powers to decide the sanctions that have to be taken in order to maintain or restore international peace and security. These powers are made in the form of Security Council Resolutions under Chapter VII (*Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression*) of the UN Charter. The EU also imposes embargoes consistent with its Common Foreign and Security Policy objectives.

The type of UN sanction most widely used is the arms embargo, such as those imposed on Angola, Ethiopia, Iraq, Liberia, Rwanda, Sierra Leone, Somalia, Côte d'Ivoire, and Sudan. There have also been commodity embargoes, for example, on diamond exports from Angola, Sierra Leone, Liberia, and Côte d'Ivoire; travel bans and asset freezes on individuals in Angola, Sierra Leone, Liberia, Côte d'Ivoire, and Sudan; and a ban on the sale of petroleum products to the Angolan rebel movement UNITA.

Embargoes and Negative-Sum Games

In an increasingly integrated global economy, it is important to have a clear understanding of the costs and benefits of embargoes. The focus of the literature on economic sanctions has been twofold: their effectiveness and their economic impacts on the sender (the sanction-imposing) country, the target country, and the neighbors.

As to the question of effectiveness, most studies conclude that economic sanctions have limited utility for changing the behavior of governments in target countries. Moreover, for these countries, the effects of banning economic exchanges can cause isolation, reduction in trade and investment flows, and deterioration in their overall economic welfare.

As to economic impacts, several studies have focused on the strategic interaction between targets and senders of sanctions, and on quantifying the costs to both parties. The main findings suggest a relatively high cost of economic sanctions to the economies of both parties while sanctions are in place. The evidence that comprehensive sanctions affect bilateral trade flows between the sender and the target countries is strong. Allegedly, sanctions also hurt third countries, neighbors or major trading partners. Research suggests that UN sanctions cut off trading routes, increase transportation and other transaction costs, and disrupt established trading ties with clients and suppliers. This reduces trade flows between land neighbors and the rest of the world.

As embargoes can also lead to serious economic recession, macroeconomic effects in the target country cannot be underestimated. Restrictions on imports and exports reduce overall gross national product and per capita income, employment falls, the decline in state revenue leads to reduced capital investment, and to lower levels and quality of social services. On August 6, 1990, the Security Council imposed economic sanctions on Iraq. Seven years later, the UN Committee on Economic, Social and Cultural Rights noted that the living standard of a large section of the Iraqi population had been reduced to subsistence level since the imposition of the embargo. Per capita income was estimated to have declined by about three-quarters from 1990–93, increasing social inequality.

As we can see, economic sanctions often hurt those people in the target country who are least responsible for the policies that prompted the imposition of sanctions, and who are also least likely to be able to change these policies. The impact of trade sanctions on the citizens of some countries raises the question of the relationship between civil and political, and social and economic rights. This is why, in recent years, the international community has become increasingly concerned about the humanitarian impact of embargoes and other economic sanctions. For example, in the case of worldwide sanctions against South Africa (1977–94), critics argued that the sanctions harmed the group the sanctions were supposed to help. Several researchers have also pointed out the evidence of the impact of sanctions against Cuba, Haiti, and Iraq, specifically on health and health services. Since 1991, international agencies have documented Iraq's explosion in child mortality rates, waterborne diseases from untreated water supplies, and malnutrition in large sectors of the population.

To mitigate the humanitarian implications, three important international initiatives—the Interlaken, the Bonn-Berlin, and the Stockholm Processes—were launched between 1998 and 2002, with the objective of making UN sanctions more effective by targeting them more precisely on political objectives. The efficacy of embargoes as an instrument of foreign policy is in great doubt. Now the goal is to influence decision makers in the target country while avoiding negative humanitarian effects.

See Also: Blocked Funds; Fair Trade; Free Trade; Iran; South Africa; Terrorism; Trade Sanctions; Trade War.

Bibliography. R. Garfield, *The Impact of Economic Sanctions on Health and Well-being* (Overseas Development Institute, November, 1999); G. C. Hufbauer, A. E. Kimberly, C. Tess, and E. Winston, *U.S. Economic Sanctions: Their Impact on Trade, Jobs and Wages*, Working papers (Institute for International Economics, 1997); G. C. Hufbauer, J. J. Schott, and K. A. Elliott, *Economic Sanctions Reconsidered,* 2 vols., 2nd ed. (Institute for International Economics, 1990); Damien Fruchart and Daniel Strandow, *United Nations Arms Embargoes: Their Impact on Arms Flows and Target Behaviour* (SIPRI, 2007); D. E., Rennack, and R. D. Shuey, "Economic Sanctions to Achieve U.S. Foreign Policy Goals: Discussion and Guide to Current Law," *CRS Report 97-949F* (November 1, 1999); United Nations Office for the Coordination of Humanitarian Affairs, Humanitarian Information Centres and Partners, www.humanitarianinfo.org (cited March 2009); United Nations Security Council, *Resolutions 1946 to Date,* www.un.org (cited July 2008); J. Yang, H. Askari, J. Forrer, and H. Teegan, "U.S. Economic Sanctions: An Empirical Study," *International Trade Journal* (v.18/1, 2004).

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Emerging Economies

Emerging economies are generally known as the largest, wealthiest, and fastest-growing of the developing countries. Emerging economies are typically economies in transition, moving from a closed to an open economy, undergoing far-reaching economic reforms as they seek to integrate into the world economy. This transition, however, can be tenuous as political or economic turmoil threatens to impede movement toward open markets. These economies may grow rapidly, but they can make for risky economic investments because of political instability, inequality, social unrest, and the potential for financial crises. Often, these countries present sharp contrasts of cutting-edge technology and relative prosperity coexisting beside stark poverty and poor infrastructure.

Their growth is due primarily to the use of new energy, telecommunications, and information technologies as well as rapid industrialization. China, for example, is already moving away from low-skilled manufacturing as it ships those jobs offshore to Vietnam, Bangladesh, and the Philippines. It is expected that by 2020, the five biggest emerging markets' share of world output will be 16 percent, up from 7.8 percent in 1992. They will also become more significant consumers than industrialized countries due to their fast-growing populations and rise in the countries' middle-class. While industrialized countries will add about 100 million more middle-income consumers by 2020, the developing world will add over 900 million, and China alone will add 500 million.

In the past five years, China, India, and Russia, together with other fast-growing economies mostly in Asia and Latin America, have averaged almost 7 percent growth compared with the industrialized countries' 2.3 percent. It is expected that by the middle of the new century, Russia, India, China, and Brazil together could be larger than the combined economies of the United States, Japan, the United Kingdom, Germany, France, and Italy. China alone could be the world's second-largest economy by the end of the second decade of 2000 and could surpass the United States by 2050, with India predicted to follow.

In the 1980s, the emerging economies were mainly the "Asian Tigers" and some Latin American countries. In recent years, the largest developing countries of Brazil, Russia, India, Mexico, and China, known as BRIC or BRIMC, are viewed as the primary emerging economies. Other countries considered emerging economies include Mexico, Argentina, South Africa, Poland, Turkey, Indonesia, Chile, and South Korea. Due to their rapid growth, the United Arab Emirates, Chile, Malaysia, Vietnam, Bangladesh, and the Philippines form the next wave of emerging markets.

Emerging economies are expected to change the face of global economics and politics, as they gain increased stature in the world political arena and as the world increasingly relies on them to drive future growth. Their growth has resulted in calls for the largest of them to conform to greenhouse gas emissions limits, something they were exempt from doing in the first phase of the Kyoto Protocol (2008–12) in order to give them a chance to catch up with the economic development of the industrialized world.

Competition from the emerging economies will force developed countries to find areas of comparative advantage to ensure their own economic growth, whether it be specialized technologies of high value or commodities, requiring the retraining of their workforce to meet these specializations, something the developed countries do well. Whether the potential of emerging economies can be realized depends in large part on their ability to invest in their growing populations, government stability, and commitment to open markets, none of which are certain.

See Also: Asian Tigers; BRICs; Emerging Markets; Kyoto Protocol; Transition Economies.

Bibliography. John Hawksworth, *The World in 2050: How Big Will the Major Emerging Market Economies Get and How Can the OECD Compete?* (PricewaterhouseCoopers LLP, 2006); Chuan Li, "What Are Emerging Markets?" The University of Iowa Center for Finance and International Development, www.uiowa.edu/ifdebook (cited March 2009); D. L. Wince-Smith, "Emerging Economies Coming on Strong," *Issues in Science & Technology* (v.23/3, 2007).

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Emerging Markets

Emerging market is a loose term, one often used by people who are not entirely comfortable with it but have not found a useful substitute. What substitutes do exist tend to be highly specific and have criticisms of their own, like BRICs or Asian Tigers (or the various other Tigers). The term was originally coined by Antoine van Agtmael in 1981, as a shift away from the *third world* tag, a replacement term that emphasized forward motion. In general, an emerging market is one transitioning from a developing nation to a developed nation. Obviously this is problematic since every "developing" country is, by implication of the term, transitioning, and for that reason, the *emerging* term is sometimes used to imply a liminal stage at the end of that transition, a position on the cusp just before becoming "developed." Emerging markets are sometimes considered to be developing more rapidly than other developing nations, too, particularly since the *developing* label is sometimes attached to countries engaged in no obvious motion toward the received standard of developedness.

Emerging markets are not necessarily bound by common interest, and may in some cases be competitors, or perceive each other as such. There is no official list, or criteria, of emerging markets, and although there are indices that track groups of emerging markets, those indices should not be considered exclusive.

Emerging markets do not always consider themselves emerging. Russian economists and politicians, for instance, have taken offense at Russia's economy being called "emerging," even in light of its recent financial troubles.

Emerging Market Lists

The FTSE maintains two lists of emerging markets. The Advanced Emerging Markets have higher income and more developed infrastructure than the Secondary Emerging Markets. The Advanced Emerging Markets are Brazil, Hungary, Mexico, Poland, South Africa, and Taiwan. While this is clearly a disparate group of countries, with little in common, what they share is some abundance of natural resources (especially Brazil and Mexico) or extensive political and economic history with more developed allies, which gives them an edge, at least a perceived one, over the secondary markets. The Secondary Emerging Markets include Argentina, Chile, China, Colombia, Egypt, India, Indonesia, Malaysia, Morocco, Pakistan, Peru, the Philippines, Russia, Thailand, and Turkey.

The FTSE further describes Frontier Markets, which are sometimes called "pre-emerging markets." A tier down from the secondary markets, Frontier Markets are those developing economies that for one reason or another are considered to have a similar risk and return profile as that of the emerging markets. While the infrastructure and economic environment are not as developed as in developed nations nor, generally, in the emerging markets, Frontier Markets are marked by their general economic and political stability relative to other groups of developing nations. The FTSE Frontier Market list includes Albania, Bahrain, Bangladesh, Bosnia and Herzegovina, Botswana, Bulgaria, Croatia, Cyprus, Estonia, the Ivory Coast, Jordan, Kenya, Lithuania, Macedonia, Mauritania, Nigeria, Oman, Qatar, Romania, Serbia, Slovakia, Slovenia, Sri Lanka, Tunisia, and Vietnam.

Financial services and rating company Standard and Poor's (S&P's) coined the *Frontier Market* term in 1996, and launched two Frontier Market indices in 2007. The Select Frontier Index tracks 30 companies from 11 countries on the list; the Extended Frontier Index tracks 150 companies from all 27 countries on the list. The S&P's Frontier Market list includes Bahrain, Bangladesh, Bulgaria, Cambodia, Croatia, Cyprus, Estonia, the Ivory Coast, Jordan, Kazakhstan, Kenya, Kuwait, Lebanon, Lithuania, Nigeria, Oman, Pakistan, Qatar, Romania, Slovenia, Sri Lanka, Tunisia, the Ukraine, the United Arab Emirates, and Vietnam.

Since S&P's launch of the Frontier Market indices, Deutsche Bank and Morgan Stanley have adopted their own such indices using largely the same list. Morgan Stanley also maintains an Emerging Market list: Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Hungary, India, Indonesia, Iran, Israel, Jordan, Malaysia, Mexico, Morocco, Pakistan, Peru, the Philippines, Poland, Russia, South Africa, South Korea, Taiwan, Thailand, Tunisia, Turkey, and Vietnam. *The Economist* maintains a list virtually identical to Morgan Stanley's, adding Hong Kong and two countries Morgan Stanley considers developed rather than emerging: Singapore and Saudi Arabia. (Many would argue that South Korea is a developed nation, and its inclusion in so many Emerging Markets lists is one reason the term is falling out of favor.)

The Emerging Economy Report maintained by the Center for Knowledge Societies (a consulting firm in India) defines emerging markets as those that "are experiencing rapid Informationalization under conditions of limited or partial Industrialization." Their list emphasizes markets that lagged behind the developed world throughout a significant part of the 20th century, but which are able to take advantage of 21st-century technological opportunities. The Center for Knowledge Societies list includes Brazil, China, Egypt, India, Indonesia, Kenya, and South Africa.

Emerging Market Debt

External debt incurred by the governments of Emerging Market countries is called Emerging Market Debt (EMD) and is a potential source of investment, such as in the funds promoted by van Agtmael when he coined the *Emerging Markets* term. Specifically, EMD refers to the bonds issued by such governments, or any securities derived from other debts of those governments. Such bonds are usually low rated: bonds are rated by groups like S&P from (in increasing order of quality) D (debts that are in default), CC, CCC, B, BB, BBB, A, AA, AAA, with +s and –s for further distinction. Anything below BBB– is considered "below investment grade,"

An agricultural research program staffer working on methods to improve crop production in Mexico in 2004. Mexico is considered an advanced emerging market because of its relatively developed infrastructure and abundance of natural resources.

sometimes called "speculative grade" since such bonds are traditionally the province of more aggressive investors. Because of the high risk indicated by low ratings, bonds with a speculative grade rating at the time of issuing are popularly known as junk bonds. Most EMD bonds are rated as junk bonds; some may reach BBB, or in rare cases A. As with other bonds, the ratings of EMD bonds fluctuate after issuance.

EMD bonds have become more common since 1989, when in the wake of widespread Latin American debt crises, U.S. Secretary of the Treasury Nicholas Brady proposed a plan to convert bonds issued by friendly developing nations into dollar-denominated bonds, i.e. bonds redeemable in American dollars instead of the currencies of these fragile economies. Commercial banks holding debts from developing countries were allowed to exchange those debts for such bonds. In the process, the nominal outstanding debt obligation could be reduced, in exchange for the original creditor being protected from exposure to risk. The Treasury Department helped to oversee this process, which essentially renegotiated debts between debtor governments and creditor banks, ostensibly to the benefit of both. Restructuring was highly flexible, and generally involved collateralizing the restructured principal with special 30-year dollar-denominated bonds issued by Treasury for this purpose. These so-called Brady bonds were more highly-rated than most EMD bonds are today, with their interest payments sometimes guaranteed by high-rated securities held by the Federal Reserve.

Types of Brady bonds included discount bonds, which were guaranteed and issued with market-rate coupons, but which had been discounted from the original value of the debt; this was especially common as many commercial banks wanted out of investment in developing/emerging markets altogether, and were willing to reduce the amount of the original debt out of the belief that if they did not take advantage of the opportunities of the Brady plan, they might never recoup that debt at all. Par bonds were issued at the original value of the loan, but with a below-market-rate coupon. There were also front-loaded interest-reduction and debt-conversion bonds.

The original Brady bonds were issued to collateralize debt obligations from the governments of Argentina, Brazil, Bulgaria, Costa Rica, the Dominican

Republic, Ecuador, Mexico, Morocco, Nigeria, the Philippines, Poland, and Uruguay. Though the program ended in the 1990s after dealing with the fallout of those initial Latin American crises, the creation of the Brady bonds standardized and facilitated the secondary market for EMD bonds. Notably, several of these emerging markets have since paid off the debts the Brady bonds represented. Mexico was the first to do so, in 2003; Brazil, the Philippines, Colombia, and Venezuela have all done likewise (the latter two having joined the Brady program later in the process). Many EMD bonds are available as part of mutual funds.

Newly Industrialized Countries

There is a fair bit of overlap, conceptually and geographically, between "emerging" or "frontier" markets, and the classification of "newly industrialized countries." Both share a liminal, or threshold, quality: they describe something going on right now more than something that has been achieved. Like emerging markets, newly industrialized countries have pulled ahead of other developing nations. Specifically, they have done so because of their advances in industrialization, which generally leads to rapid economic growth, an improvement in the balance of trade, and a significant increase in exports and export incomes. Newly industrialized countries do not always enjoy the political and social stability necessary to be considered emerging markets, however: the rapid industrialization can disrupt rural, agrarian societies, which in turn can lead to political uncertainty during a period of adjustment.

Generally speaking, the newly industrialized countries are considered to be Brazil, China, India, Malaysia, Mexico, the Philippines, South Africa, Thailand, and Turkey. Egypt and Indonesia are often included, and advocates of the usefulness of the BRICs designation include Russia by implication. The newly industrialized nations have such diverse histories and heritages that, like emerging markets, they should no longer be considered a homogeneous group. China and Russia, for instance, have a history of communism to contend with—still in force but modified in China's case, and in the recent past in Russia's. India and Mexico, on the other hand, have long histories of democracy and struggles with imperialist powers.

See Also: Asian Financial Crisis; Asian Tigers; Association of Southeast Asian Nations; BRICs; Capital Flight; Development Assistance; Economic Development; Emerging Economies; Foreign Direct Investment; Free Markets; FTSE; Globalization; Industrialized Countries; Less Industrialized Countries; Newly Industrialized Countries.

Bibliography. Lado Beridze, *Economics of Emerging Markets* (Nova Science, 2008); Sebastian Edwards and Márcio Gomes Pinto Garcia, *Financial Markets Volatility and Performance in Emerging Markets.* A National Bureau of Economic Research Conference Report (University of Chicago Press, 2008); *International Finance in Emerging Markets Issues, Welfare Economics Analyses and Policy Implications* (Gardners, 2008); Harinder S. Kohli, *Growth and Development in Emerging Market Economies: International Private Capital Flows, Financial Markets and Globalization* (Sage, 2008); Damian Miller, *Selling Solar: The Diffusion of Renewable Energy in Emerging Markets* (Earthscan, 2008); Kamel Rouibah, Omar Khalil, and Aboul Ella Hassanien, *Emerging Markets and E-Commerce in Developing Economies* (Information Science Reference, 2009); Karl P. Sauvant, Kristin Mendoza, and Ince Irmak, *The Rise of Transnational Corporations From Emerging Markets: Threat or Opportunity?* (Edward Elgar, 2008); Antoine W. van Agtmael, *The Emerging Markets Century: How a New Breed of World-Class Companies is Overtaking the World* (Simon & Schuster, 2008).

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Emotion

Emotion has various definitions. Some characteristics of emotions that are generally accepted are that they involve thought, appraisal, and judgments, a physical reaction, and an experience that is intentional. These characteristics indicate that emotions are both physical and cognitive. They help create meaning and action, and they are intrinsic to social order, conflict, politics, influence, etc. Emotions are affected by intellect, language, culture, and experience.

Emotions, with the exception of stress and satisfaction, were missing from the organizational context as they were perceived as incompatible with reason or rationality and were therefore viewed as a human limitation, something that needed to be controlled or eradicated. Organizations were understood as rational entities that aimed to eliminate irrational behavior of people as it was likely to interfere with the accomplishment of their goals, and emotions were perceived as synonymous with irrationality. Interest in emotion in business and emotional work has increased since the 1970s as the realization that emotion cannot be excluded from human interaction increased and the shift away from the pure rationalist perspective of organizations took place. More recently, emotions are perceived as not only compatible with reason but as something that can complement reason or even as something necessary for reasoning and decision making.

In organizational studies, *affect* is sometimes used as the umbrella term that contains emotions and moods. Emotions are of increased interest in organizations because they affect work motivation and job satisfaction. In the organizational literature, an emphasis on positive emotions such as happiness, love, joy, and enthusiasm is identified because they enable individuals to feel good and have positive consequences by creating a harmonious, strong, fair organization. In contrast, negative emotions like anxiety, fear, and hate are seen as destructive and disruptive, and therefore, based on the assumption that they can be separated from positive emotions, the prescriptions relating to them focus on their elimination. This view is questioned, however, since positive and negative emotions cannot be separated, as they inform and develop each other.

Mapping the journey of emotions in the organizational arena, first a reluctance to allow emotions in organizations developed, followed by a more recent reluctance to accept negative emotions. Other views see selected emotions as inherently part of organizations as long as they relate to aggression, confidence, and competition, which define organizational life, while other emotions that relate to weakness, submission, and caring are inherently not organizational.

In the organizational context, the effect of emotion in relation to performance, decision making, turnover, prosocial behavior, negotiation, group dynamics, and leadership has been researched with evidence that suggests that positive emotions improve performance at the individual, group, and organizational levels. Some negative emotions have been found to have positive consequences in relation to concerns about fairness, power, and negotiation. Further, current research in emotions suggests that they are not necessarily only attributed to individuals but they are also attributed to organizations.

Perceptions of the place of negative emotions in the workplace have been changing in recent years.

The interest in emotions in organizations increased with the development of emotional intelligence (EI) and emotional labor. EI is the ability to monitor and control one's own and others' emotions and to be able to use them effectively in one's thinking and action. Emotions are used and controlled to improve intelligence. EI is perceived as a competency and capability that enables people in organizations and in particular leaders to achieve outstanding levels of performance. Debates about EI, despite its popularity, concern its nature and measurement. Some argue that EI is based on abilities that help people understand and use emotional information while others argue that EI is a set of characteristics that can be applied in interpersonal settings.

Emotional regulation and emotional labor relate to how employees exhibit their emotions at work. Emotional regulation provides the link between feeling and consciousness and it is argued that all emotion is regulated, thus understanding emotion regulation as relative is more appropriate than regulated or unregulated emotion. When, however, this regulation is imposed by the organization this difficulty disappears, as the employee has to comply with emotion display rules that result in emotional labor. Emotional labor is the commercialization of emotions for organizational ends. It includes the management of emotions at work, as well as the organizational controls on emotional displays through roles, tasks, social interaction, and culture. It is labor because employees have to regulate their emotions so that they can produce appropriate emotional states in others.

See Also: Acculturation; Attitudes and Attitude Change; Communication Styles; Cultural Norms and Scripts; Culture-Specific Values; Motivation; Silent Language of Hall (Nonverbal Communication).

Bibliography. Neal M. Ashkanasy and Cary L. Cooper, *Research Companion to Emotion in Organizations* (Edward Elgar, 2008); S. G. Barsade and D. E. Gibson, "Why Does Affect Matter in Organizations?" *Academy of Management Perspectives* (2007); Alan D. Boss and Henry P. Sims, Jr., "Everyone Fails! Using Emotion Regulation and Self-Leadership for Recovery," *Journal of Managerial Psychology* (v.32/2, 2008); R. B. Briner, "The Neglect and Importance of Emotion at Work," *European Journal of Work and Organizational Psychology* (1999); "Failing Happily: How Emotions and Self-Leadership Can Lead You Back To Success," *Development and Learning in Organizations* (v.22/6, 2008); S. Fineman, ed., *Emotion in Organizations* (Sage, 2000); S. Fineman, "Getting the Measure of Emotion—and the Cautionary Tale of Emotional Intelligence," *Human Relations* (2004); D. Goleman, *Emotional Intelligence* (Bantam Books, 2006); J. J. Gross, "Emotion Regulation: Past, Present, Future," *Cognition and Emotion* (1999); R. Harre and W. G. Parrott, eds., *The Emotions: Social, Cultural and Biological Dimensions* (Sage, 1996); A. Rafaeli and M. Worline, "Individual Emotion in Work Organizations," *Social Science Information* (2001); Eugénie Angèle Samier, and Michèle Schmidt, *Emotional Dimensions of Educational and Administrative Leadership* (Routledge, 2009); Amy Carson Sauers, *Effective Customer Relationship Management: How Emotion Drives Sustainable Success* (Cambria Press, 2008).

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Employer–Employee Relations

Employer–employee relations or employment relations replaced industrial relations as the study of the relationship between employers and employees, a relationship that may be affected by government and unions. The employer–employee relations field is comprised of industrial relations and human resource management (HRM). Recently more importance is given to the legal characteristics of the employment relationship and to HRM than during the traditional industrial relations era, which emphasized collective bargaining. This is a consequence of the weakening influence of trade unions that enabled employers to redefine employment contracts and job content. Increased employment protection legislation, however, provides regulation and protection to employees, but it does so at the individual rather than the collective level. Management thinking about the relationship also changed with more emphasis on a personal relationship between employers and employees based on commitment rather than control in an increasingly competitive business context.

Despite differences in perspectives, there is agreement that the employment relationship is changing in most parts of the world. This change is the consequence of a number of factors including economic, technological, and structural developments; organizational downsizing and restructuring, the composition of the labor force which has changed from male, blue collar, and manufacturing to female, white collar, and service. Globalization also affects the employment relationship as it leads to the deregulation of labor markets to improve flexibility and facilitates convergence of employment relations systems around the world.

In addition, the employment relationship has been affected by the rise of nonstandard contracts of employment that became more prominent as organizations sought to improve flexibility and more women entered the labor force, the individualization of the workplace that led to the reduction in union membership, and the shift away from the unitarist and toward a pluralistic perspective of organizations. Traditionally the relationship was fundamentally one of conflict represented by industrial relations, but more recently issues of trust, fairness, employee voice, involvement and participation, and dignity and respect are increasingly important in the relationship with more emphasis on moral as well as economic issues and concerns.

The two main models of the employment relationship are the unitarist and pluralist. In addition to these, the egoist and the critical models also examine the employment relationship. John Budd provides an overview of the four models and explains that the unitarist perspective assumes that employers and employees have shared interests and any conflict is a consequence of inadequate management practices. This perspective emphasizes the individual and views government and trade unions as unnecessary. This is the model adopted by applied human resource management.

The pluralist perspective views employers and employees in a bargaining relationship within imperfect labor markets and with the presence of conflicts of interest in organizations. This model accepts that employees and employers may have shared or conflicting interests. A fundamental principle of this view is that labor is not a mere commodity and therefore it is entitled to voice and equity. Government and unions are important in this perspective because they assist in leveling the inequalities that exist due to market imperfections.

The egoist model subscribes to the view that freedom and individual self-interest result in optimal outcomes through the free market transactions. The employment-at-will doctrine (the right of employers to hire and fire for any reason or no reason at all and the right of the employee to accept a job and resign at will) is based on the egoist model adopted in the United States. Finally, the critical perspective sees the employment relationship as a struggle for power and control, a struggle that is not confined to this relationship but is found throughout society.

An increasingly important aspect of the employment relationship is the psychological contract, which represents the relationship between an employer and an employee and the perceptions of their duties and obligations in that relationship. The psychological contract is based on social exchange theory, and it has been used extensively to research and understand the employment relationship despite the debate about its conceptualization, because it develops the relationship beyond the employment contract and highlights the mutual expectations that exist.

Denise Rousseau's work on psychological contracts, which she defines as an individual's beliefs about the terms and conditions of a reciprocal exchange agreement, further developed the concept focusing on the individual rather than the relationship and on the more powerful mutual obligations in the relationship rather than the expectations. The psychological contract between employees and employers has changed from exchange of life-long employment for loyalty and mutual commitment to an exchange of opportunities. This development, it is argued, led to the extinction of "the organization man," the employee who would obediently discount all other interests for the benefit of the organization. Others, however, argue that the new employment relationship that relies on the base of "no long term," i.e., on free agents and not life-long employees, is a relationship that corrodes trust, loyalty, and commitment, thus having a negative impact on people's quality of life.

The focus of the employment relationship is now on individual employees rather than on the employees as a collective, a relationship that is focusing on cooperation rather than antagonism. Discussion of the new employment relationship in the literature focuses on the changes in the employment contract as well as the psychological contract. It identifies training and development, employee involvement and participation, and two-way communication as the elements that characterize the new relationship.

See Also: Commitment; Compensation; Empowerment; Motivation; Salaries and Wages; Social Pact.

Bibliography. P. Ackers and A. Wilkinson, *Understanding Work and Employment: Industrial Relations in Transition* (Oxford University Press, 2003); Tennyson C. Beckles, *Human Resource Management: Its Nature and Significance with Practical Techniques for Improving Employer/Employee Relations and Enhancing Productivity* (Tennyson Beckles, 2008); J. W. Budd, "Values, Ideologies, and Frames of Reference in Employment Relations," in *The SAGE Handbook of Industrial and Employment Relations,* N. Bacon, P. Blyton, J. Fiorito, and E. Heery, eds. (Sage, 2008); Peter Cappelli, *Employment Relationships: New Models of White-Collar Work* (Cambridge University Press, 2008); J. Coyle-Shapiro, L. M. Shore, S. Taylor, and L. E. Tetrick, eds., *The Employment Relationship: Examining Psychological and Contextual Perspectives* (Oxford University Press, 2004); Ian Cunningham, *Employment Relations in the Voluntary Sector* (Routledge, 2008); M. V. Roehling, M. A. Cavanaugh, L. M. Moynihan, and W. R. Boswell, "The Nature of the New Employment Relationship: A Content Analysis of the Practitioner and Academic Literatures," *Human Resource Man-*

agement (2000); D. M. Rousseau, *Psychological Contracts in Organizations* (Sage, 1995); R. Sennett, *The Corrosion of Character* (W. W. Norton, 1998); Rebecca Tonn, "Maximizing Human Capital," *Colorado Springs Business Journal* (April 25, 2008); Harry J. Van Buren III and Michelle Greenwood, "Enhancing Employee Voice: Are Voluntary Employer–Employee Partnerships Enough?" *Journal of Business Ethics* (v.81/1, 2008).

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Empowerment

Empowerment is the process of conferring decision-making capacity upon those who previously had been unable to decide matters for themselves or had limited ability to do so. In management, employee empowerment refers to the practice of giving employees more responsibility and autonomy in decision making. Empowerment allows decisions to be made at lower levels in the organization and is expected to improve the responsiveness of the organization, increasing productivity and employee commitment to company goals.

Tracing the historical development of the notion of empowerment across disciplines, Jean Bartunek and Gretchen Spreitzer have showed that the meanings of empowerment may be subsumed within three broad categories: sharing real power, fostering human welfare, and fostering productivity. Empowerment meaning sharing real power appeared in the 1960s and 1970s, focusing on giving power to those who have little. Empowerment as enabling and fostering human welfare emerged in the 1970s and 1980s, focusing on improving the life of people through increasing self-worth, increasing knowledge, dignity, and respect. The last meaning of empowerment, which emerged in the 1980s and 1990s, focuses primarily on empowerment as a factor in fostering productivity. This category includes participation in decision making, taking responsibility, sense of ownership, and working in teams. All these three different meanings of empowerment have contributed to the development of the notion of employee empowerment.

In management, *empowerment* is a term that may cover many different types of management initiatives and an overall common definition has not evolved. A simple definition of employee empowerment is the involvement of employees in the decision-making process regarding their work-related tasks. In this perspective empowerment can be seen as a one-dimensional phenomenon concerned with delegation of management power to subordinates. Alternatively it has been argued that empowerment is a multidimensional phenomenon, an element of broader management strategies to mobilize the multiple skills of employees in order to enhance operational and economic effectiveness. In this perspective empowerment is a management practice that is concerned with a variety of issues, for example, how leaders lead, how employees react, how employees interact with each other, and how work-related processes are structured.

Employee involvement initiatives had been proposed earlier under other labels such as job enrichment, employee participation, and profit sharing. The modern form of employee empowerment emerged in the particular business context of the late 1980s together with notions of enterprise culture giving greater room for individual initiative and new management approaches such as total quality management (TQM) and human resources management (HRM). By the late 1980s, businesses had adopted the basic idea of the need for new modes of managing in turbulent markets, constantly changing technology, and the need to satisfy even more demanding customers in terms of choice, quality, design, and service. Empowerment then became one important element in the management models introduced as an alternative to the traditional hierarchical model of management.

Socio-Structural Empowerment

Three different perspectives have been used to study and understand empowerment: the socio-structural perspective, the psychological, and the critical perspective. Socio-structural empowerment refers to organizational policies, practices, and structures that grant employees power, authority, and influence regarding their work. The focus of the socio-structural perspective is on sharing power throughout the organization. Having power is seen as having formal authority or control over organizational resources. The emphasis is on employee participation through increased delegation of responsibility. The socio-structural perspective emphasizes the importance of changing organizational policies, practices, and structures away from top-down control systems toward high-involvement practices. Specific management practices that indicate a high involvement organization include participative decision making, skill- and knowledge-related pay, open flow of information, flat organization structures, and training of employees. Each of these practices may contribute to employee empowerment.

From a socio-structural perspective, empowerment represents a moral hazard for managers, in the sense that the success or failure of employee empowerment depends on the ability of managers to reconcile the potential loss of control inherent in empowerment practices with the organizational need for goal congruence. Setting clear limits for empowerment and building trusting relationships have been found to be effective mechanisms for reducing the risk of this kind of moral hazard.

Psychological Empowerment

In contrast to the socio-structural perspective which defined empowerment in terms of delegation of authority and sharing of resources, the psychological perspective views empowerment as enabling and enhancing personal efficacy. According to the psychological perspective, empowerment is achieved when psychological states produce a perception of empowerment within the employee. Several models of empowerment have been developed to describe different dimensions of this psychological state of the employee, for example the employee's sense of meaning, competence, self-determination, and impact.

Meaning involves a fit between the needs of one's work role and one's beliefs, values, and behaviors. Competence refers to self-efficacy specific to one's work, a belief in one's capability to perform work activities with skill. Self-determination is a sense of choice in initiating and regulating one's actions. Self-determination reflects autonomy over the initiation and continuation of work behavior and processes. Impact is the degree to which one can influence strategic, administrative, or operating outcomes.

Research on the antecedents of psychological empowerment suggests that leaders have a wide variety of levers for enabling psychological empowerment of employees. Many of these antecedents could be developed within the socio-structural perspective on empowerment above. What is different in the psychological perspective is that rather than assuming that the socio-structural antecedents are an indication of empowerment, they are viewed as enabling mechanisms that can facilitate the individual experience of empowerment. For example, a system may provide employees with access to important information, but unless they realize they have value having this information and know how to use it, it will not contribute to their experiencing empowerment. The two perspectives on empowerment are then linked, but have different viewpoints on what empowerment means.

The Critical Perspective

The critical perspective questions the notion of power in empowerment, arguing that typical empowerment interventions are in fact disempowering. According to this perspective, empowerment interventions sometimes create more controls over employees through less obvious means. For example, interventions focused on empowering employees by putting them into work teams may result in extensive peer pressure that leaves employees feeling ever more controlled and disempowered.

These three perspectives on empowerment—the socio-structural, the psychological, and the critical—may be seen as complementary to one another, each providing a different lens for understanding empowerment in the workplace. The socio-structural perspective focuses on the organization. The psychological perspective focuses on the individual and their experience. And the critical perspective focuses on the political nature of empowerment and the potential for new forms of domination.

Empowerment Programs

Employee empowerment initiatives may involve a variety of management policies, for example, information sharing, upward problem solving, task autonomy, attitudinal shaping, and self-management. Information sharing between management and employees is a central element in three different areas. Downward communication from management to employees is important to raise employees' understanding of the reasons for business decisions. It is also seen as important that employees have the opportunity to express their views openly through upward communication, as well as through horizontal communication channels in teams or in work groups. Upward problem solving involves various practices that make it possible for employees to inform on or to act directly on production problems observed to stimulate continuous improvements of products or processes.

Task autonomy involves organizational restructuring toward more or less self-managing teams. The teams may have autonomy concerning most production-related issues but are normally still working within a structure determined by management. Attitudinal shaping concerns psychological aspects of empowerment and my involve training and education. A further core element in empowerment programs is a limited form of self-management in projects, teams or work groups. Empowerment programs may incorporate some or all of these dimensions.

It is generally assumed that empowerment is connected with high levels of commitment and organizational performance. From a relational perspective, empowerment involves power redistribution that is expected to produce interpersonal trust and collaboration among employees. Empowerment allows decisions to be made at lower levels in the organization, thereby improving the responsiveness of the organization. Research shows that employee empowerment can lead to better decision making as well as to higher levels of training, motivation, and productivity.

See Also: Attitudes and Attitude Change; Commitment; Employer–Employee Relations; Leadership; Motivation; Training.

Bibliography. J. M. Bartunek and G. M. Spreitzer, "The Interdisciplinary Career of a Popular Construct Used in Management: Empowerment in the Late 20th Century," *Journal of Management Inquiry* (2006); J. A. Conger and R. N. Kanungo, "The Empowerment Process: Integrating Theory and Practice," *Academy of Management Review* (1989); Wendy Fenci and Mary Ann Masarech, "Stop Spinning Your Wheels: Increase Employee Engagement at Your Company," *Workspan* (v.51/9, 2008); N. Foy, *Empowering People at Work* (Gower, 1994); N. D. Lincoln, C. Travers, P. Ackers, and A. Wilkinson, "The Meaning of Empowerment: The Interdisciplinary Etymology of a New Management Concept," *International Journal of Management Review* (2002); Deepa Narayan-Parker, *Measuring Empowerment: Cross-Disciplinary Perspectives* (World Bank, 2005); G. M. Spreitzer, "Toward Common Ground in Defining Empowerment," in *Research in Organizational Change and Development*, R. W. Woodman and W. A. Pasmore, eds. (JAI Press, 1997); K. W. Thomas and B. A. Velthouse, "Cognitive Elements of Empowerment: An 'Interpretive' Model of Intrinsic Task Motivation," *Academy of Management Review* (1990); A. Wilkinson, "Empowerment: Theory and Practice," *Personnel Review* (1998).

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Enculturation

Enculturation is the process whereby an established culture influences and teaches an individual, group, or organization to the extent that the target adopts the particular culture's values, norms, and behaviors and the target finds an accepted role within the established culture. The concept is distinct from acculturation, cultural adjustment, and cultural adaptation. The individual process of enculturation also applies to enculturation within organizations. An awareness of the processes of enculturation is important in effective intercultural training. The process of enculturation is not entirely passive or unconscious, as the cultural transmission (or transmutation) involves processes of teaching and learning that are reflective, deliberate, incidental, and functional.

The term *enculturation* was first coined by cultural anthropologist Melville Herskovits in 1948. Anthropologist Margaret Mead clearly defined enculturation in 1963 as a process distinct from socialization in that enculturation refers to the actual process of cultural learning with a specific culture whereas socialization refers to the universal developmental process of social learning. Enculturation is the process of learning a culture in all its uniqueness and particularity whereas socialization is a process common to all human societies. The process of enculturation establishes a context of boundaries and correctness that dictates what is and is not permissible within a society's framework.

The concept of enculturation is also distinct from acculturation. Acculturation is the modification of the culture of a group or individual as a result of contact with a different culture. Enculturation is the original process whereby the learner acquires a primary cultural identity within their ethnic or organizational group apart from engagement with another culture. For example, consider the case of Company "A" and Company "B" merging. In this merger, enculturation refers to the initial process whereby the employees of Company A adopt Company A's culture, whereas acculturation refers to the process whereby a Company A employee adopts some of the cultural values of Company B.

The process of enculturation includes learning about the material aspects of one's own culture such as identifying symbols, ceremonial artefacts, and cultural icons. Acquiring the nonmaterial aspects of culture includes cultural values, attitudes, beliefs, and corresponding behavior patterns. For example, a child from an individualistic culture such as the United States may learn to place greater value on making personal goal-oriented independent decisions over collective decisions, whereas a child from a collectivist culture such as Japan may learn to primarily value consensus-based group decisions rather than group-oriented collectivist decisions. This enculturation process in developing ethnic identity may be mirrored in adopting an organizational identity, where a new employee will learn to primarily value making either individual goal-oriented or group consensus–oriented decisions through supervisory feedback and performance management processes.

An understanding of enculturation is an important part of training global staff in developing intercultural skills. Intercultural training often begins with activities that make the trainees aware of their own ethnocentrism, and their enculturation into their own culture. The individual must come to realize that as they developed and acquired competence within their culture, they also acquired cognitive maps that continue to guide their behavior, whether they are living in that cultural context or not. Related to this enculturation awareness training is training to develop an understanding of how others have been enculturated into very different cultures.

In the global business context, successful organizations develop an enculturation process to orient and align the values of a new employee to the values of the organization. Communicating organizational culture may involve initiation rituals, learning stories of the organization's founding, reference to symbols, heroes, slogans, and ceremonies. Membership in the Boy Scout movement, for example, usually involves learning stories of the founding of the organization, initiation ceremonies, familiarization with symbols, and reciting the Scout promise. The processes of enculturation within an organization may include utilizing systems of employee participation that rely on systems of incremental commitment, utilization of groups for control of members, and utilization of reward systems involving recognition and approval.

Enculturation has sometimes been confused with cultural adjustment and cultural adaptation. Cultural adjustment has been defined as the social and psychological adjustment of individuals or cultural groups to the new cultural environment in which they now reside. Cultural adaptation involves a process of mutual change and accommodation between newcomer and relevant environmental factors. Cultural adjustment and adaptation, therefore, are more related to acculturation rather than an individual or group initially acquiring a cultural identity and role through enculturation.

See Also: Acculturation; Conformance/Conformity; Cultural Norms and Scripts; Culture-Specific Values; Flexibility; Training.

Bibliography. P. Davidson, A. Simon, and P. R. Woods, *Management: An Australasian Perspective,* 4th ed. (Wiley, 2008); J. R. Harrison and G. R. Carroll, "Keeping the Faith: A Model of Cultural Transmission in Formal Organizations," *Administrative Science Quarterly* (v.36, 1991); J. R. Harrison and G. R. Carroll, "The Dynamics of Cultural Influence Networks," *Computational & Mathematical Organization Theory* (v.8, 2002); M. J. Hatch, "The Dynamics of Organizational Culture," *Academy of Management Review* (v.18/4, 1993); M. J. Herskovits, *Cultural Anthropology* (Alfred A. Knopf, 1955); M. Mead, "Socialization and Enculturation," *Current Anthropology* (v.4/2, 1963); N. Shimahara, "Enculturation—A Reconsideration," *Current Anthropology* (v.11/2, 1970); Eero Vaara, Janne Tienari, and Risto Santti, "The International Match: Metaphors as Vehicles of Social Identity-Building in Cross-Border Mergers," *Human Relations* (v.56/4, 2003).

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Enel

Enel is engaged in the production, distribution, and sale of electricity and gas across Europe and North and Latin America, managing a range of hydroelectric, thermoelectric, nuclear, geothermal, wind, and photovoltaic power stations. It currently operates in 21 countries with 75,500 MW of generating capacity and serves more than 50 million power and gas customers. It is the largest power company in Italy and the second in Europe by installed capacity. It is also the second-largest Italian operator in the natural gas market, with approximately 2.5 million customers and a 10 percent market share in terms of volumes. Headquartered in Rome, Italy, in fiscal year 2007 Enel recorded revenues of 43.7 billion euros and net income of 4 billion euros. Its main global competitors are Centrica, EDP, Électricité de France, Electrabel, Eni; E.ON, Iberdrola, National Grid, RWE, Suez, and U. Fenosa.

Enel (Ente Nazionale per l'Energia Elettrica) was founded in 1962 with the nationalization of the power industry by the Italian government. The realization of the Italian transmission network and the building of new power plants was the first objective of the company, which had to face a difficult period in the 1970s with the increasing of construction costs and the Arab oil embargoes. Enel's monopoly was disassembled in 1992 when the Italian government decided to open power generation to outside producers and Enel was converted into a joint-stock company. The actual shareholder's structure is represented by the Economy and Finance Ministry (21.1 percent), the Cassa Depositi e Prestiti (10.1 percent), retail investors (34.5 percent), and institutional investors (34.3 percent).

Today Enel operates through eight different divisions. The Sales Division is responsible for sales and quality of commercial services targeted to the end-user market for electrical power and gas. The Generation and Energy Management Division operates power generation and environment safeguarding. The Infrastructure and Networks Division is in charge of distributing electricity and gas in Italy. Engineering and Innovation is a new organizational division that manages and controls the engineering processes related to the construction of generation facilities, coordinates research activities, and promotes and supports the development of innovation opportunities across the various business areas. The International Division consolidates and promotes the internationalization strategies of the company in all foreign countries of interest with the exception of Spain, Portugal, and Latin America, which are the responsibility the new Iberia and Latin America Division. Finally, the Parent Company and Services and Other Activities area has the purpose to leverage group synergies and provide transversal services to Enel's core activities.

Especially in recent years, innovation, infrastructure development, excellence in customer service, and internationalization through alliances and direct investments have represented the key success factors of Enel's growth strategies. Innovation has constantly sustained company growth and profitability. Enel has been the first utility company in the world to replace its customers' traditional electromechanical meters with modern electronic devices. The ability to take meter readings in real time and manage contractual relationships remotely has enabled Enel to implement time-of-use electricity charges, offering customer savings for evening and weekend electricity use, globally improving the efficiency of its electricity network. Innovation investment is now focused on the development of renewable energy sources, for research and development of new environment-friendly technologies, and for modernization of old power plants.

The consolidation of international activities has recently been driven by the necessity to reduce dependence on Italy. Enel has a relevant presence in Europe (Bulgaria, France, Greece, Italy, Romania, Russia, Slovakia, and Spain), North America (Canada and the United States), and Latin America (Brazil, Chile, Costa Rica, El Salvador, Guatemala, Mexico,

Enel, the largest power company in Italy, has expanded to serve 50 million power and gas customers in 21 countries.

and Panama). Recent acquisitions and alliances have been numerous. The acquisition of Endesa, the leading electricity company in Spain and Latin America, was completed through the partner Acciona, one of the leading Spanish groups operating in the development and management of infrastructure, services, and energy from renewables. Also of relevance is the completion of the public tender offer for OGK-5, one of the largest Russian generating companies. Both acquisitions have given Enel the size to play a leading role, reduce regulatory and business risks, and expand its growth potential, creating the basis for future efficiency.

See Also: Acquisitions, Takeovers, and Mergers; Eléctricité de France; Eni; E.ON; Italy.

Bibliography. Datamonitor, www.datamonitor.com (cited March 2009); "Enel, A Privatisation Gone Awry," *Economist* (2000); Enel SpA, www.enel.it (cited March 2009); Hoovers, www.hoovers.com (cited March 2009); David Lane, *Enel* (Financial Times Energy, 2000); Loredana Mascheroni, "Lights on the City—In Rome, Angela Bulloch, Jeppe Heine and Patrick Tuttofuoco Set Up a Dialogue With Three Symbolic Locations For ENEL," *Domus* (v.2/904, 2007); "Russia: Enel Buys Power Plant," *Petroleum Economist* (v.74./7, 2007).

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Eni

Eni is one of the leading integrated energy companies in the world, and its success is mainly based on continuous innovation and growth strategies. The primary businesses managed by the company through different operating divisions and subsidiaries are Exploration & Production, Gas & Power, Refining & Marketing, Engineering & Construction, Petrochemicals, Oilfield Services and Engineering. From exploration and production (upstream segment) to the supply, transport, distribution, and sale of natural hydrocarbons (midstream segment), to the processing and marketing of refined products (downstream segment), Eni has a presence in all phases of the energy value chain. BASF, BP, Chevron, ConocoPhillips, E.ON, Enel, ExxonMobil, Marathon Oil, Pemex, Petrobras, Repsol YPF, Royal Dutch Shell, Sunoco, and Total are among its main global competitors.

The company, headquartered in Rome, Italy, has reached a strong international position operating in around 70 countries with a staff of about 76,000 employees. During fiscal year 2007 the group recorded revenues of €87,256 millions, and a net profit of €10,011 millions.

Eni (Ente Nazionale Idrocarburi) was established by the Italian government in 1953 with the mission to promote and develop national energy-related operations. It became a joint stock company in 1992. Today the main shareholders are the government (20.31 percent), the Cassa Depositi e Prestiti (CDP SpA, whose capital is held 70 percent by the Italian Ministry of the Economy and Finance and 30 percent by some Italian banking foundations) with a share of 9.99 percent, the Intesa San Paolo Group (2.27 percent) and the Monte dei Paschi di Siena Group (2.11 percent).

Since the beginning, under the leadership of its chairman Enrico Mattei, the company was focused on developing international key business alliances with many producer countries. Furthermore, relevant investments into research and technologically advanced structures of excellence had been always considered a key success factor for satisfying customers' needs and protecting the environment. Technological, business-model, and new-to-the world product innovations are continuously developed in Eni, resulting in the creation of maximum value and generating a strong and durable competitive advantage.

In Eni the continuous growth of its upstream and downstream activities has been always considered a strategic priority. The growth strategy, supported by a strong pipeline of projects and strongly coordinated with an increasing operational efficiency and relevant technological investments, is differently implemented depending on the business lines.

Exploration & Production Division growth has been based since its historical origins on a continuous increase of production, thanks to some foreign direct investments carried out through development projects, acquisitions of assets, and new exploration licenses. Partnerships and strategic agreements have enabled the company to accelerate the achievement of its growth strategies. Today organic production growth is relevant in some strategic regions such as the Caspian Sea area, Gulf of Mexico, North and West Africa, where Eni is part of some important projects. Nowadays, one of the company's targets is to replace in the medium term more than 100 percent of produced reserves.

Also in the Gas & Power business Eni occupies a strong and integrated position in Europe. The company's value drivers can be summarized in the following: a strong capacity to dialogue with oil and gas producing countries such as Russia and Algeria; a competitive advantage in capturing full value from the gas value chain; business development with an integrated approach between Gas & Power and Exploration & Production.

Eni's profitability in the Refining and Marketing Division is also a priority. In Refining, profitability is reached through focused investments that enable the company to obtain a continuous increasing of the refining conversion index. This results in higher value and quality products, lower operating costs, and increasing refinery flexibility in processing low-quality crude oils. In Marketing, with its retail business focused in Italy where the company is the leader with the brand Agip, Eni is involved in focused marketing initiatives and effective segmented pricing strategies. Nevertheless the company is strengthening its position in other international growing markets through the acquisition of local service stations.

Finally, among the numerous differentiating strategies that determine the competitive advantage in the other company's business lines and subsidiaries, is the continuous geographical expansion and innovation, the constant business integration, and the creation of plants which enable the company to generate significant economies of scale.

See Also: Downstream; Électricité de France; Enel; E.ON; Italy; Strategic Alliance; Upstream; Vertically Integrated Chain.

Bibliography. Datamonitor, www.datamonitor.com (cited March 2009); "Eni: Looking to Bounce Back," *Petroleum Economist* (v.75/5, 2008); Eni SpA, www.ENI.it (cited March 2009); D. Fisher. "Devil's Advocate: Italian Oil Giant Eni Has a History of Cutting Deals with Anyone. But Now Its Future Hangs on Russia," *Forbes* (v.180/2, July 23, 2007); "Going for a Gusher in Libya Italy's Eni Is Beating Out Giants Like BP and ExxonMobil, Partly Because It Never Left the Country During the U.S. Embargo," *BusinessWeek* (March 26, 2007); Hoovers, www.hoovers.com (cited March 2009); "Norway: Eni Aiming for 2012 Production Start for Barents Oil in the Arctic," *Offshore* (v.68/4, 2008); "UOP and Eni Plan to Make Diesel Fuel from Vegetable Oil," *Focus on Catalysts* (n.10, October 2007).

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Enron Corporation

When Enron Corporation filed for bankruptcy under Chapter 11 protection on December 2, 2001, it was valued at over $60 billion, thus achieving the notoriety of being the largest U.S. corporate failure at that time. The exemplar of American commercial enterprise became a byword for corporate malfeasance.

Enron was brought into being by Chief Executive Officer Kenneth Lay in 1985 from an amalgamation of Houston Natural Gas (HNG), of which he was previously CEO, and InterNorth of Nebraska. The new corporation's business was centered on some 37,000 miles of natural gas pipelines and supply contracts. Until the late 1980s, gas pipeline operators were required to be buyers and resellers of natural gas as well as transporters of the product. Deregulation motivated Enron to remove the constraints of entering into purchase contracts and reduce their involvement to transportation and tolling. In 1988, a meeting of top executives was told by Lay and his vice chairman Richard Kinder that far from harming their business, deregulation should provide the impetus for reengineering their business.

By 1990, a review of their corporate business strategy led to a reprofiling of the corporation. Some noncore businesses were sold off and the business was relabeled as an energy provider. In reality, this was a move from their previous conservative strategy of developing trading opportunities from a capital asset base to becoming an energy trading entity with capital assets.

This business transformation was led by Jeffrey Skilling, who joined Enron in 1990 from the consultancy business of McKinsey and Co., where he had been senior partner of their energy business. He came with his strategy to turn Enron into an "asset-light"

Enron, based in this complex in Houston, Texas, was the largest U.S. corporate failure ever when it went bankrupt in late 2001.

organization, fueling expansion through financial trading. From using their "Gas Bank" to fulfill contractual obligations, their trading from 1992 might be better considered as derivative trading, since Enron was more involved in creating energy and financial markets than selling either products or services.

From its foundation, Enron was saddled with substantial debt inherited from HNG and InterNorth. This was increased in 1988 to buy out some 16 percent of the shareholding held by Irwin Jacobs, a major investor in InterNorth, and later investors, who had threatened to mount a takeover bid for the young Enron. This raised their debt-to-capital ratio to some 75 percent, making the corporation a poor investment risk. Through refinancing, this ratio was reduced, but keeping debt and losses off their consolidated balance sheet eventually led to Enron's collapse. This was not helped by some of Enron's less successful ventures, such as Azurix (water/utilities) and Elektro Eletricidade e Servicios (Brazilian electricity utility).

Enron also invested in the internet, buying into RhythmsNetConnections, an independent internet service provider (ISP). While developing a means of hedging following their initial public offering (IPO), Andrew Fastow, who was promoted to chief financial officer (CFO) in 1998, set up the first LJM entity. This was an investment vehicle formed by his family (their initials) that became an integral part of Enron's SPEs (special purpose entities). Earlier SPEs, such as the Cactus Fund, were legitimately used to create trading liquidity in gas markets. The later SPEs, such as the Raptors and Talon partnerships, became vehicles for "off balance sheet" accounting, avoiding the consolidation of debt, risk, and losses.

Two other Enron ventures also need to be mentioned, since they contributed to a shift in Enron's reputation with the public and investors. First was the trade in electricity supplies in California. By using their expertise to play the deregulated markets in 1997–98, as the largest power trader, Enron was able to make substantial profits during a crisis period, mostly at the expense of consumers. It was reported that they generated profits of $1.5 billion before suddenly leaving the market.

The other venture was EnronOnline, which was launched in 2000 and where using their strong technical expertise, Enron was able to take advantage of the boom in dotcom technology. The online market created was primarily a tool for their own business rather than as an open or third-party online marketplace. They were able to increase their trading capacity through the immediacy of this internet trading. However, the growth in liquidity of their trading, with the reduction in timescale, now meant that deals were smaller and standardized for simplicity and thus subject to a much decreased profit margin. Whether this influenced the change in trading practice or was a product of practices that were already undergoing change is open to debate.

In February 2001 Jeffrey Skilling became chairman of Enron, a post he held for only six months before resigning on August 14 and returning the responsibility to Ken Lay. The following day, Lay received an anonymous letter that later transpired to have originated from Sherron Watkins, who worked in Enron as an accountant for their SPEs. She expressed her concerns for their insubstantial collateral and their tax implications. Lay met with Watkins and subsequently took legal advice from Enron's lawyers, Vinson and Elkins.

Enron's stock value continued to fall, so Lay made efforts to appease the financial community by explaining Enron's income and disengaging Fastow from their SPEs. However, he and several other Enron executives had been selling their stock since 1999 and continued to do so while aware of the corporation's serious financial problems.

On October 19, the *Wall Street Journal* revealed that Fastow had made a profit of over $7 million from his SPE activities. This prompted the Securities and Exchange Commission (SEC) to announce an investigation into these activities. Enron immediately replaced Fastow as CFO and appointed Jeffrey McMahon to replace him. Shortly thereafter, Enron restated its earnings downward by $0.5 billion and increased its debt by $2.6 billion.

Dynergy opened a bid to buy Enron on November 9, supported by Chevron Texaco, though they pulled out of the deal three weeks later following an announcement of a further $700 million loss. Enron's credit rating crashed to the extent that on December 2 they filed for bankruptcy under Chapter 11 protection. On January 23, 2002, Lay resigned. A report by William Powers following an inquiry by Enron's Special Investigation Committee blamed Lay, Skilling, and accounting firm Arthur Andersen for the collapse. A subsequent hearing found Arthur Andersen, Enron's auditors, to be guilty of obstruction of justice for shredding documents while aware of a pending investigation by the SEC.

In May 2006, Lay and Skilling were found guilty of fraud and conspiracy, although Lay died of a heart attack six weeks later and his conviction was quashed. Skilling was sentenced to 24 years in prison and Fastow to seven years, with lesser sentences handed out to others. Enron stockholders are still working to minimize their losses.

See Also: Accountability; Auditing Standards; Bankruptcy; Citigroup; Company Profiles: North America; Corporate Governance; Corruption; Credit Ratings; Deregulation; Disclosure Requirements; Securities and Exchange Commission.

Bibliography. Stephen V. Arbogast, *Resisting Corporate Corruption: Lessons in Practical Ethics from the Enron Wreckage* (Scrivener, 2008); Robert L. Bradley, *Corporate Social Responsibility and Energy: Lessons From Enron* (Institute for Study of Economics and the Environment, Lindenwood University, 2008); Kurt Eichenwald, *Conspiracy of Fools: A True Story: Collapse of the Enron Corporation: Hearing Before the Committee on Commerce, Science, and Transportation* (U.S. G.P.O., 2005); M. Gladwell, "Open Secrets: Enron and the Perils of Full Disclosure," *New Yorker* (January 8, 2007); C. Helman and D. Fisher, "Crime Pays the Enron Trial Will Have One Happy Result: For the Market Value of the Prosecutors," *Forbes* (v.177/13, June 19, 2006); John Kroger, *Convictions: A Prosecutor's Battles Against Mafia Killers, Drug Kingpins, and Enron Thieves* (Farrar, Straus, and Giroux, 2008); Bethany McLean and Peter Elkind, "Enron Diary," *Fortune* (v.153/4, 2006); W. Powers, Jr., *Report of Investigation by the Special Investigative Committee of the Board of Directors of Enron Corp.* (February 1, 2002); Malcolm S. Salter, *Innovation Corrupted: The Origins and Legacy of Enron's Collapse* (Harvard University Press, 2008).

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Entrepreneurship

Entrepreneurship can be defined as the practice of starting a business or "breathing life" into an existing business. One can do so by exploring and pursuing new business initiatives that have the potential to make the organization grow.

Basic Categories

Although many do not attempt to distinguish the different types of entrepreneurs, Webster (1977) classified the title into five different categories. He believed that the distinctions between the different categories allowed one to understand the different terminology in the field and practice. His five different categories of entrepreneur included the following:

- The Cantillon Entrepreneur. Richard Cantillon introduced the term *entrepreneur* in the early 18th century to denote a person who is treated as one of the four factors of production (i.e., land, labor, capital, and the entrepreneur). The entrepreneur is considered the catalyst in the role of innovator, and is responsible for fueling growth in a capitalist economy. Entrepreneurs can be successful and make a profit when they have the ability to create an opportunity where they have a temporary monopoly to change market products and processes before the competition has an opportunity to dilute industry profits. Many economists do not view the entrepreneur as a real person. Rather, the entrepreneur is seen as a "silent theoretical entity that makes rational decisions, strives for profit maximization as defined by the economists, and assumes managerial and other uninsurable risks in exchange for profits."

- The Industry Maker. Traditional management research views the entrepreneur as an industry maker, or someone who builds the nation's economic system, is hard-working and willing to take risks, and invests personal assets. According to this school of thought, the entrepreneur establishes the foundation for an organization, and then builds it into an industry leader.
- The Administrative Entrepreneur. The entrepreneur role is viewed as an executive who establishes a new company, or a reorganization of an existing corporation, and becomes a permanent leader of the management team. Although there are similarities, there is a distinct difference between an industry maker and an administrative entrepreneur. Administrative entrepreneurs are usually associated with an individual organization (e.g., Henry Ford); whereas industry makers are usually considered as manipulators (e.g., Jack Welch) of an entire industry or of a large segment of an industry.
- The Small Business Owner/Operator. During Webster's time, small business owners were perceived to be the local merchants, and tied predominantly to the retail and wholesale industry. Many scholars believed that these vendors were limited in scope in regard to sales, geographical outreach, and profit potential. However, technology, such as the internet, has allowed service businesses as well as retail businesses to reach an international market.
- The Independent Entrepreneur. An individual who creates ventures from scratch, and does not generally commit to long-term managerial responsibilities to one venture. These individuals tend to be very creative and get a thrill with developing the business, and they tend to be loners.

Current Categories

All five types can be seen in the system, but they have different roles. Webster's work was written in the 1970s and times have changed. As noted with the small business owner category, the increase in technology and globalization have changed the way that business is conducted as well as how entrepreneurs are categorized. Allen's categories (2006) are reflective of how business is conducted in the 21st century, and the new categories include:

- The Home-Based Entrepreneur. According to the American Association of Home Based Businesses, more than 24 million people operate home based businesses. Although many of these businesses start out as sole proprietors, many have grown to the point that they can compete against large, well-known businesses. Technology has made it possible for businesses to operate from any location, and home-based businesses are able to tap into resources via the internet. Home-based businesses are usually the starting point for many businesses.
- The Cyber Entrepreneur. This type of entrepreneur enjoys the fact that he or she is able to run a full fledged business without a brick-and-mortar location. Cyber entrepreneurs are able to process all of their business transactions with customers, suppliers, and strategic partners over the internet. In addition, their businesses tend to be digital products and services that do not require a physical infrastructure such as a warehouse.
- The Serial Entrepreneur. These entrepreneurs enjoy creating businesses, but have a desire to move on when the business is up and running. They are motivated by the hype of the pre-launch and start-up phases of the business, but do not have a desire to handle management responsibilities.
- The Traditional Entrepreneur. Traditional entrepreneurs are classic entrepreneurs. They start brick-and-mortar businesses and stick with them as they begin to prosper. Traditional entrepreneurs will be around as long as there is a need to build sustainable businesses, especially in industries such as food services, manufacturing, and retail.
- The Nonprofit Entrepreneur. Nonprofit entrepreneurs have a passion for work that involves socially responsible themes such as education, religious, and charitable initiatives. Many seek their 501(c) status so that they can solicit fund-

ing and donations from organizations and individuals who believe in the mission. Their businesses are allowed to make a profit as long as the profits are used for business purposes and not distributed to the owners of the company.

- The Corporate Venturer. Corporate venturers are individuals who seek out new ventures while working within established large organizations. Organizations create skunk works so that they have a unit to explore potential opportunities. Skunk works are autonomous groups that are given the mandate to find and develop new products for a company that may be outside of the organization's core competencies. However, many have found this a difficult task due to the bureaucratic structure of many large organizations. In order to be a successful corporate venturer, it is important that the following factors are present: senior management commitment; corporate interoperability, meaning that the work environment must support collaboration and provide resources; clearly defined stages and metrics so that the organization can decide whether or not to continue to pursue the initiatives; a high-performance work team; and finally, a spirit of entrepreneurship. Although success is the goal, failures may occur. Organizations must support the team as they explore the opportunities, even when efforts are failures.

Financing

One of the greatest challenges for new ventures is the ability to secure capital for investments that will allow the company to grow. All projects will reach a crossroad where sufficient cash flow is necessary in order to go to the next level. It could be after a period of time or it could be because the venture was so popular and the company is growing at a rapid rate due to demand. Regardless of the situation, the company's management team will need to determine when and how they will invest in items such as purchasing new equipment, hiring new staff, and putting more money into marketing initiatives. Raising money can be a difficult task if the company has not established a reputation or is still new.

When determining the amount of capital needed, the decision makers must analyze the situation and decide how much and what type of capital is required. Since the situation is not the same for all businesses, there is no magical formula. Some businesses may only need short-term financing for items such as salaries and inventory; whereas, other businesses may need long-term financing for major items such as office space and equipment. Each business must develop a customized plan that will meet its unique needs.

Securing capital is a choice made after weighing the pros and cons of various options. There are three popular sources for obtaining funding for new ventures: borrowing from financial institutions, partnering with venture capitalists, and selling equity/ownership in exchange for a share of the revenue. All financing options can be classified into two categories—debt financing and equity capital.

Debt financing includes bank loans, personal and family contributions, and financing from agencies such as the Small Business Administration. Loans are often secured by some type of collateral in the company and are paid off over a period of time with interest. On the other hand, venture capitalists and angel investors provide funding in the form of equity capital. Both are given ownership in the company in exchange for money. Pierce (2005) offers some advice which may be of assistance when assessing which option may be best for the company. Some of the tips include:

- A Small Business Administration program may not be the best option if the company needs less than $50,000.
- Debt financing is usually cheaper and easier to find than equity capital. Financing the venture via debt leads to the responsibility of making monthly payments whether or not the business has a positive cash flow.
- Equity investors expect little or no return in the early stages of the business, but require more reporting about the company's progress. In addition, they expect the company to meet the established goals and milestones.
- Debt financing is usually available to all types of businesses. However, equity capital tends to be reserved for businesses with fast and high growth potential.
- Angel investors tend to invest money in companies that are within a 50-mile radius, and the amounts of funding tend to be in the range of $25,000 and $250,000. Angel investors may be

friends, family, customers, suppliers, brokers, and competitors.
- It is difficult to secure venture capital funding, even in a good economy.

Debt financing and equity capital options both require the business owner to complete detailed documentation prior to the award of financing. The owner should be prepared to produce quarterly balance sheets, background information on the company, and projections.

Debt Financing

If a company cannot finance its expansion through personal investments, the management team will need to develop a business plan that meets the criteria for potential lenders. Commercial banks may be the first choice, especially if the owner has a relationship with a specific lender. Since traditional lenders tend to be conservative, good rapport and an established relationship will be beneficial when applying for a loan. According to the University of Maine's Cooperative Extension, a 1980 Wisconsin study of small businesses found that 25 percent of the businesses interviewed were initially denied, but 75 percent of these groups were approved when they submitted their proposal to another group.

If a commercial bank is not an alternative and the entity is a small business, the Small Business Administration may be another option. The business must satisfy the agency's criteria and not be able to secure financing from other sources. The Small Business Administration (SBA) is an independent agency of the Executive Branch of the federal government, and it is responsible for assistance to small businesses in the United States. There are four types of assistance this agency can offer: advocacy, management, procurement, and financial assistance. Financial assistance can be granted through the agency's investment programs, business loan programs, disaster loan programs, and bonding for contractors.

There are three loan programs, and the Small Business Administration sets the guidelines and other entities such as lenders, community development organizations, and micro-lending institutions make the loans to small businesses. In order to reduce the risk to these entities, the SBA will guarantee the loans. When a business applies for an SBA Loan, they are actually applying for a commercial loan with SBA requirements and guaranty.

In 1958 Congress created The Small Business Investment Company (SBIC) program. SBICs, licensed by the Small Business Administration, are privately owned and managed investment firms. SBICs partner with the government and use their own capital with funds borrowed at reduced rates to provide venture capital to small businesses.

The Surety Bond Guarantee (SBG) Program was developed to provide small and minority contractors with contracting opportunities for which they would not otherwise bid. The Small Business Administration (SBA) can guarantee bonds for contracts up to $2 million, covering bid, performance, and payment bonds for small and emerging contractors who cannot obtain surety bonds through regular commercial channels.

Equity Capital

The first venture capitalist firm was established in the 1940s with the purpose of providing financial and business support to entrepreneurs in exchange for repayment in capital gains. They tend to gravitate toward technology initiatives because of the potential for high returns. In addition, these organizations were interested in promoting their services nationally and internationally. During the last two decades, venture capitalism has expanded to the global marketplace.

Venture capital is usually available for start-up companies with a product or idea that may risky, but has a high potential of yielding above average profits. Funds are invested in ventures that have not been discovered. The money may come from wealthy individuals, government-sponsored Small Business Investment Corporations (SBICs), insurance companies, and corporations. It is more difficult to obtain financing from venture capitalists. A company must provide a formal proposal such as a business plan so that the venture capitalist may conduct a thorough evaluation of the company's records. Venture capitalists only approve a small percentage of the proposals that they receive, and they tend to favor innovative technical ventures.

Funding may be invested throughout the company's life cycle with funding being provided at both the beginning and later stages of growth. Venture capitalists may invest at different stages. Some firms may invest before the idea has been fully developed while others may provide funding during the early stages of the company's life. However, there is a group of venture capitalists who specialize in assisting companies when they have reached the point when the company needs financing in order to expand the business.

Many firms receive some type of funding prior to seeking capital from venture capitalists. Angel investors have been identified as one source that entrepreneurs may reach out to for assistance. As Edelhauser (2007) puts it:

> In a nationwide survey of more than 3,000 individual angel investors conducted by the Angel Capital Association, more than 96 percent predict they'll invest in at least one new company in 2007. Also, 77 percent expect to invest in three to nine start-ups, and five percent think they'll fund 10 or more new companies.

Including angel investors in the early stages of financing could improve the chances of receiving venture capital financing. A 2005 study of small businesses found that 57 percent of the firms that had received angel investor financing had also received financing from venture capitalists. Firms that did not receive angel investing in the early stages (approximately 10 percent of the firms in the study) did not obtain venture capital funding. It appears that angel investor financing is a significant factor in obtaining venture capital funding. Since obtaining venture capital tends to be difficult, businesses can benefit from the contacts and experience of angel investors in order to prepare for a venture capital application and evaluation. The intervention of an angel investor may make the company appear more attractive to the venture capitalists.

Regardless of how a company decides to finance the venture, it often has to make an agreement that is beneficial to the investors since investors are providing the capital. Therefore, it is important to select a choice that benefits the business in the long run. Initial decisions may set the tone for future deals. Advani (2006) has provided some recommendations to consider when determining what will work best. These suggestions include the following:

- Don't give pro-rata rights to your first investors. If your first investor is given pro-rata rights, chances are your future investors will want the same agreement. It would be wise to balance the needs of your early investors to protect their stake in the company with how attractive the company will be to future investors.
- Avoid giving too many people the right to be overly involved. If too many people are involved, it could create a bureaucracy and make it difficult for decisions to be made in a timely manner. In addition, the daily tasks of a business may be prolonged due to the need for multiple authorization signatures.
- Beware of any limits placed on management compensation. Some investors may place a cap on the earning potential of senior management personnel. This type of action could create a problem with human resource needs such as attracting and hiring quality talent to run and grow the business.
- Request a cure period. Many investors will request representation for every legal agreement to protect themselves if the management of a company is not in compliance with laws, licenses, and regulations that govern the operation of the business. Although all parties may have good intentions, errors do occur. If a "cure period" is added to the financing agreement, the entrepreneur will have the opportunity to find a solution to the problem within a given period of time (e.g., two to four weeks).
- Restrict your share restrictions. Having unrestricted shares is often a good negotiating factor with future investors. Therefore, it would be wise to evaluate any requests to restrict the sale of shares owned by the founders and/or management team.

See Also: Capitalism; Competition; Confucian Work Dynamism; Co-Production; Electronic Commerce; Risk; Risk Management; Venture Capital.

Bibliography. K. Allen, *Launching New Ventures*, 4th ed. (Houghton Mifflin, 2006); Asheesh Advani, "Start-up Financing Trends for 2007," Entrepreneur.com (cited March 2009); Asheesh Advani, "Raising Money From Informal Investors," Entrepreneur.com (cited March 2009); K. Edelhauser, "Angel Investing to Grow in '07," Entrepreneur.com (cited March 2009); R. K. Goel and I.

Hasan, "Funding New Ventures: Some Strategies for Raising Early Finance," *Applied Financial Economics* (v.14/11, 2004); P. A. Gompers, "Optimal Investment, Monitoring, and the Staging of Venture Capital," *Journal of Finance* (v.50/5, 1995); P. Kilby, *Entrepreneurship and Economic Development* (The Free Press, 1971); J. Madill, G. Haines Jr., and A. Riding, "The Role of Angels in Technology SMEs: A Link to Venture Capital," *Venture Capital* (v.7/2, 2005); C. Pierce, *How to Prepare and Present a Successful Business Funding Request* (BusinessFinance.com, 2005); F. Webster, "Entrepreneurs and Ventures: An Attempt at Classification and Clarification," *The Academy of Management Review* (v.2/1, 1977).

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Entry Mode

An entry mode is the manner in which a company decides to enter into foreign markets. International market efforts take many forms. There are various strategies an organization may implement once it has decided to enter the global market. Ways to enter a foreign market include licensing, franchising, joint ventures, exporting, and direct investment.

Licensing occurs when a target country grants the right to manufacture and distribute a product under the licenser's trade name in a target country. The licensee pays a fee in exchange for the rights. Small and medium-sized companies tend to grant licenses more often than large companies. Since there is little investment required, licensing has the potential to provide a large return on investment. However, it is seen as the least profitable way to enter the market because most companies use licensing to supplement manufacturing and exporting. Licensing tends to be a viable option to enter a the market when (1) the exporter does not have sufficient capital, (2) when foreign government import restrictions forbid other ways to enter the market, or (3) when a host country is not comfortable with foreign ownership.

Advantages of this method to a multinational corporation (MNC) are (1) there is no capital expenditure requirement, (2) it is not risky, and (3) payment is a fixed percentage of sales. Disadvantages are (1) the multinational does not have any managerial control over the licensee because it is independent, and (2) the licensee can give the multinational's trade secrets to a potential competitor.

Exporting is the marketing and direct sale of domestically produced goods in another country. It is a traditional and established method of reaching foreign markets. New companies tend to enter international markets through exporting. One reason may be because this type of entry does not require the organization to produce the goods in the targeted country, which means that the organization would not have to invest in foreign production facilities. Marketing expense is the biggest cost with exporting. There are two ways an organization can make sales in exporting—directly or indirectly. Direct sales can be made via mail order or through offices set up abroad. Indirect sales are made via intermediaries who locate the specific markets for the organization's products. The four players in the exporting business are the exporter, importer, transport provider, and the government. Many organizations are able to successfully establish themselves abroad and do not have to expand beyond exporting.

Direct investment occurs when there is direct ownership of facilities in the target country, and it requires a high level of resources and a high degree of commitment. This type of market entry may be made via the acquisition of an existing entity or the establishment of a new enterprise. It requires the transfer of resources such as capital, technology, and personnel. Direct ownership can provide a high level of control in the operations as well as provide the opportunity to better know the potential customers and competitive environment. MNCs may select this method when they want to (1) grow: the organization reaches a point where it realizes that it is not growing; therefore, there in an initiative to identify new markets so that it can continue to make profit; (2) bypass protective instruments in the target country. American MNCs avoid set-up subsidiaries in order to avoid the common external tariff imposed by the European market; (3) prevent competition: MNCs may buy a foreign company so that it will not become a competitor; and (4) reduce costs: labor costs tend to be different in countries. Many MNCs will attempt to identify countries that have qualified workers that will work for lower wages. For example, many American MNCs have outsourced their customer service and technology functions to India.

There are a number of reasons why a franchise may consider going global, and some of these reasons include opportunities to (1) build more brand and shareholder value, (2) add revenue sources and growth markets, (3) reduce dependence on the company's home market, (4) leverage existing corporate technology, supply chains, know-how, and intellectual property, and (5) grow more franchises in the home country by being global.

Joint ventures occur when an organization enters a foreign market via a partnership with one or more companies already established in the host country. In most cases, the local company provides the expertise on the target market while the exporting company manages and markets the product. A joint venture arrangement allows organizations with limited capital to expand into international markets, and provides the marketers with access to its partner's distribution channels. Key issues in a joint venture are ownership, control, length of agreement, pricing, technology transfer, local firm capabilities and resources, and government intentions. Potential problems include (1) conflict over new investments, (2) mistrust over proprietary knowledge, (3) how to split the pie, (4) lack of parent company support, (5) cultural clashes, and (6) when and how to terminate the relationship if it is necessary to take such action.

See Also: Barriers to Entry; Globalization; International Marketing; Joint Venture; Multinational Corporation.

Bibliography. Jean-Luc Arregle, Louis Hebert, and Paul W. Beamish, "Mode of International Entry: The Advantages of Multilevel Methods," *Management International Review* (v.46/5, 2006); C. S. Dev, J. R. Brown, and K. Z. Zhou, "Global Brand Expansion: How to Select a Market Entry Strategy," *Cornell Hospitality Quarterly* (v.48/1, 2007); Beata Javorcik, K. Smarzynska, and Kamal Saggi, *Technological Asymmetry Among Foreign Investors and Mode of Entry* (Trade, 2004); Sudha Mani, Kersi D. Antia, and Aric Rindfleisch, "Entry Mode and Equity Level: A Multilevel Examination of Foreign Direct Investment Ownership Structure," *Strategic Management Journal* (v.28/8, 2007); Simon C. Parker and C. Mirjam van Praag, *The Entrepreneur's Mode of Entry: Business Takeover or New Venture Start?* (Tinbergen Institute, 2006); Arjen H.L. Slangen and Jean-François Hennart, *Greenfield or Acquisition Entry: A Review of the Empirical Foreign Establishment Mode Literature* (Erasmus Research Institute of Management, Erasmus University, 2007); Y. Zhang, *A Research Towards Service and Manufacturing MNCs International Entry Mode Choices* (Erasmus University, 2007).

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Environmental Standards

Environmental standards are recommended or compulsory policy specifications designed to regulate human, generally business, effects on the environment, the surroundings in which an organization operates. Compliance means conforming to a policy specification that has been clearly defined. The International Organization for Standardization (ISO) is the confederation for environmental, health, and safety and quality standards, consisting of a network of the national standards institutes of 157 countries. Each member country has one member representative on the ISO and decisions are made via consensus. The ISO headquarters are located in Geneva, Switzerland. The ISO is internationally recognized as the hallmark for an audited Quality Management Control System.

Specific environmental standards become law through international treaties or national standards. Many countries have specific departments that regulate the impact of businesses on the environment. Also, trained, accredited environmental auditors can relate company environmental impacts against ISO or other international or national environmental standards while operating under an ethical professional code of practice. The introduction of an accredited environmental management system within a company demonstrates legal and regulatory environmental requirements and should result in sustained improved management of environmental risks as internal processes are constantly reviewed; however, it requires resources. Nevertheless, there are a number of reasons from a strategy perspective why companies might voluntarily set environmental standards that are stricter than those set by law or recommended.

An organization's environment is the surroundings in which it operates and extends from within the company to the global system. Businesses impact on the environment by using raw materials and energy in production processes and by producing wastes and emitting pollutants onto the land or into waterways and the atmosphere. For example, the combustion of fossil fuels such as coal and petroleum oil in power plants and many other industrial processes has contributed to the substantial increase in atmospheric carbon dioxide concentration over the past 50 years. There is considerable evidence that this increase in carbon dioxide concentration is a factor contributing to global warming. The combustion of fossil fuels in power plants and other industries can also result in the production of other gaseous pollutants such as sulphur dioxide and nitrous oxide. These gases can have adverse effects on human health as well as on the environment. Nitrous oxides are also emitted in the production of nylon and nitrogen-based fertilizers while use of nitrogen fertilizers has had negative environmental effects on land, water, and the atmosphere, contributing to the eutrophication of nutrient-poor land habitats, fresh waters, estuaries, and coastal water; a decrease in biodiversity inside and outside the agricultural systems; and emissions of greenhouse gases to the atmosphere. Utilization of raw materials and energy, and production of pollutants, is not related only to large industries. With few exceptions, all businesses require electricity or gas for lighting, heating, and running of appliances and also produce waste.

Different countries can have different environmental standards and environmental standards can vary between different parts of a country. For example, in the United Kingdom, environmental standards can be different in Scotland than in England or Wales. In the United States, environmental standards can be different in different states. The ISO has developed international environmental standards addressing a broad array of subjects and new standards are published annually. These standards are generic in nature and are periodically updated. Initially such standards were quite inflexible to diverse business operations. In response to growing credible criticisms, the ISO responded by modifying standards to accommodate different organizational operations, while maintaining its fundamental principles.

The ISO 14000 Series

The ISO publishes the ISO 14000 Series Environmental Management systems, which is a series of international standards on environmental management. The fundamental principle of the ISO 14000 Environmental Management Standard is to provide a framework of reference for organizations to reduce/minimize their commercial processes that negatively affect their internal and external environment; adhere to relevant legislation; add further environmental requirements as necessary; and demonstrate continuous improvement of environmental procedures. The ISO 14000 series specifies the actual requirements for the development of an environmental management system and its supporting audit program to be carried out by a company. It applies to those environmental aspects over which a company has control.

The major parts of the ISO 14000 series are ISO 14001 and ISO 14004. ISO 14001 is the international specification for an environmental management system; it provides details of the requirements of a company in establishing an environmental policy. ISO 14001 identifies the activities of an organization that impact the environment, sets measurable targets for improvement, and details a management program to achieve these targets. The process involves continual checking and management review with the implementation of corrective action if required. ISO 14004 is a guidance document for ISO 14001 giving more detail on the establishment of an environmental management system, the setting of measurable environmental targets for improvement, and the implementation of checks and controls. It also provides details on the coordination of an environmental management system with other management systems such as those related to health and safety, and quality.

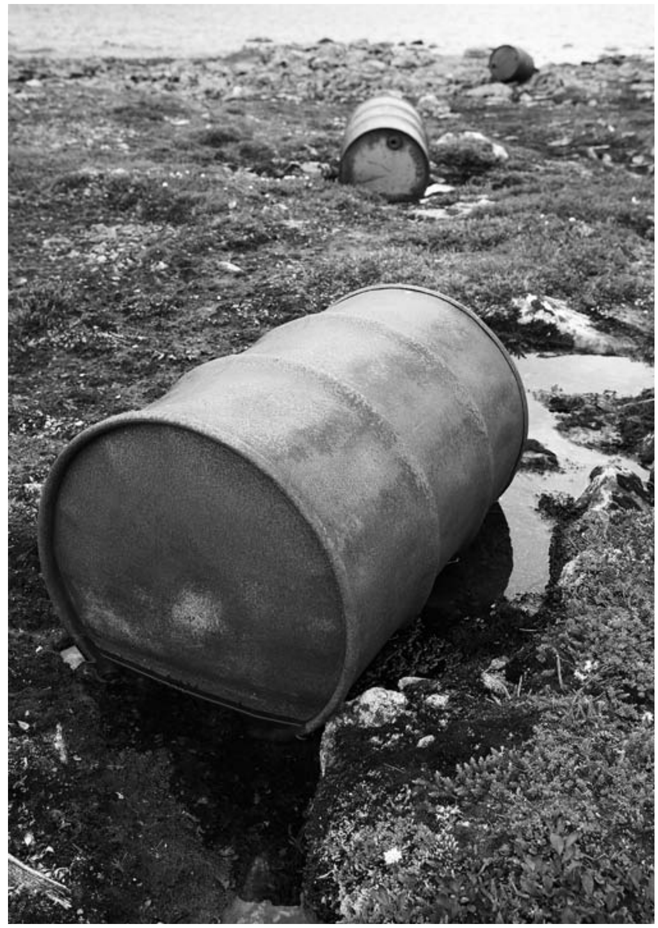
Environmental management standards are akin to quality management standards. They focus on the outcome of the production process as opposed to the product/item, utilizing the concept of "cleaner production." Their fundamental aim is to design and control an auditable procedure aimed at minimizing adverse environmental "aspects," for example, production of waste, spillage of chemicals, and carbon dioxide emissions. An "aspect" is an element of an organization's activities or products or services that can interact with the environment. ISO 14001 identifies suitable methodologies/tools to interpret such aspects and to assess their impact. ISO 14001 is a set of standards against which all organizations can be assessed. As of 2008, over 100,000 companies worldwide have been certified to ISO 14001 standard.

Assessment

Environmental impacts fall broadly into two classifications, direct and indirect impacts. Direct impacts are effects that are the immediate result of the actions or operations of an organization, for example, waste production and carbon dioxide emissions. Indirect impacts are the effects that occur upstream or downstream of the organizational activities, for example, extraction of raw materials that are transported to, then utilized by, a company. The ultimate aim is to formulate realistic proactive remedies for sustainable continuous improvement.

Tried and tested aspect assessment approaches that can be utilized within a company can fall under three methodologies: the risk-based scoring methodology, environmental and commercial qualitative methodology, and criteria-based methodology. The risk-based scoring methodology adopts a numerical cut-off value. The likelihood of breaches in organizational systems (A) are multiplied by severity of environmental impact (C). Both A and C are allocated criteria and ranking such that the significance figures fall between 1 and 50. Those risk-based activities that are allocated above 20 points are deemed "significant" and need to be addressed. The environmental and commercial qualitative methodology adopts a traffic-light scheme. Color codes are allocated to specific aspects that are benchmarked against predetermined criteria, for example, legal requirements, cost savings, and customer views. The criteria based methodology identifies key yes/no answerable questions. The largest number of yes responses represents the highest significance.

Many countries have specific governmental, publicly-funded departments/agencies that regulate the impact of businesses on the environment. For example, the United States has the U.S. Environmental Protection Agency; Australia has the Department of the Environment, Water Heritage and the Arts; and England and Wales, the Department for Environment, Food and Rural Affairs (DEFRA). These organizations provide guidance to businesses in relation to meeting environmental standards. Also, in some cases, they have the power to issue improvement or prohibition notices which may lead to the prosecution of businesses that breach environmental regulations. Convicted organizations are fined and listed on governmental Web sites and, as a result, can suffer long-term difficulties in retaining or sourcing supply chain clients. This is one of the primary reasons to ensure environmental conformance.



Many environmental standards aim to control industrial waste, including requiring records to make waste traceable to its origin.

Trained, accredited environmental first-, second-, and third-party auditors can assess company environmental impacts against environmental standards, for example, ISO 14001 or other international or national standards while operating under an ethical/professional code of practice. First-party auditors carry out audits within their own department. Second-party auditors can be from within the company but are outside the department being assessed or are independent consultants. It is considered best practice for internal auditors to audit outside their formal management line, in order to maintain a neutral assessment. Third-party auditors come from an accrediting body that carries out official audits. The role of the third-party auditor is to identify nonconformance, and the organization must identify corrective action.

EMAS

Within the European Union, the Eco-Management and Audit Scheme (EMAS) is a voluntary initiative designed to improve companies' environmental performance. EMAS is more rigorous than ISO 14001. It aims to recognize and reward those organizations that go beyond minimum legal compliance and continuously improve their environmental performance. For example, EMAS requires the completion of an initial environmental review that is an assessable part of the environmental management system. ISO 14001 recommends an initial environmental review if an organization does not have an existing environmental management system but it is not a requirement. Also, EMAS requires a maximum three-year audit cycle and the publication of an environmental statement by the company that reports on their environmental performance, while ISO 14001 requires "periodic" environmental management system audits and that an organization should "consider" external communication.

EMAS has very specific requirements in the type of environmental aspects that should be addressed within the environmental management system and it is possible that ISO 14001 does not cover some of these areas. The European Union has formally recognized that ISO 14001 satisfies many of the requirements of EMAS and has set out steps on how to implement EMAS if a company is already ISO 14001 certified. Auditors require additional competencies to award EMAS in comparison with ISO 14001 accreditation.

The Institute of Environmental Management and Assessment (IEMA) is a not-for-profit professional membership body that supports environmental auditors internationally and provides training courses for them. As of 2008, the IEMA had over 12,500 members in 87 countries.

Certification

Organizations wishing to apply for accreditation from an official environmental standards body are assessed against the standards and, if successful, are awarded certification. Certification is not indefinite; organizations must undergo reaccreditation periodically. Successful organizations maintain accreditation, while those who exhibit noncompliance are issued a report that addresses the audit findings. Such findings may include "observations," "action requests," "noncompliances," and specify a period to correct those highlighted issues. If significant noncompliances are discovered or the previous audit report recommendations were not addressed, accreditation may be suspended or, in extreme cases, withdrawn.

Generally, a company is responsible for environmental aspects over which it has control and this can encompass procedures outside the company site. For example, in relation to waste management, in England and Wales, the producers of waste are responsible for its correct disposal. Here, a company must develop and maintain a waste inventory, listing the date the waste was produced, the source, type and amount of waste produced, the medium (land, air, or water) affected by the waste, and how the waste was dealt with, for example, by controlled disposal via skip to landfill or special disposal such as incineration. Also, the person responsible for the waste disposal must be stated. Then, in relation to the transfer of waste offsite, the company must ensure that carriers and waste sites have the proper licenses to deal with the waste produced. In relation to the transfer of hazardous waste, the company must pre-notify the Environment Agency, a nondepartmental public body of DEFRA, when it intends to transfer this offsite and complete consignment notes that must be kept for three years.

As a further check, there are waste acceptance procedures that must be carried out by waste disposal companies. For example, a waste disposal company operator must inspect the waste at the entrance to the landfill and at the point of deposit in order to verify that it matches the description given on the relevant documentation from the company that produced it and from the company that transported it. The operator must keep a register of the date the waste was delivered, the origin of the waste (company that produced it and company that transported it), and type and quantity of waste. With respect to hazardous waste, the precise location of the site in which it was deposited must be recorded. Thus all waste deposited should be traceable to the activity that resulted in its production.

Accredited environmental management systems within companies require commitment and can be costly. Time and funding must be allocated to the development and maintenance of the system. This would involve staff training to develop a company-wide culture of environmental awareness. Nevertheless, some companies have made a commitment to operate policies that are more rigorous than the environmental standards set. There are a number of reasons from a strategy perspective as to why companies might voluntarily set environmental standards that are stricter than those set by law or recommended. For example, every organization has complex involvement with stakeholders, all groups or individuals that are affected by or can affect an organization's objectives. Stakeholders are a critical factor in determining the success or failure of a business. By matching and concentrating on the interests of various stakeholder groups, managers can increase the efficiency of their organizations' adaptation to external demands. Setting environmental standards that are more rigorous than required could lead to greater stakeholder satisfaction. If this satisfaction were felt by customers, this could lead to increased sales. Thus from a cost-benefit framework perspective, commitment of a company to more rigorous environmental standards than required could increase consumer demands for its products. Also, it could improve corporate reputation in the market and enhance relations with regulating agencies, community, nongovernmental organizations, and media.

In marketing terms, implementation of environmental standards more rigorous than recommended or required by law could give a company a competitive advantage over rival companies, assuming the environmental standards set by these other companies is less rigorous. Also, this advantage could be sustained if a company continuously analyzes and responds to changes in the environment.

See Also: Compliance; Corporate Social Responsibility; Corporate Social Responsibility and International Business Ethics; International Law; Kyoto Protocol; Legal Environments; National Regulatory Agencies; Regulation; Sustainable Development.

Bibliography. David P. Angel, Trina Hamilton, and Matthew T. Huber, "Global Environmental Standards for Industry," *Annual Review of Environment and Resources* (32, 2007); Europa-European Commission, "EMAS—The Eco-Management and Audit Scheme," www.ec.europa.eu (cited March 2009); Steven Ferrey, *Environmental Law: Examples and Explanations* (Wolters Kluwer Law & Business/Aspen Publishers, 2007); IEMA—International Organization for Standardization, "IEMA Training," www.iema.net (cited March 2009); International Organization for Standardization, "Management Standards," www.iso.org (cited March 2009); National Research Council (U.S.), *Estimating Mortality Risk Reduction and Economic Benefits from Controlling Ozone Air Pollution* (National Academies Press, 2008); Michael Schmidt, *Standards and Thresholds for Impact Assessment. Environmental Protection in the European Union*, vol. 3 (Springer, 2008); United Nations Economic Commission for Europe Secretariat, *Environmental Policy and International Competitiveness in a Globalizing World: Challenges for Low-Income Countries in the UNECE Region: Note* (UN, 2007); United States, *Implementation of the Existing Particulate Matter and Ozone Air Quality Standards: Hearing Before the Subcommittee on Clean Air, Climate Change, and Nuclear Safety of the Committee on Environment and Public Works, United States Senate, One Hundred Ninth Congress, First Session, November 10, 2005* (U.S. G.P.O., 2008); Franz Wirl and Juergen Noll, "Voluntary (Environmental) Standards," *Journal of Economics and Business* (v.59/4, 2007).

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E.ON

E.ON describes itself as the world's largest investor-owned power and natural gas company. E.ON is involved in every step of the power supply chain from development, through transportation, to final delivery to customers. The company describes its wide range of activities as not only allowing it to minimize risk but to also claim that its supply of both gas and power allows its customers the benefit by needing only one supplier. The antitrust offices in the European Commission have taken issue with that assertion.

In 2007 E.ON reported €67 billion in sales and €7.7 billion in profits. It employs approximately 88,000 employees. It is based in Dusseldorf, Germany, and operates throughout Europe but also has electric, gas, and renewable energy operations in North America.

E.ON came into existence in 2000 when the companies of VIAG in Germany and VEBA AG (which had existed since 1929) were merged. Since the merger E.ON has made several important acquisitions including companies in Britain, Russia (where is also has an arrangement with Gazprom), and Sweden. It has also extended its reach throughout Europe, including eastern Europe as a result of its acquisition of the natural gas provider Rurhgas in 2003.

E.ON has not been in successful in all cases where it has tried to expand. In April 2007 E.ON stopped its efforts of over a year and a half to acquire the Spanish utility company Endesa for €42.4 billion. Competing against a Spanish utility corporation and the Italian energy company Enel, which had acquired 46 percent of Endesa, E.ON dropped its bid. In return, it received a promise that it could buy part of Endesa's assets worth approximately €10 billion.

E.ON has also drawn the attention of the European Union's antitrust offices. In June 2008, E.ON and another energy company, GDF, were accused by the European Commission of agreeing not to sell energy to each other's countries. E.ON has denied all accusations and has stated that it will collaborate with the European Commission to resolve the charges. Further, the company stated that it had invested several billion euros in projects to improve infrastructure that will carry gas throughout Europe. Additionally, E.ON has been under a great deal of pressure from the Commission to sell part of its infrastructure, the supply grids, to facilitate cross-border competition and in 2008 the company announced that it would sell some of its assets. Other charges against the company include accusations that it has withheld electricity in an effort to drive the price up.

The European Commission is not the only organization that has taken issue with E.ON. E.ON has been investigated by the German Government's Cartel Office. As a result of the initial investigations, E.ON agreed that it would pay €55 million as refunds to its customers served by six of its regional companies. In addition, E.ON promised it would not initiate its planned 10 percent price increases in gas until the end of 2008. In return the Cartel Office stated that it would stop further investigations into E.ON. E.ON's rationale was not that it had done anything wrong but that it wished to present legal proceedings that might go on for a long time and that it preferred to refund money to its customers than pay fines to the government. In November 2008 Germany's Federal Supreme Court issued an order prohibiting E.ON from increasing the holdings it currently has in municipal services of German towns. For 10 years utility companies such as E.ON and RWE had been buying shares in these corporations in response to a loosening of regulations in 1998.

E.ON has also drawn the opposition of environmental groups. As wind farming has not been as successful in Europe as planned, E.ON has commenced the construction of coal-fired electrical generation plants, an action that has resulted in protests.

See Also: Enel; European Union; Gaz de France; Gazprom; RWE.

Bibliography. Victoria Burnett, "German Suitor Makes Deal With Rivals and Ends Its Bid for Endesa, a Spanish Utility," *New York Times* (April 3, 2007); "E.ON Banned From Increasing Stakes in Municipal Services" [BGH verbietet Eon nationale Zukaufe], *Europe Intelligence Wire* (November 12, 2008); E.ON, *Corporate Responsibility Report 2007*, www.eon-uk.com (cited March 2009); E.ON, www.eon.com (cited March 2009); Simon Jones, "E.ON Refunds €55m to Head Off Cartel Probe," *Utility Week* (October 17, 2008); Peter Maloney, "Foreign Firms Envision Wind Farms Dotting the U.S.," *New York Times* (November 7, 2007).

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Equities

The term *equity* means different things in different contexts. In the business world, equity usually refers to stocks or other securities that represent ownership rights (to a company or some other business entity). A person possessing any amount of equity in a company owns the corresponding portion of that company. If a legal person (a person or a business entity) owns more than 50 percent of the outstanding shares of a company, then the person possesses a controlling share of that company. A company owning a controlling share of another company is called the parent company while the latter is called the subsidiary company. Equity can also mean the difference between the value of an asset (for example, a house) and the debt (mortgage) amount the owner still owes.

In the context of margin trading, equity is the value of the margin account less the amount borrowed from the brokerage firm. Margin trading is trading of securities using a margin account with a brokerage firm. Margin trading allows the investor to invest in securities with borrowed money from the brokerage house and thereby leverage their investment (magnify both the gains and losses from the investment).

In the context of global business, however, equity primarily refers to the stocks or other securities representing ownership rights to companies across the nations. The trading of global equity has created global capital flow across countries, and has created a single world financial market that truly spans all the economies. The economic impact of a single global financial market has been enormous. The growing businesses of the world now can raise capital faster than ever and the investors have the widest range of investment pool available to them. But it has also given rise to problems like capital flight, which has devastated different economies from time to time.

In a globalized world, a person can own equities in multiple foreign business entities. Foreign stocks are traded in all the major stock exchanges in the world. Global equity trading increased sharply beginning in the 1980s. Equity trading across borders has allowed companies to be cross-listed and dual-listed, has enabled the formation of parent subsidiary relationships between foreign companies, and has given rise to unique business structures like that of Renault-Nissan Alliance.

Cross-Listing or Co-Listing Companies

Shares of many large companies are traded in multiple stock exchanges, so that investors from different countries can have easy access to their securities. For example, Fortis, a banking, insurance, and investment management company that has a presence in Europe and North America, is listed on three stock exchanges: Euronext Brussels (Ticker symbol FORB), Euronext Amsterdam (FORA), and Luxembourg stock exchanges (FOR). Getting listed on a stock exchange in a country other than the country of incorporation has certain business advantages. Many large Canadian companies are listed both on the Toronto Stock Exchange and the New York Stock Exchange (NYSE). Getting listed on the NYSE has helped these Canadian companies to expand in the large U.S. market. The disadvantage of cross-listing is, of course, the extra work necessary to adhere to the regulations (financial reporting) of different countries.

It is important to note at this point, however, that a foreign company's security can be traded between investors through other channels. For example, in the United States, investors can buy and sell foreign companies' stocks in over-the-counter trading (process of directly trading equities as opposed to trading through a stock exchange). Many banks like JP Morgan Chase issue instruments like ADR (American Depositary Receipt) and GDR (Global Depositary Receipt) that enable investors to buy foreign securities while bypassing the hassle of international transactions. Buying ADR, GDR, or similar other instruments essentially means buying the ownership rights to the underlying (foreign) securities; investors can buy them and receive their dividends in U.S. dollars.

Dual-Listed Companies

While cross-listed companies are those that are listed on more than one stock exchange, a dual-listed company (DLC) is a special corporate structure consisting of two listed companies, with separate bodies of shareholders sharing the ownership of the corporate entity. DLC works like a merger (a process of forming a new company by merging two existing companies) in some ways, but both the original companies continue to exist. The companies in a DLC have separate bodies of shareholders, but they share all the risks and rewards of the entire corporate structure in a fixed proportion. Dual-listing allows companies from different countries to collectively do business without having to undergo any merger or acquisition process. In this way, dual-listing facilitates integration of business operations of two companies where business environmental forces (national pride, commitment to corporate identity, etc.) do not support mergers or acquisitions between the two companies.

Unilever, the giant multinational corporation that owns many of the world's consumer product brands, is a dual-listed company. Unilever consists of Unilever NV in Rotterdam (Netherlands) and Unilever PLC in

London (United Kingdom). Both Unilever companies have the same directors and effectively operate as a single business. Similarly, Thomson Reuters, a leading media company of the world, is also a dual-listed company consisting of Thomson Reuters Corporation, a Canadian company, and Thomson Reuters PLC, a United Kingdom company.

Cross-Border Corporate Alliances

Global equity flows have allowed parent-subsidiary relationships between foreign companies, facilitating vertical integration of business operations across the border. For example, the U.S. soft drink giant Coca-Cola has assumed control over various Chinese bottlers and distillers over the course of its several-decade business presence in China. Besides conventional parent-subsidiary relationships, global equity trading has enabled unique corporate alliance structures like Renault-Nissan Alliance Group.

Renault-Nissan Alliance is a group of two global carmakers (Renault and Nissan) that are linked by cross-shareholding. Renault S.A., a French company, owns 44.4 percent shares of Nissan, a Japanese company, which in turn owns a 15 percent share of Renault. Both the companies, especially Nissan, which was in deep financial crisis before the formation of the alliance, have benefited from the alliance. In some aspects the Renault-Nissan Alliance works much like a merger since it has allowed integration in operations and management of the two companies (Carlos Ghosn is the CEO of both the companies). But the alliance does not face the legal and corporate challenges associated with a merger.

Capital flight has been a problem in various countries' capital markets. Aggressive foreign investors often initially flood a given country's capital market with fresh investment capital for the time being. However, when in the presence of some triggering phenomena (e.g., political turmoil, economic worries, etc.), these investors often pull back their investment in droves and the capital market of that specific country faces cataclysmic crisis. This is commonly referred to as capital flight. It is hoped that better international regulations will alleviate such problems.

See Also: Acquisitions, Takeovers, and Mergers; Capital Flight; Financial Market Regulation; Foreign Direct Investment, Horizontal and Vertical; Virtual Vertical Integration.

Bibliography. Jaideep Bedi, Anthony J. Richards, and Paul Tennant, "The Characteristics and Trading Behavior of Dual-listed Companies," Reserve Bank of Australia Research Discussion Paper No. 2003-06 (2003); John Braithwaite and Peter Drahos, *Global Business Regulation* (Cambridge University Press, 2000); Bahattin Buyuksahin, Michael S. Haigh, and Michel A. Robe, *Commodities and Equities: A "Market of One"?* (Commodity Futures Trading Commission, 2008); Kristin Forbes, *Why Do Foreigners Invest in the United States?* (National Bureau of Economic Research, 2008); Michael R. King and Dan Segal, "International Cross-listing and the Bonding Hypothesis," Bank of Canada Working Paper No. 2004-17 (2004); Mark Mobius, *Equities: An Introduction to the Core Concepts* (Wiley, 2007); Matthew Tagliani, *The Practical Guide to Wall Street: Equities and Derivatives* (Wiley, 2009).

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Estonia

The country of Estonia is the northernmost of the three Baltic States, having been a part of the Russian Empire from 1721 until independence in 1918. In 1940, it was invaded by the Soviet Union, and in 1941 it was invaded again, this time by Nazi Germany. The Red Army retook Estonia in 1944 and occupied it until independence in 1991. On May 1, 2004, Estonia joined the European Union. The country now has one of the fastest-growing economies in the world.

Estonia is known for involvement in multiple industries, but has especially extensive timber, with forests still covering some 47 percent of the land, and there are also limestone deposits. The Estonians have a regional reputation for canniness in financial matters, and before World War I, although some 90 percent of the population were ethnic Estonians, there was a substantial German business class. There were also several thousand Swedes who had an important role in local commerce that was out of proportion to their small number.

During the period when Estonia was part of the Russian Empire, the city of Tallinn became relatively wealthy. One of the merchants of the city, Robert von Glehn (1801–85), moved to London, and his son, Alfred George de Glehn (1848–1936) made a major contribution to the development of the steam locomotive. After independence, Estonia started to develop many of its own industries to prevent reliance on other former parts of the Russian Empire. It exported timber and timber products, dairy products, cotton, and wool. Many imports came from Germany and also Austria, with Steyr automobiles being popular. There was also a substantial trade with Britain involving companies such as Ilford Limited for photography.

While Estonia was a part of the Soviet Union, the economy was centrally controlled, and many Russians settled in Estonia; Russians now make up 25.6 percent of the population of the country, while 68.7 percent are Estonians. The Estonian capital, Tallinn, remained a prosperous city, not having been as badly damaged during World War II as many others in the region. With independence, the new Estonian government decided that as an economic policy, they would allow the free market to operate, and as a guarantee against future invasion, the country would seek close ties with the West. These objectives saw Estonia welcome investment, tourism, and joining the European Union.

The transformation of the Estonian economy after independence has seen a move from a period when it is believed that up to 90 percent of the economy was controlled from Moscow, and all the major economic decisions were made there, and when some 95 percent of the labor force worked in government-owned enterprises or on collective farms, to a major embracing of the free-market economy, engagement with the International Monetary Fund, and trade with northern and western Europe. The selling off of state property to allow private property ownership was a major plank in the policy of the Estonian government and property was returned, when possible, to the pre-1940 owners, or compensation paid.

The new Estonian currency, the kroon, was pegged to the U.S. dollar to ensure confidence in it and also stability, and this reduced any threat of inflation that had badly affected nearby Lithuania after it achieved independence. Foreign trade has grown massively, as has foreign investment in Estonia, and it has become a popular holiday destination for many Europeans. The major exports from the country are machinery and equipment (24 percent), wood products, textiles, food and food products, metals, and chemicals. Machinery and equipment make up 31 percent of the country's imports, with food, metals, and textiles also being imported. Some 23 percent of exports go to Finland, and 15 percent of imports come from Finland. There is also considerable bilateral trade with Germany, Russia, and Sweden.

See Also: Eastern Europe; European Union; Latvia; Lithuania; Russia.

Bibliography. J. Davis, "Web War One," *Wired* (v.15/9, 2007); *The Europa Year Book* (Europa Publications, 2008); Rünno Lumiste, Robert Pefferly, and Alari Purju. *Estonia's Economic Development: Trends, Practices, and Sources; a Case Study* (Commission on Growth and Development, 2008); Jaan Masso and Priit Vahter, *Technological Innovation and Productivity in Late-Transition Estonia: Econometric Evidence from Innovation Surveys,* Working Paper Series, University of Tartu, Faculty of Economics and Business Administration, 61 (Tartu University Press, 2008); Wayne C. Thompson, *Nordic, Central, and Southeastern Europe, 2007* (Stryker-Post Publications, 2007).

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Ethnocentric Human Resource Policy

The term *ethnocentric* is derived from the Hellenic (Greek) word *εθνοκεντρισμός*, a composite word that consists of the term *έθνος*, which means nation, and the term *κέντρο*, which means center. The meaning of the term is identical in both the Hellenic and the English language, and signifies that policies and systems in the countries in which the multinational corporation operates (the host countries) revolve around the policies and systems of the country from which the multinational organization originates (the home country).

In ethnocentric orientation, human resource systems in the host countries mirror those that are utilized in the home country. The idea is that if these systems have worked well in the home country, they should work well everywhere, with little or no adaptation to the local conditions and culture. Hence, the ethnocentric human resource approach pays minimal attention to local factors. However, evidence suggests that direct transferability of human resource systems across national boundaries without taking into account cultural factors is risky.

A trademark characteristic of the ethnocentric human resource approach is the employment of home country nationals to fill key positions in the host country. Reasons for adopting an ethnocentric approach in the staffing of operations include:

- Starting up operations in host countries. This is a critical stage, and there is a need to place individuals in host countries who are fully aware of the needs of the multinational and any specifications, as these have been set by the headquarters. Normally individuals who are most familiar with the goals and demands of the multinational as these have been set by the headquarters are home-country nationals who have been with the corporation for some time.
- Technical expertise. Many times multinational corporations need to transfer scientific and technological knowledge, professional expertise, and managerial skills into new operations. In many cases the knowledge and skills do not exist in the local workforce, especially if the product is highly specialized and utilizes cutting-edge technology. Therefore, it is necessary to deploy home-country nationals in host-country operations.
- Maintenance of financial control and facilitation of coordination. A major need for the headquarters is effective and efficient communication as well as trust with key employees in host countries. It is natural to consider that this is more feasible when key positions in host-country operations are filled with home-country nationals.
- Provision of international experience for promising managers and professionals. An assignment abroad normally requires ability to work independently and to show initiative in an unfamiliar environment. This serves as a test and as an opportunity for development for home-country managers and professionals who are groomed for senior positions.
- Need to maintain the foreign image of the multinational corporation. Sometimes the headquarters consider that it is in the best interests of the corporation that operations in particular countries are associated with the home country. This, for example, can be the case when products from a particular home country in a particular market have a very good reputation; or when a particular home country is viewed positively by host-country nationals.
- The multiracial or multireligious population of the host country. In some cases the host country has a population that belongs to two or more races or religions that have a history of rivalry. In such cases it may be risky for the multinational corporation to appoint a local national, because nationals from the other races or religions may perceive it as bias against them.

Ethnocentrism in human resource policy has been the norm in the past, but it is a phenomenon that is dissipating. There are a number of reasons for this, including the realization of the importance of cultural factors in the appropriate functioning of human resource systems, the improving level of education around the globe that has increased the availability of qualified managerial and professional workers in host countries, and the high cost of expatriates.

See Also: Ethnocentrism; Expatriate; Geocentric Human Resource Policy; Home Country; Host Country; Multinational Corporation; Parent Country National; Polycentric Human Resource Policy.

Bibliography. David G. Collings, Hugh Scullion, and Michael J. Morley, "Changing Patterns of Global Staffing in the Multinational Enterprise: Challenges to the Conventional Expatriate Assignment and Emerging Alternatives," *Journal of World Business* (v.42/2, 2007); Terence Jackson, "The Management of People Across Cultures: Valuing People Differently," *Human Resource Management* (v.41/4, 2002); Jo Rhodes, Paul Walsh, and Peter Lok, "Convergence and Divergence Issues in Strategic Management—Indonesia's Experience With the Balanced Scorecard in HR Management," *The International Journal of Human Resource Management* (v.19/6, 2008); Michael J. Stevens et al., "HR Factors Affecting Repatriate Job Satisfaction and Job Attachment for Japanese Managers," *International Journal of Human Resource Management* (v.17, 2006); Miao Zhang and Christine Edwards, "Diffusing 'Best Practice' in Chinese Multinationals: the Motivation, Facilitation and Limitations," *The International Journal of Human Resource Management* (v.18/12, 2007).

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Ethnocentrism

Ethnocentrism refers to the human tendency to view the world through the lens of one's own culture. An ethnocentric individual considers their race or ethnic group and aspects of their culture—behavior, customs, language, and religion—as superior to others and judges them in relation to their own. This affinity for one's culture is explained in psychology as an individual's preference for people that share similar values, beliefs, and behavior (in-group). Furthermore, it can be difficult for individuals to understand different cultures from perspectives other than their own since they are socialized in their birth culture for which they may develop an intrinsic bias. Consequently, an ethnocentric person will view these other cultures as not only different but may resist or reject another culture and its patterns of thought and behavior as they are considered less desirable or inferior to their birth culture. This predisposition may lead to a range of discriminatory behaviors, most commonly in-group favoritism ("ethnocentrism") and out-group hostility ("xenophobia"). Ethnocentrism has been associated with ethnic conflict, war, voting, the instability of democratic institutions, and consumer choice.

Ethnocentrism has also been related to genetic similarity among ethnic groups that can produce an alignment of interests among members. In this way, ethnocentrism has been linked to the concept of nationalism in political science and use of the term *ethnocentric* to describe national and ethnic groups as selfish and culturally biased. There are many instances where citizens and nations have demonstrated ethnocentric behavior. For example, an Anglo-centric world view was created through the measurement of longitude in degrees east or west of Greenwich, England. Eurocentrism refers to the tendency to view the world from a European (or Western) perspective with an implied belief about the superiority of European culture and to interpret the histories and cultures of non-European societies from this point of view.

Despite increasing access to foreign-made products, often of superior quality and lower price, socio-psychological motivations such as ethnocentrism still drive consumers to purchase domestically made products, even against their economic self-interest. Consumer ethnocentrism may be defined as the beliefs held by consumers about the appropriateness, indeed morality, of purchasing foreign-made products. This concept may be described in terms of a continuum. On one extreme is nationalism, characterized by the willingness to sacrifice individual interests for the nation, coupled with hostility toward external groups. This attitude is based on the belief of one's own country's superiority, right to dominate, and an uncritical attachment to national values. Nationalists blindly overemphasize the virtues of domestically made products while downplaying, even boycotting, those of foreign origin in order to weaken other countries economically.

On the other extreme of the continuum one finds internationalism, characterized by positive feelings toward other nations and their people, thus fostering a sense of global community. Internationalism shows concern about other nations' welfare and empathy for problems abroad. Internationalists find it morally acceptable to purchase imports and to actively support the struggle and welfare of other nations. It is possible for consumers to have a moderate attitude, what can be described as healthy patriotism, or love of country. Patriots also consider it their duty to protect their country's economy, even at personal expense, through the purchase of domestic products but without aggressive bias against out-groups. Research indicates that the level of consumer ethnocentrism varies according to demographic variables. Less-educated, lower-income, older, and female consumers tend to be more conservative, patriotic, and even nationalistic in their consumption. As incomes and education increase, so does the likelihood of international travel, exposure to foreign products, and openness toward imports.

Consumer nationalism and patriotism can be from the bottom up, in the form of spontaneous popular movements. This sentiment can also be from the top down—a product of deliberate government policies. In its more benign form this can result in "buy national" campaigns which encourage consumers to purchase domestic products, helping local manufacturers but not necessarily consumers and the overall economy. In its more extreme manifestations, consumer ethnocentrism can move consumers to boycott products, conduct demonstrations, and even engage in violent acts against foreign brands and corporations. Unlike ethnocentrism, which applies to what consumers perceive to be foreign, animosity is a more specific phenomenon that generates negative feelings toward particular countries affecting consumer purchases. This, in turn, is more politically and culturally determined, with mass media playing a critical role. An example of animosity would be the boycott by some New Zealand consumers of French products and brands in response to France's South Pacific nuclear testing program in the mid-1990s.

Ethnocentrism may also affect decision making in international business through staffing policy. Companies that fill key managerial roles exclusively with staff of parent-country origin are implementing an ethnocentric staffing policy. This approach is not as widespread today, but has been previously adopted by companies including Philips NV, Procter & Gamble, Matsushita, and Samsung.

An ethnocentric human resource policy may be favored for three main reasons: (1) means to achieve a unified corporate culture, (2) perceived lack of suitably qualified candidates from the host country to fill senior management positions, and (3) means to transfer core competencies to foreign operations. However, this approach can create "cultural myopia," whereby the firm may fail to appreciate cultural differences in the host country and expatriate managers may take considerable time to adapt to the new host culture. In particular, ethnocentric expatriates may be hesitant to learn from host-country nationals, less likely to socialize with them, or to establish local networks. Thus, in-group–out-group distinctions become more noticeable within the organization.

Conversely, expatriates who are open to different perspectives and new experiences are more likely to interact with host-country staff and adapt to the culture more quickly. On the other hand, highly ethnocentric host-country nationals may resist or disassociate themselves from expatriates who are viewed and treated as out-group.

See Also: Acculturation; Culture-Specific Values; Ethnocentric Human Resource Policy; Geocentric Human Resource Policy; Home Country; Host Country; Parent Country National; Polycentric; Polycentric Human Resource Policy.

Bibliography. American Anthropological Association, *RACE: The Story of Race* (American Anthropological Association, 2006); G. Balabanis, A. Diamantopoulos, R. Mueller, and T. C. Melewar, "The Impact of Nationalism, Patriotism and Internationalism on Consumer Ethnocentric Tendencies," J*ournal of International Business Studies*, (v.32/1, March 2001); R. Benedict, *Patterns of Culture* (Mentor Books, 1934); Christian S. Crandall, Mark Schaller, and Thomas F. Pettigrew, *Social Psychology of Prejudice: Historical and Contemporary Issues* (Lewinian Press, 2005); G. W. Florkowski and D. S. Fogel, "Expatriate Adjustment and Commitment: The Role of Host-Unit Treatment," *International Journal of Human Resource Management* (v.10/5, 1999); J. Klein and R. Ettenson. "Consumer Animosity and Consumer Ethnocentrism: An Analysis of Unique Antecedents," *Journal of International Consumer Marketing (v.*11, 1999); Samuel L. Myers and Bruce P. Corrie, *Racial and Ethnic Economic Inequality: An International Perspective*, American University Studies, vol. 10 (Lang, 2006); Sonny Nwankwo, and Robert Rugimbana, *Cross-Cultural Marketing* (Thomson/Nelson, 2003); Yorgo Pasadeos, *International Dimensions of Mass Media Research* (Athens Insititute for Education and Research, 2007); M. A. Shaffer et al., "You Can Take It with You: Individual Differences and Expatriate Effectiveness," *Journal of Applied Psychology* (v.91/1, 2006); M. M. L. Wong, "Organizational Learning Via Expatriate Managers: Collective Myopia as Blocking Mechanism," *Organization Studies* (v.26/3, 2005).

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Euro

The euro is the currency of those member states of the European Union (EU) that (1) want to use a common currency with other members of the Union, and

(2) meet the criteria for joining the "eurozone." As of July 2008, 15 countries within the EU use the euro as their currency: Belgium, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, and Finland. Other countries (Bulgaria, Czech Republic, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden, and the United Kingdom) are members of the EU but do not use the euro as their currency. Of these, Denmark and the United Kingdom have decided to "opt out" from participation, while the remainder (many of the newest EU members plus Sweden) have yet to meet the "convergence criteria" for adopting the single currency.

The euro is an artificial or a synthetic currency that was launched on January 1, 1999. It first became the new official currency of 11 countries, replacing the old national currencies—such as the Deutsche mark and the French franc—in two stages. For the first three years of its existence, the euro was a virtual currency used by financial institutions for cashless payments and accounting purposes. Old currencies continued to be used for cash payments. The euro then appeared as banknotes and coins on January 1, 2002, for all transactions and the older national currencies were phased out of use within three months. In addition to the original 11, Greece adopted the euro in 2001, Slovenia in 2007, and Cyprus and Malta in 2008.

National currencies were converted into euros at fixed rates. One euro, for example, was worth 1.95583 Deutsche marks, 0.787564 Irish pounds, and 239.640 Slovenian tolars. These fixed rates are now only of historical interest. Euro's value in all other currencies of the world is free to fluctuate according to the dictates of market forces. In early July 2008, one euro was worth 1.57 U.S. dollars and 0.79 UK pounds.

The launching of the euro was the culmination of the process of integration of European economies that had begun in 1957 with the Treaty of Rome. The first step in this integration process was the formation of a common market, followed after many other steps by the establishment in 1979 of the European Monetary System, whose main objective was to reduce the volatility of exchange rates between the currencies of the European Economic Community.

The final step in the establishment of one currency, the euro, was the 1992 Maastricht Treaty (Treaty on European Union), which committed the EU members to have a common currency and set out the ground rules for the establishment of the common currency. These conditions came to be known as "convergence criteria" (or "Maastricht criteria"). The objective of stipulating these criteria was to ensure that the countries that adopt a common currency have comparable monetary conditions before forming a monetary union. These criteria were applied quite flexibly in 1998 to allow the first 11 countries to launch the euro in 1999. When the euro came into being, monetary policy became the responsibility of the independent and newly created European Central Bank (ECB). National central banks of the member states adopting the euro then became arms of the ECB for overseeing the implementation of the monetary policy within their jurisdictions.

Benefits and Drawbacks

The euro, as a single currency, confers a number of benefits on the countries that use it. Elimination of national currencies reduces the risk inherent in changing exchange rates between these currencies. Elimination of exchange rate risks stimulates trade between the countries and encourages integration of financial markets. Use of one currency also permits transparency of prices. People traveling between countries can make price comparisons more easily than if they have to convert prices from one currency to another. Research indicates that prices of goods between member countries have converged since the introduction of the euro. One currency also eliminates some transaction costs for financial transactions.

There are also some drawbacks for countries that give up their national currencies. Most important of these is the loss of monetary independence. Countries using the euro have surrendered an important tool—their monetary policy—for managing economic fluctuations to a central authority—the European Central Bank. There is now one monetary policy within the whole of the eurozone. Each country has only a limited voice in setting this policy. Should there be higher inflation or a recession in one region of the eurozone compared to other regions, monetary policy cannot be adjusted to accommodate the needs of one region. A country with its own currency can change its interest rates to manage the economic shock. Introduction of the euro also resulted in an initial bout of inflation as traders took advantage of confusion surrounding

The euro was launched in 1999, and by 2007 its use had surpassed that of the U.S. dollar by some measures.

the conversion of prices from local currencies into euros and raised their prices.

Soon after its introduction, the euro fulfilled the expectations of many by becoming an important international currency. Of all international reserves, 26.5 percent were held in euros at the end of 2007 compared to only about 15.4 percent at the end of 1995 (in currencies that now constitute the euro). By early 2008, the volume of international bonds raised in euros exceeded the volume of such bonds raised in the U.S. dollar—a currency that used to dominate transactions in international financial markets. By early 2007, the value of outstanding banknotes in euros exceeded those in dollars. Some of these numbers, however, may represent a slightly distorted picture due to a significant decline in the value of the U.S. dollar compared to the euro since 2002.

Usage of the euro is expected to continue its growth. It is expected that Slovakia will join the eurozone in 2009, Bulgaria, Estonia, Lithuania and perhaps Hungary in 2010, the Czech Republic in 2012, and Poland in 2015 or later.

See Also: Dollar Hegemony; European Monetary Union; European Union; Flexible Exchange Rate Regime; Reserve Currency.

Bibliography. *Building the Financial Foundations of the Euro* (Routledge, 2008); Menzie Chinn and Jeffrey Frankel, "The Euro May Over the Next 15 Years Surpass the Dollar as Leading International Currency," www.voxeu.org (cited March 2009); Paul de Grauwe, *Economics of Monetary Union* (Oxford University Press, 2007); Kenneth H. F. Dyson, *The Euro at Ten: Europeanization, Power, and Convergence* (Oxford University Press, 2008); Madeleine Hösli, *The Euro: A Concise Introduction to European Monetary Integration* (L. Rienner Publishers, 2005); Philip King and Sharmila King, *International Economics, Globalization, and Policy: A Reader* (McGraw-Hill Irwin, 2009); *The Euro* (The Stationery Office/Tso, 2008)

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European Bank for Reconstruction and Development

The European Bank for Reconstruction and Development (EBRD) was founded in May 1990, and inaugurated in April 1991, and works in the economies of 27 countries in central and eastern Europe and central Asia with a view to ensuring them a stronger economic outlook and strengthening democracy. Its stated objectives are

> to contribute to the progress and the economic reconstruction of the countries of central and eastern Europe which undertake to respect and put into practice the principles of multi-party democracy, pluralism, the rule of law, respect for human rights and a market economy.

The EBRD draws financial support from some of the members of the European Union and the European Free Trade Area, and also other countries, specifically Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Malta, Mexico, Morocco, the Netherlands, New Zealand, Norway, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. In addition, the European Community and the European Investment Bank were also shareholders in their own right. The funds and resources are used to help 26 countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, the Former Yugoslav Republic of Macedonia, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

The foundation of the EBRD was intended to help the former communist countries of eastern Europe and the Soviet Union adapt their economies and political systems and to integrate them into the world economy. To do this, projects were raised with the EBRD, which has its headquarters in London. All projects had to be located in one of the target countries, have "strong commercial prospects," involve the host country's government or other agencies also contributing, and benefit the economy of the host country with a view to developing the private sector. In addition, accountancy and banking standards had to be maintained and the overall project had to abide by strict environmental standards. Initially all payments were made in ECUs, the European Currency Unit used for denoting European Union transactions. However these were later denoted in euros.

The projects that were supported by the EBRD included those in agribusiness, manufacturing, natural resources, power and energy, property and tourism, telecommunications, information technology and media, transport, and also in dealing with the establishment of financial institutions, introducing energy efficiency standards, and projects to deal with governmental, municipal, and environmental infrastructure.

The initial problems facing many of the host countries were large, and there were many complications that followed the collapse of Yugoslavia and the subsequent fighting in the region. International politics proved to be important in the allocation of funds, and there were some early notable successes including the Czech Republic moving from being a recipient to a donor. It is expected that Bulgaria, Estonia, Hungary, Poland, Romania, Slovakia, and Slovenia—all now members of the European Union—will also see an end to operations, and possibly become donor countries by 2010. The problems faced by the EBRD were further exacerbated in August 1998 when Russia faced a major economic crisis. However, in the calendar year 1999, the EBRD was able to approve 88 operations for which funds totaling €2,162 million were involved.

The first president of the EBRD was the Algerian-born French economist Jacques Attali (b. 1943) who held the position from April 1991 until June 1993. After Attali had to resign in the wake of several scandals, he was succeeded by Jacques de Larosière (b. 1929), the French civil servant who had been managing director of the International Monetary Fund from 1978–87. He was EBRD president from September 1993 until January 1998, and restored confidence in the bank. The third president, Horst Kohler (b. 1943), a German economist, held the position from September 1998 until April 2000, and on July 1, 2004, became the president of Germany. He was succeeded by a French economist, Jean Lemierre (b. 1950), who had been director of the French Treasury from 1995 and a member of the European Monetary Committee from 1995 until 1998. He was the EBRD's president from July 3, 2000, until July 2008, and then the German politician Thomas Mirow (b. 1953) was appointed in July 2008. He had been the chef de cabinet of Willy Brandt, and then held senior positions in the Hamburg government.

See Also: Communism; Eastern Europe; European Union.

Bibliography. P. Byfield, "Banking on Collaboration In a Bid to Encourage Knowledge Sharing, the European Bank for Reconstruction and Development Created an Online Tool to Collect and Disseminate Legal Information," *Inside Knowledge* (v.9/5, 2006); *European Bank for Reconstruction and Development (EBRD) Handbook* (International Business Publications, 2007); Rainer Grote and Thilo Marauhn, *The Regulation of International Financial Markets: Perspectives for Reform* (Cambridge University Press, 2006); Jan-Hendrik Röver, *Secured Lending in Eastern Europe: Comparative Law of Secured Transactions and the EBRD Model Law* (Oxford University Press, 2007); United States, *European Bank for Reconstruction and Development (EBRD), London: A Report to Members of the Committee on Foreign Relations, United States Senate, One Hundred Ninth Congress, Second Session, June 16, 2006. S. prt, 109-75* (U.S. G.P.O., 2007); J. Verville, "The European Bank for Reconstruction and Development's Experience of Contract Enforcement," *European Business Law Review* (v.17/2, 2006).

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European Coal and Steel Community

The European Coal and Steel Community (ECSC) was a supranational organization instituted under the 1951 Treaty of Paris, which provided a framework for the pooling of coal and steel resources across member countries. The ECSC was designed to make future military conflict between France and Germany materially impossible through the integration of heavy industry, while contributing to the economic development and political stability of postwar Europe. A new range of political institutions were established under the treaty to oversee the operation of the organization, and the ECSC can be regarded as both the first attempt at a supranational organization and the forerunner to the European Union. The organization had considerable success in the modernization of production, advancement of commercial policy, and management of industrial dislocation before the expiration of the Treaty in 2002.

The formation of the ECSC was spurred by the efforts of the French foreign minister Robert Schuman, who believed that a unified Franco-German coal and steel industry would stand at the heart of a peaceful and prosperous Europe. The treaty establishing the ECSC was signed in Paris by France, Germany, Italy, Belgium, the Netherlands, and Luxembourg on April 18, 1951, with the common market for coal, iron ore, and scrap metals coming into force on February 10, 1953, and the common market for steel on May 1, 1953. The mission statement of the ECSC was set out in Article 2 of the treaty: to contribute to economic expansion, higher employment, and an improvement in living standards while ensuring rational distribution, high productivity, and the avoidance of economic disturbances in member states. In order to fulfill these objectives, a new range of supranational institutions were established: the High Authority, the Assembly, a Council of Ministers, and a Court of Justice.

The High Authority was the independent executive committee, composed of nine members from the six participating countries, whose ultimate responsibility was to ensure treaty obligations were fulfilled. The High Authority obtained funding for the ECSC's administrative costs and schemes from a levy placed on coal and steel production, while it had powers to gather information pertinent to the execution of its duty from member states and enforce sanctions against those states remiss in their obligations. The Assembly, composed of 78 representatives of the national parliaments, held supervisory power over the operation of the ECSC while the Council, including a representative from each participating country, acted as the harmonizing agent between the actions of the High Authority and the national economic policies of member states. The Court of Justice, composed of seven judges appointed for six-year terms, ensured that the law was observed with regard to the implementation of the treaty while protecting individuals and enterprises against any administrative malpractices by the ECSC.

The High Authority acted upon the information ascertained from undertakings and market data to decide commercial policy, and the necessity of any intervention through the establishment of production quotas, fixed prices, or customs duties. The ECSC also tried to prevent collusion between member firms, while removing restrictions upon the free movement of labor between member states. From the levy imposed upon production, the ECSC was able to provide financing for research and development (R&D), technical modernization, and investment loans. The organization also provided significant funding for the construction of employee housing and the compensation and retraining of workers displaced from the sector due to general industrial decline.

The ECSC enjoyed considerable success in the main areas of policy despite operating in a period of relative industrial decline in western Europe. Although certain failures were apparent in the organization's inability to prevent economic concentration between member firms and equalize wage rates between countries, these are juxtaposed against significant social benefits accrued from the retraining and redeployment of displaced labor. The ECSC treaty expired on July 23, 2002, with provision being made for the transfer of the activities of the organization to the European Community. The 2001 Treaty of Nice provided for the transfer of all remaining funds to the European Community for the purpose of R&D in the coal and steel industries.

See Also: Common Market; European Union; Treaty of Rome.

Bibliography. Desmond Dinan, *Origins and Evolution of the European Union* (Oxford University Press, 2006); European Commission, and Statistical Office of the European Communities, *50 Years of the ECSC Treaty: Coal and Steel Statistics: Data 1952–2000: Pocketbook. Theme 4—Industry, Trade, and Services* (Office for Official Publications of the European Communities, 2002); John Gillingham, *Coal, Steel, and the Rebirth of Europe, 1945–1955: The Germans and French from Ruhr Conflict to Economic Community* (Cambridge University Press, 1991); M. Donald Hancock, *Politics in Europe* (CQ Press, 2007); Jens-Uwe Wunderlich, *Regionalism, Globalisation and International Order: Europe and Southeast Asia* (Ashgate, 2007).

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European Monetary Union

The European Monetary Union (EMU) represents countries within the European Union that have agreed to have a common currency, the euro, and a common monetary policy. As of July 2008, 15 of the 27 countries that form the European Union were part of the EMU.

The EMU is the culmination of the process that began in 1971. Just before what was to be the advent of the floating exchange rate regime in 1973 after the collapse of the Smithsonian agreement of 1971, European Common Market (later to be known as European Union) countries had agreed to stabilize the values of their currencies against each other within a narrow band. A new set of parities had been agreed to in 1971, but the central banks were still responsible for maintaining the exchange rates of their currencies within bands of ± 2.25 percent agreed at the Smithsonian Institution.

In 1972 Common Market countries agreed to maintain parities of their currencies within a narrower band of ± 1.25 percent (called a snake) than the band within which the same currencies could float against the dollar (called a tunnel) set by the Smithsonian agreement. The system came to be known for a while as the "snake within the tunnel." After the collapse of the Smithsonian agreement in 1973, it was agreed that the "snake" would be retained but the "tunnel" would be abandoned. Other industrialized countries had by that time adopted the fluctuating exchange rate system in which the markets determined the values of the currencies.

The turbulence that followed the advent of the floating rate regime proved incompatible with the goal of promoting intra-union trade and integration of the Common Market economies. To counter the effects of the volatility of exchange rates, a European Monetary System was established in March 1979. The centerpieces of this system were (1) the Exchange Rate Mechanism that limited the exchange rate movements between the currencies of the member countries to within ±2.25 percent (± 6 percent for Italian lira) of the established parity rates, and (2) a basket currency called European Currency Unit (ECU). The exchange rates were to be maintained within their defined bands through a European Monetary Cooperation Fund. One of the unique aspects of this Exchange Rate Mechanism was that when an exchange rate between two currencies moved close to one of the limits defined by the 2.25 percent bands, both the countries whose currencies constituted that exchange rate were required to intervene in the foreign exchange market. The usual practice in the international financial markets had been that the country whose currency depreciated with respect to others was required to intervene and protect the value of the currency.

The Cooperation Fund was also used to coordinate the monetary policies of member countries. The basket currency ECU was an artificial concept that consisted of fixed amounts of national currencies. There were nine national currencies in the basket in 1979 and 12 by 1989 (addition of more currencies was barred by the Maastricht Treaty). ECU was to be used only for settling accounts between countries and in financial markets. Actual notes and bills denominated in ECU were never issued, although individuals could open bank accounts denominated in ECUs. Over time, the currency became a popular unit for issuance of financial instruments such as bonds.

The foundations of the European Monetary Union were laid in December 1991 when the Maastricht Treaty was put forward for approval by member countries. In spite of the currency crisis of 1992–93, and initial rejections by voters in some countries, the treaty was adopted in November 1992.

The essence of the treaty was the formation of a monetary union and adoption of one currency. The common currency would be issued by the European Central Bank (ECB) and ECB would conduct the monetary policy for the countries using the common currency. These countries would give up their control over the monetary policy in their economy. Countries' existing central banks would become instruments of ECB.

Following the recommendations of the original report, countries were allowed to join the monetary union if they met all four of the following convergence criteria—known as Maastricht criteria—established in 1998. Countries have the option of "opting out" of the union.

1. Fiscal deficits: The government deficit must not exceed 3 percent of the country's gross domestic product and the total government debt must not exceed 60 percent of the gross domestic product—declining debt level is, however, acceptable.
2. Price stability: The inflation rate of the country over the previous year must not exceed by more than one and a half percentage points the average inflation rates of the three member states with the lowest inflation rates.
3. Interest rates: The long-term nominal interest rate must not exceed by more than two percentage points the average of the long-term interest rates of the three member states with the lowest interest rates.
4. Exchange rate: The exchange rate of the country must have remained within the fluctuation margins (± 15 percent since the 1992–93 exchange rate crises) provided for by the exchange-rate mechanism and must not have faced severe tensions for at least the last two years before entry.

In addition, it is required that there be legal compatibility for the central bank to join the monetary union in the form of freedom from political interference. The treaty also requires compatibility on factors like balance of payments, integration of markets, and unit labor cost without setting specific numerical goals. These criteria are not applied very rigidly—the final decision as to whether a country will be allowed to join or not is political.

The European Monetary Union was formally launched on January 1, 1999, with 11 countries (Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, and Finland). *Euro* was the name chosen for the common currency and its value was fixed in terms of the national currencies. Greece joined two years later. Three other countries have since joined the EMU (Cyprus, Malta, and Slovenia). Other countries (Bulgaria, Czech Republic, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden, and the United Kingdom) are members of the EU but do not use the euro as their currency. Of these, Denmark and the United Kingdom have decided to "opt out" from participation, while the remainder (many of the newest EU members plus Sweden) have yet to meet the "convergence criteria" for adopting the single currency.

For the first three years, the euro was used simultaneously with the national currencies for financial statements and public accounts. Bank notes and coins were introduced on January 1, 2002, and by July 1 of that year old national currencies were no longer legal tender in their countries.

Effects

The European Monetary Union has not been an unqualified success. It has improved economic efficiency because introduction of one currency has eliminated risks associated with exchange rate changes within the euro area as well as transaction costs associated with conversions of currencies. After an initial bout of inflation resulting from the tendency of retailers to take advantage of conversion of prices from national currencies into euro, prices in member countries have shown a tendency to convergence. Use of one currency has encouraged development of integrated financial markets. Early in 2008, the volume of bonds denominated in euros exceed that of dollar bonds for the first time ever. The share of euro in international reserves held by countries has increased over the past decade.

On the down side, countries are feeling the effects of loss of independence of monetary policy. When the euro rises in value against other currencies, as it has done since 2002, member countries feel the effects differently. Lacking ability to implement different monetary policies in the absence of full factor mobility may lead to loss of a country's international competitiveness. This is indeed the case for Greece, Spain, Italy, and Portugal in 2008.

Introduction of a common currency in Europe has been one of the landmark events in European history. There is very strong will in large parts of Europe for this experiment to succeed. Chances are the euro will be around for a while.

See Also: Euro; European Union; Flexible Exchange Rate Regime; Floating Exchange Rate; International Monetary System.

Bibliography. European Commission, *EMU @ 10: Successes and Challenges after Ten Years of Economic and Monetary Union*, European Economy, 2008, No. 2 (Office for Official Publications of the European Communities, 2008); European Commission, *One Currency for One Europe: The Road to the Euro* (Office for Official Publications of the European Communities, 2007); P. R. Lane, "The Real Effects of European Monetary Union," *Journal of Economic Perspectives* (v.20/4, 2006); Anna Lipińska, "The Maastricht Convergence Criteria and Optimal Monetary Policy for the EMU Accession Countries," Working Paper No. 896 (European Central Bank, 2008); F. P. Mongelli, "What Is European Economic and Monetary Union Telling Us About the Properties of Optimum Currency Areas?" *Journal of Common Market Studies* (v.43/3, 2005); Hanspeter K. Scheller, *The European Central Bank—History, Role and Functions*, 2nd ed. (European Central Bank, 2006); Emil Stavrev, "Growth and Inflation Dispersions in EMU: Reasons, the Role of Adjustment Channels, and Policy Implications," IMF Working Paper, WP/07/167 (International Monetary Fund, 2007); Malcolm Townsend, *The Euro and Economic and Monetary Union: An Historical, Institutional and Economic Description* (John Harper, 2007); C. Wyplosz, "European Monetary Union: the Dark Sides of a Major Success," *Economic Policy* (v.21/46, 2006).

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European Union

An international organization comprised of independent nations that share their sovereignty to be stronger and have a greater global influence, the European Union (EU) was created by the Maastricht Treaty (1992), and put into operation by 12 countries (Belgium, Denmark, France, the Federal Republic of Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom) on November 1, 1993. The purpose was to form a continent united by common institutions, progressively harmonize national economies, establish a greater common market, and gradually coordinate social policy.

Since its emergence, Austria, Finland, and Sweden (1995); Cyprus, Slovakia, Slovenia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, and the Czech Republic (2004); and Bulgaria and Romania (2007) have been incorporated into the EU. The 27 members have a total population of 495 million people and a land extension of 4.2 million sq. km.

European Institutions

Institutions are essential in the assumption of decision making in the European Union: These are the European Council, the Council of the European Union (CEU), the European Commission, the European Parliament (EP), the European Court of Justice (ECJ), and the European Court of Auditors (ECA).

The European Council was created to make official the meetings of heads of state that had previously been convoked irregularly. It convened for the first time in 1975 in Dublin. Meeting at least twice a year, it is formed by the heads of government of member countries, and attended by foreign affairs ministers. The state that currently holds the presidency of the CEU presides over the function.

The Maastricht Treaty was the initiator of the Union's first policies, which granted arbitration power in questions of conflict between ministers who cannot reach an agreement in the CEU. It also addresses pressing international problems through the Common Foreign and Security Policy (CFSP), which is designed to allow the EU to speak with one voice on diplomatic issues.

The Council of the European Union (CEU), the Ministers Council, pertains to the defense of the interests of member states. Council presidency is held by one of the member states for six-month terms, which grants an essential role in the organization of work in the institution and is a driving force in the legislative and political decision process. The assemblies are held in the CEU and attended by the member states' ministers responsible for issues to be addressed (for example, foreign affairs, finance, social issues, transportation, agriculture). It executes a legislative power, generally in codecision with the European Parliament to assure economic policy coordination of member states; define and put common foreign and security policy into practice; observe international accords in the name of the Union; coordinate state movement and adopt measures in the scope of police cooperation and penal matters; and constitute the authority that passes the Community budget.

The most customary procedure to approve decisions is by a qualified majority of the 27 member states, whereby each country, depending on its population, has a portion of the 345 total votes (2007). Any adopted decisions must be passed by a majority of the member states, and any state may solicit confirmation that the votes in favor represent at least 62 percent of the total population of the EU.

The European Commission represents and defends the interests of the EU, proposes legislation, policies, and proceedings programming, and is responsible for applying the decisions of the EP and the CEU. Since 2007 it has comprised of 27 members and 24,000 functionaries. The president is elected for five years by the governments of member states and he or she thereby elects his or her commissioner, who must be accepted as a whole by the Parliament. The Commission, with headquarters in Brussels and Luxembourg, is supported by an administration made up of 36 General Directorates. The president is in charge of delegating work to each commissioner. The Commission meets once a week to pass proposals.

The European Parliament

Since 1979, members of the European Parliament (EP) have been directly elected by the citizens of the EU. There are currently 785 members due to the entry of Bulgaria and Romania (2007), but this will be reduced to 732 in the 2009–14 legislature. The two most significant political groups are the European People's Party (Christian Democrats) and the Party of European Socialists. The Parliament's headquarters are in Strasbourg.

The EP has legislative, budgetary, and democratic checking powers. With respect to the legislative, it employs three procedures: "codecision" with the Council, which allows it to influence the orientation of European politics like the free circulation of workers, the interior market, research and development, culture, and health; "consultation" that submits international accords negotiated by the Commission to parliamentary approval, as well as future expansions of the EU; modification of functions and statutes of the European Central Bank (ECB), which implements objectives and organization of structural and cohesion funds; and "cooperation" for which the Parliament participates in community directives, essentially deciding what to propose in the Commission.

Since 1970 the EP has shared budgetary power with the Council. The European Commission prepares a preliminary budget that is elaborated by the Council and sent to the Parliament. In December, the Parliament either approves or rejects the Union budget. It also guards against public funds fraud. Finally, the EP exercises checks on the performance of the Commission, the Council of the European Union, and the European Council. Furthermore, it can create commissions to investigate possible infractions of community rights or cases of administration deficiencies of the institutions of the Union. Monthly plenary sessions take place in Strasbourg. The Parliament also functions in Belgium and Luxembourg, where the secretariat of the European Parliament has its installations.

The European Court of Justice

The European Court of Justice (ECJ), based in Luxembourg, was established by the Treaty of Paris in 1952. In early 2007 it was comprised of 27 judges, one for each member state, and eight attorneys general. This judicial body is in charge of guaranteeing community rights, interpreting treaties, and avoiding legal discrepancies from one state to the next. Created in 1989, the Court of First Instance oversees matters intervened by physical persons and cases of unfair competition practices between businesses. The decisions of the Court of First Instance (CFI) are appealable before the European Court of Justice.

The European Court of Auditors (ECA) was created in 1975. After the Treaty of Maastricht was put into effect, it was recognized as an institution. Its function consists of controlling the correct execution of the community budget, as well as being accountable to European citizens for the management of public funds of community authorities and member states.

This court is made up of members from each country of the EU who are designated by a qualified majority in the Council after consulting the EP. A member's term is six years and can be repeated.

Origins

After World War I (1914–18), Count R. Coudenhove-Kalergi (1894–1972) pushed the idea of a federation of the people of Europe (1924). Even before World War I, others had found commonalities among European countries and proposed systems designed to maintain peace and establish institutions that assured cooperation between them. But the most spectacular initiative was that of French minister Aristides Briand (1862–1932), who presented in 1929 a project for the League of Nations to create "a common market to maximally raise human well-being throughout the entire territory of the European Community." However, the economic crisis, Briand's death, and the victory of national-socialism in Germany ended the project.

At the conclusion of World War II (1939–45), the end of European hegemony was visible. The Yalta Conference (1945) had divided the continent into two blocs under the direction of the United States and the Soviet Union, which led to a new conflict: the Cold War. It was necessary to recover lost ground and impede future confrontations. That is why Europeans looked again to the ideas proposed by Winston Churchill (1874–1965) at the University of Zurich to advance the construction of "a type of United States of Europe" (1946).

Meanwhile, steps were being taking to reconstruct Europe. The United States launched the Marshall Plan (1947) as economic aid. To administer that aid, the Organization for European Economic Cooperation (OEEC) was created to liberalize trade, develop economic cooperation, and introduce ideas about monetary agreements (1948). The Marshall Plan resulted in being a great economic success as it enabled restoration of productive infrastructures in war-torn western Europe.

The Rome Treaty

France, the Federal Republic of Germany, Italy, Belgium, Luxembourg, and the Netherlands signed the Treaty of Paris in 1951, through which the European Coal and Steel Community (ECSC) was born in 1952. The initiative, shared by French politicians Jean Monnet (1888–1979) and Robert Schuman (1886–1963), tried to coordinate the production of coal and steel, fundamental instruments of war, by suppressing the restrictions on its entry and exit. New room for confidence was born for "a future European federation that assures peace keeping" that would put an end to Franco-German disputes over the resources of the Saar and Ruhr coalfields.

In parallel, in 1956, a report sent to the Council of Ministers of the ECSC proposed to complement itself with two new communities: one, for a common market and the other, for atomic energy. Signed by the six members of the ECSC in the Rome Treaty on March 25, 1957, the European Economic Community (EEC) and the European Atomic Energy Community (EURATOM) came to be. When the Rome Treaty was put into effect on January 1, 1958, it proposed as objectives the principles to

> promote, by means of the establishment of a common market and the progressive rapprochement of politics among member states, a harmonious development of economic activities in the whole of the Community, a continuous expansion and equilibrium, a growing stability, an accelerated rise in the standard of living and closer relations between the States that form the Community.

As each institution functioned with distinct components, the next step was to unify them through the Merger Treaty. On July 1, 1967, the EEC joined the ECSC and EURATOM with the Council of Ministers (CEU) and the European Commission. One of its fundamental contributions was the launching of the Common Agricultural Policy (CAP) in 1960, which was greatly needed since a fifth of the active population of the Community worked in agriculture. Prices were maintained by means of purchasing production surpluses, placing protective tariffs on importations from other countries and establishing a system of subsidies to improve agrarian structures and input costs. The European Agricultural Guarantee Fund (EAGF, 1962) executes these policies and absorbs a greater part of the Community budget (60 percent until 1989). As financial solidarity had been set out in the CAP, its cost has become a center of permanent dispute between member states.

The Rome Treaty achieved its objective. In 1968, it established a customs union that eliminated any type of restrictive duty and instituted the Common External Tariff (CET) for nonmember countries. This customs union facilitated economies of scale and improvements in competitiveness of businesses in the global market. Trade grew and converted the EEC into one of the first economic powers in the world.

The European Twelve

Meanwhile, Great Britain had founded the European Free Trade Association (EFTA) in 1959 as an alternative organization, which eventually failed. That is why, soon after, Great Britain requested entry into the EEC. However, the request was denied by General Charles De Gaulle (1963 and 1967), alleging it would put the French leadership in danger. The arrival to the presidency of the Republic of France by Georges Pompidou (1911–74) allowed the entry of Great Britain, Ireland, and Denmark in 1973. Thus began the journey of the "European Nine."

In 1981 Greece entered, resulting in the "European Ten." Shortly after in 1986, Spain and Portugal joined to make the "European Twelve." This enlargement generated difficulties, especially in terms of the CAP, since the new members brought such an agricultural weight. It was also necessary to adopt policies geared toward alleviating significant structural deficiencies and to reduce economic differences between the new members and countries of the north.

In February 1986, the "European Twelve" signed the Single European Act (SEA). After achieving the goal of a Common Market at the end of the 1960s, aspirations of a political union emerged. These were outlined over the following decade and during the presidency of Jacques Delors were materialized with the "White Paper" (1985). In 1987 all the member states ratified the SEA that guaranteed the free circulation of goods, services, capital, and people, and permitted the constitution of an authentic economic and monetary union. On December 31, 1992, free circulation was put into effect, and later the single market on January 1, 1993.

The SEA meant important advances in social policies, especially those referring to health and safety in the workplace, dialogue with social partners, and social and economic cohesion. In addition, it created Structural Funds to stimulate development in new member states and gave a base for common foreign policy.

At the end of the 1980s, the ECC had to address the fall of the Berlin Wall (1989), which allowed it to participate in the unification of Germany. On the other hand, beginning in 1991, problems began in the former Yugoslavia. NATO in 1995 tried to put an end to the war with selective bombing, and the signing of the Dayton Accords paralyzed the conflict in November of the same year. However, fighting resumed in 1998, and only from renewed bombing by NATO was the surrender of S. Milosevic (1941–2006) obtained in the summer of 1999.

The Maastricht Treaty and Beyond

The Maastricht Treaty (Netherlands), approved February 7, 1992, came into effect November 1, 1993. From then on, the European Economic Community was to be called the European Union, bestowing a more political dimension. The treaty, which extended all the previous agreements, constituted a new phase of relations between the nations of Europe. It established a structure based on "three pillars:" the European Communities, the Common Foreign and Security Policy (CFSP), and the Justice and Home Affairs (JHA). Newly added innovations recognized European Citizenship (right of abode, to vote, and candidacy in any country of the Community), ended the single market, and established the economy of the European Union.

Attempting monetary unification was not a new concept (the Belgium-Luxembourg Economic Union in 1921 is one example). In the context of the crisis of the 1970s, the European Monetary System (EMS) was established to create a monetary area in search of financial stability in the EEC. Due to its relative success, it was not until 1989 that Delors (1925–) presented a plan to carry out the Economic and Monetary Union (EMU). Ratified in the Maastricht Treaty (1992), soon after it established criteria that states had to comply with to participate, involving, for example, inflation, interest rates, budgetary deficits, public debt, and exchange rates. The euro as currency appeared in 1999, and since 2002 has been the single currency in the eurozone (except for the United Kingdom, Denmark, Sweden, and 10 new members). The European Central Bank (ECB), created in 1998, guarantees price stability and management of the euro.

The Maastricht Treaty also hoped to achieve economic and social cohesion among diverse regions. The establishment of the Cohesion Fund allowed financial resources to be transferred to less prosperous countries to improve infrastructures. On January 1, 1995, Austria, Sweden, and Finland were incorporated into the EU, resulting in the "European Fifteen."

The Treaty of Amsterdam took effect on May 1, 1999, to try to adapt European institutions to the Community that opened the accession of central and eastern Europe. Its main accomplishment was the ratification of the Stability and Growth Pact and the agreement to promote employment policies (18 million unemployed in 1997) financed by the European Investment Bank (EIB). Furthermore, it was agreed when the EU would increase the number of member states and that there would be only one commissioner from each country in the Commission. The final draft foresaw the establishment of a common foreign and security policy, and the naming of Javier Solana, former secretary general of NATO, as Mr. CFSP, which also made him secretary general of the Council of the European Union.

The Treaty of Nice, signed in 2001 and taking effect in 2003, tried to resolve questions about future enlargements that had remained pendant in Amsterdam. The composition of the Commission, weighting of votes in the Council, and the expansion of subjects to be passed by a qualified majority were addressed. Also, the effectiveness of the jurisdictional system was increased and the recourse for "enhanced cooperation" procedure was simplified.

Negotiations for the entry of new countries from central and eastern Europe, which were presented at the beginning of the 1990s, began in 1997. In 2004, the Czech Republic, Slovakia, Slovenia, Estonia, Hungary, Latvia, Lithuania, Poland, and the islands of Malta and Cyprus were admitted to the Union, forming part of the "European Union-25." Romania and Bulgaria were added in 2007 and subsequently comprise part of the "European Union-27."

The European Convention on the future of the EU that was presided over by Valéry Giscard d'Estaing, adjourned with the conclusion in 2003 that the creation of a constitution for the EU was necessary. The idea was that after the entry of 12 new states, internal cohesion had to be strengthened and the correct functioning of the supranational institutions guaranteed. That is why the treaty that established a Constitution for Europe was signed in October 2004. However, France and Holland did not obtain its approval by referendum in 2005 as six more countries canceled its confirmation. Hence, in June of 2007, the leaders of the EU agreed to work out a new Treaty for the Institutional Reform of the European Union before the end of 2007.

The flag of the European Union flying in Spain, one of the 27 member states in 2008.

The Treaty of Lisbon was signed by member states on December 13, 2007. The new treaty declared that a president would serve a two-and-half-year term, facilitated the functioning of the institution, recognized a legally binding Charter of Fundamental Rights, and intended to display a greater personality on the international level as the CFSP became the true community ministry of foreign affairs. Furthermore, it established a new weighting of votes that will permit, beginning in 2014, the approval of matters that must be passed by double majority (55 percent of member states and 65 percent of the population).

See Also: Austria; Belgium; Bulgaria; Candidate Countries; Common Agricultural Policy; Common External Tariff; Common Market; Cyprus; Czech Republic; Denmark; Economic Union; Estonia; Euro; European Bank for Reconstruction and Development; European Coal and Steel Community; European Monetary Union; France; Finland; Free Trade Zone; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; Maastricht Treaty; Monetary Union; Netherlands; Non-Tariff Barrier; Organisation for Economic Co-operation and Development; Poland; Portugal; Romania; Slovakia; Slovenia; Spain; Sweden; Trade Liberalization; Treaty of Rome; United Kingdom.

Bibliography. Alberto Alesina and Francesco Giavazzi, *The Future of Europe: Reform or Decline* (MIT Press, 2006); Ian Bache and George Stephen, *Politics in the European Union* (Oxford University Press, 2006); Eduardo Cuenca, *Economía de la Unión Europea* (Pearson Prentice Hall, 2007); Desmond Dinan, *Europe Recast: A History of European Union* (Palgrave Macmillan, 2004); A. M. El-Agraa, *The European Union: Economics and Policies* (Cambridge University Press, 2007); "Enlarging the European Union: Chicken or Kiev?" *Economist* (v.387/8582, 2008); Sten Erglund, Joakim Ekman, Henri Vogt, and Frank Aarebrot, *The Making of the European Union: Foundations, Institutions and Future Trend* (E. Elgar, 2006); Colin Hay and Anand Menon, *European Politics* (Oxford University Press, 2007); Simon Hix, *The Political System of the European Union* (Palgrave Macmillan, 2005); Patrick Holden, *In Search of Structural Power: EU Aid Policy as a Global Political Instrument* (Ashgate, 2008); John McCormick, *Understanding the European Union, Third Edition: A Concise Introduction* (Palgrave Macmillan, 2005); Larry Neal and Daniel Barbezat, *The Economics of the European Union and the Economies of Europe* (Oxford University Press, 1998); Brent F. Nelson and Alexander Stubb, *The European Union: Readings on the Theory and Practice of European Integration* (Palgrave Macmillan, 2003); Neill Nugent, *The Government and Politics of the European Union* (Duke University Press, 2006); "The European Union Europe's Mid-Life Crisis," *Economist* (v.8520, 2007).

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Exchange Rate

An exchange rate is the price of one national currency expressed in terms of another national currency. Put another way, the rate of exchange between two currencies, A and B, represents the amount of foreign currency B that can be obtained with one unit of domestic currency A (provided that such transactions are permitted).

International trade necessitates the exchange of currencies since producers will eventually require payment in terms of their national currency. It is for this reason that American producers require payment in dollars, Japanese producers in yen, British producers in pounds sterling, German producers in euros, and so on. Exchange rates and exchange rate markets satisfy this need for currencies and are therefore essential elements of the international-payment system that facilitates the trade of goods and services within the global marketplace.

The international economy has experienced a number of different exchange rate regimes that fall into two broad categories: fixed exchange rates and floating exchange rates. Under a system of fixed exchange rates, the monetary authorities will maintain the value of their currency, in relation to other currencies, at a specific, predetermined rate through the purchase or sale of foreign currency in the foreign exchange market. In contrast, a floating (or flexible) exchange rate refers to a system where the rate of exchange between two national currencies is determined by supply-and-demand forces in the foreign exchange market. There has been much debate regarding the relative merits of these two systems. Since the early 1970s, the major industrialized countries have operated a managed flexible rate system. Through this system, the monetary authorities of different countries do not establish a predetermined rate, but intervene in the foreign exchange market in order offset major, potentially destabilizing, exchange rate fluctuations.

Approaches to understanding the movement of flexible exchange rates have tended to focus on fundamental variables such as national price levels and interest rates. The influence of national price levels is reflected in the notion of purchasing power parity (PPP). This suggests that the rate of exchange between two currencies is equal to the ratio of the prevailing national price levels within these two countries. In other words, exchange rate movements are taken to reflect changes in the rate of inflation in the two countries. Although the relative purchasing power of currencies does serve to explain the trend of exchange rate movements if the inflation differential is large, empirical evidence has demonstrated that it is inadequate as a general model of exchange rate determination. A number of factors—such as speculative capital movements—may cause exchange rates to deviate dramatically from their PPP.

Monetary factors such as capital movements and interest rate differentials have also been seen to play important roles in exchange rate determination. Funds will be transferred from America to Japan, for example, if the rate of interest in Japan is higher than that in America. The influence of such factors becomes complicated, however, since capital movements also reflect expectations regarding future exchange rate movements. Currency volatility therefore arises from market participants continuously adjusting their portfolios in response to evolving short-term and long-term expectations regarding future exchange rate movements. It is for this reason that economics still lacks a complete theory of the forces that determine the rate of exchange.

Significant changes in the rates of exchange are defined as either currency depreciation or currency appreciation. Currency depreciation refers to a situation where an increased number of units of one nation's currency are required to purchase one unit of a foreign nation's currency. For example, an increase in the dollar value of sterling from $1.50 to $2 reflects a depreciation of the dollar. The opposite of currency depreciation is currency appreciation. In this situation, fewer units of a nation's currency are required to purchase of unit of a foreign nation's currency. Thus, a fall in the dollar value of sterling from $2 to $1.50 reflects an appreciation of the dollar (and, by definition, a depreciation in the sterling value of the dollar).

Within the foreign exchange market, the value of the currencies may be traded on a "spot" or "forward" basis. The "spot" rate refers to the rate prevailing in the market at the time the rate is quoted. The "forward" rate, as the title suggests, refers to the rate at which contracts are established to buy or sell foreign exchange at some specified future date, i.e., in three months' or six months' time. The obvious disadvantage of a freely floating exchange system is that changes in the rate of exchange between currencies can increase the uncertainty of business decisions and significantly alter the profitability of business transactions. Without the benefits of a fixed exchange rate system, the existence of forward exchange rates reduces business uncertainties. The difference between the spot rate and the forward rate is determined, in part, by the difference between domestic and foreign interest rates, together with market expectations regarding the extent of future appreciation or depreciation of the currency. This latter point suggests that it not always possible for a business to offset exchange risk through forward exchange transactions. For example, the forward value of a currency will be pushed below its spot value if there is a significant market expectation that its future value will fall.

See Also: Currency Exposure; Currency Speculators; Currency Zone; Devaluation; Exchange Rate Risk (or Currency Exposure); Exchange Rate Volatility; Fixed Exchange Rate; Flexible Exchange Rate Regime; Floating Exchange Rate; Foreign Exchange Market; Purchasing Power Parity.

Bibliography. Joshua Aizenman and Jaewoo Lee, *The Real Exchange Rate, Mercantilism and the Learning by Doing Externality* (National Bureau of Economic Research, 2008); Gianluca Benigno and Pierpaolo Benigno, "Exchange Rate Determination Under Interest Rate Rules," *Journal of International Money and Finance* (v.27/6, October 2008); K. M. Dominguez and L. L. Tesar, "Exchange Rate Exposure," *Journal Of International Economics* (v.68/1, 2006); Yuko Hashimoto, *Random Walk or Run: Market Microstructure Analysis of the Foreign Exchange Rate Movements Based on Conditional Probability* (National Bureau of Economic Research, 2008); Jaewoo Lee, *Exchange Rate Assessments: CGER Methodologies* (International Monetary Fund, 2008); Ronald MacDonald, *Exchange Rate Economics: Theories and Evidence* (Routledge, 2007); Maurice Obstfeld, Jay C. Shambaugh and Alan M. Taylor, *Financial Stability, the Trilemma, and International Reserves* (National Bureau of Economic Research, 2008).

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Exchange Rate Risk (or Currency Exposure)

Exchange rate risk refers to the risk of loss due to adverse movements in exchange rates. Currency exposure refers more broadly to the possibility that exchange rate changes will result in either a gain or a loss. These gains or losses can affect individuals, firms, or investors and reflect the impact of exchange rate changes on cash flows, on assets and liabilities, on profits, and on stock market values. Exchange rate risk is thus commonly divided into three categories, reflecting the nature of their financial impact: "transaction" (or contractual) risk, "translation" (or accounting) risk, and "economic" (or operating) risk.

Transaction (or contractual) risk arises when there is a time difference between the establishment of a transaction and its financial settlement. Any change in the exchange rate between the agreement and settlement dates will affect the value of the cash flows that are either received or paid. Many foreign exchange transactions arise from the import or export of goods or raw materials, from the payment of interest on foreign currency debt, and from the receipt of dividends on foreign investments.

Translation (or accounting) risk arises from the need to translate financial statements denominated in foreign currencies into the home currency of the reporting entity. The greater the percentage of business conducted by subsidiaries, the greater is the translation risk. In consolidating financial statements, the translation can be done using either the prevailing exchange rate or the average exchange rate over the reporting period, depending on the accounting standard applicable to the parent company. Thus, while income statements are usually translated at the average exchange rate over the period, balance sheet exposures of foreign subsidiaries are often translated at the prevailing exchange rate at the time of consolidation. Many companies apply International Accounting Standard 21, "The Effects of Changes in Foreign Exchange Rates," to translate the financial statements of foreign subsidiaries.

Economic (or operating) risk refers to the possibility that the present value of future operating cash flows, and thus the economic value of the firm, will vary in home currency terms as a result of changes in exchange rates. It measures the effect that unanticipated exchange rate changes have on firm value since expected changes should already be reflected in share prices.

Economic risk is similar to transaction risk in that both are concerned with cash flows. However, in the case of economic risk the timing and amount of the cash flows are uncertain; once a potential cash flow becomes a financial commitment, it no longer represents an economic risk but a transaction risk. The main determinants of economic risk are the structure of the markets in which a firm sells its products and sources its inputs, such as labor and raw materials, and also its ability to mitigate the effect of currency changes by adjusting its markets, its product mix, and its sourcing.

A widely used method of measuring transaction exchange risk is the calculation of value-at-risk (VaR). Broadly, VaR is defined as the maximum loss for a given currency position over a specified time horizon for a given confidence interval. For example, if a bank's U.S. dollar position has a one-day VaR of $10 million at the 99 percent confidence interval, it should expect the value of this position to decrease by no more than $10 million on 99 out of 100 trading days, if normal conditions prevail.

In theory, exchange rate risk is not a problem if purchasing power parity (PPP) exists because changes in exchange rates simply offset prior price-level changes. However, the evidence suggests that PPP only exists in the long run. Firms can mitigate exchange rate risk by entering into financial hedges using forward contracts or other derivative instruments. Such hedging may be unnecessary for shareholders holding diversified portfolios, as they may find that the negative effect of exchange rate changes on one firm is offset by gains on another. However, the exact nature of currency risk is not known to investors, so it may not be fully diversifiable. Even so, firms may actively manage currency risk to avoid the costs associated with financial distress. Although the findings of empirical studies are mixed, the bulk of the evidence suggests that exchange rate risk affects shareholder wealth, and thus that there is value in hedging.

See Also: Currency Exposure; Currency Speculators; Exchange Rate; Floating Exchange Rate; Forward Market; Financial Hedge; Purchasing Power Parity; Value at Risk.

Bibliography. Laurence S. Copeland, *Exchange Rates and International Finance* (Prentice Hall/Financial Times, 2008); Craig Doidge, John Griffin, and Rohan Williamson, "Measuring the Economic Importance of Exchange Rate Exposure," *Journal of Empirical Finance* (v.13/4, 2006); Maurice D. Levi, *International Finance* (Routledge, 2009); Aline Muller and Willem F. C. Verschoor, "Foreign Exchange Risk Exposure: Survey and Suggestions," *Journal of Multinational Financial Management* (2006); C. S. Tai, "Asymmetric Currency Exposure and Currency Risk Pricing," *International Review of Financial Analysis* (v.17/4, 2008).

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Exchange Rate Volatility

Exchange rate volatility is a measure of the fluctuations in an exchange rate. It can be measured on an hourly, daily, or annual basis. Based on the assumption that changes in an exchange rate follow a normal distribution, volatility provides an idea of how much the exchange rate can change within a given period. Volatility of an exchange rate, just like that of other financial assets, is usually calculated from the standard deviation of movements of exchange rates.

Two measures of volatility are commonly employed in financial calculations. Historical volatility is calculated from the past values of an exchange rate. Given a series of past daily exchange rates, we can calculate the standard deviation of the daily price changes and then the annual volatility of the exchange rate. Suppose the US$/€ exchange rate was observed to have the following daily closing prices over a 10-day period: 1.562, 1.5745, 1.5615, 1.575, 1.5665, 1.5615, 1.5722, 1.5734, 1.5601, 1.5623. Standard deviation of daily price changes turns out to be 0.006774, and given that there are about 252 trading days in a year, annual volatility turns out to be 0.10754 or about 10.8 percent (volatility = standard deviation * root of number of observations). This implies that, should the historical patterns continue, chances are (about 67 percent) that the exchange rate within the next year will be between 1.5623 + 10.8 percent and 1.5623 – 10.8 percent, that is, it will be somewhere between $1.73/€ and $1.39/€ at the end of one year. Historical volatility provides a good assessment of possible future changes when the financial markets and economies have not gone through structural changes.

Implied volatility is a forward-looking measure of volatility and is calculated from the market participants' estimates of what is likely to happen in the future. More precisely, implied volatility is estimated from the quoted price of a currency option when the values of all other determinants of the price of an option are known. The basis for this calculation is the Black-Scholes option pricing model, according to which the price of an option is determined by the following: the current price of the asset (the exchange rate or a stock or a commodity), the strike price at which the option can be exercised, the remaining time for the maturity of the option, the risk-free interest rate, and the volatility of the asset (or the exchange rate.) When the market participants are able to quote the price of a foreign currency option, it can be assumed that they are using their estimate of the volatility (the implied volatility) to arrive at the price. Since all the other elements that determine an option price are easily observed, current market price of an option on a currency allows the calculation of the implied volatility. These calculations are fairly complex and require at least an advanced calculator. Many institutions provide software that can calculate the volatility when all other parameters are known.

Exchange rate volatility, like the volatility of any other financial asset, changes in response to information. Currency traders are sensitive to information that might influence the value of one currency in terms of another. The most important information is that about the macroeconomic performance of the economies behind the two currencies. Changes in the levels of uncertainty about the future of either economy will cause traders to become restless and less willing to hold a particular currency. Uncertainty about the future is the most important reason for the change in the volatility in the currency markets.

Changes in the proportions of hedgers versus speculators can also change the volatility of a currency. Central banks can also influence the volatility of their currencies with their announcements of their intentions to either intervene or otherwise in the markets for their currencies. While it is commonly believed that central banks can influence the value of their currency at most in the short run, they can certainly cause a change in the volatility. It is market belief that the volatility of the dollar/euro rate increased in early June of 2008 when the Federal Reserve Bank chairman, Ben Bernanke, expressed his opinion that the falling dollar influenced the U.S. inflation rate. Participants took the comment to mean that the Federal Reserve was going to intervene in the markets to support the dollar even though Mr. Bernanke had been strictly noncommittal on that specific point.

See Also: Central Banks; Currency Exposure; Currency Speculators; Exchange Rate; Exchange Rate Risk (or Currency Exposure); Financial Hedge; Floating Exchange Rate; Forward Market; Interest Rates; Options; Value at Risk.

Bibliography. L. Bauwens, D. Rime, and G. Sucarrat, "Exchange Rate Volatility and the Mixture of Distribution

Hypothesis," *Empirical Economics* (v.30/4, 2006); C. Bravo-Ortega and J. di Giovanni, "Remoteness and Real Exchange Rate Volatility," *IMF Staff Papers* (v.53, 2006); J. Cady and J. Gonzalez-Garcia, "Exchange Rate Volatility and Reserves Transparency," *IMF Staff* (v.54/4, 2007); David A. Dubofsky and Thomas W. Miller Jr., *Derivatives: Valuation and Risk Management* (Oxford University Press, 2003); Emmanuel Farhi and Xavier Gabaix, *Rare Disasters and Exchange Rates* (National Bureau of Economic Research, 2008); Frank J. Fabozzi and Franco Modigliani, *Capital Markets: Institutions and Instruments* (Pearson Prentice Hall, 2009); Mathias Hoffmann and Peter Tillmann, *Integration of Financial Markets and National Price Levels: The Role of Exchange Rate Volatility* (Dt. Bundesbank, Press and Public Relations Division, 2008); Brian Kettell, *What Drives Currency Markets* (Prentice Hall, 2000).

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Ex-Factory (Ex-Works)

Ex-Factory, or Ex-Works (EXW), is an INCOTERM, one of the 13 international commercial terms used to describe the responsibilities of buyers and sellers in an international trade transaction. Standardized trade terms have a long history to which INCOTERMs are a relatively recent addition. These terms were originally deployed by the International Chamber of Commerce (ICC) in 1936, and have been frequently revised. INCOTERMs help buyers and sellers better understand their roles in terms of costs and risk assumption. As a result, they have reduced international disputes and served as a guide to arbitration of contract disputes. Customs and legal authorities worldwide recognize INCOTERMs.

The term *Ex-Works* actually appears as "Ex-Works … named place," where the named place might be the seller's factory. For this reason, many invoices still bear the term *Ex-factory*, which is a specific case of the INCOTERM Ex-Works. When the contract specifies EXW, it signifies that the delivery of merchandise occurs when the seller makes the goods available to the buyer at a named place, e.g., the seller's factory. Under EXW, the buyer bears nearly all of the responsibility and risk associated with the transportation, documentation, and customs clearing portions of the transaction.

Under Ex-Works rules, a seller has a limited set of responsibilities. The primary responsibility is to provide the goods at the specified time and location. Additionally, the seller must provide the buyer (at the buyer's cost) any required export documentation. For example, the buyer may require a certification that must be notarized or sealed in the seller's country. The seller can charge realistic expenses (for example, courier service for the documents); they do not, however, invoice for their time. The rules concerning export documentation are clear; while the expense of providing documentation falls to the buyer, the seller must take reasonable efforts to provide the buyer with documentation that is available in the seller's country (e.g., certificates of origin, pro forma invoices, etc.). It is the seller's responsibility to properly notify the buyer of the pick-up location and timing. Note that any delays in shipping due to improper notification creates liabilities to the seller. Lastly, the seller must comply with any special terms in the contract.

The buyer in an Ex-Works arrangement has significantly more responsibilities and risks than the seller. First, the buyer must arrange for payment for the goods; EXW accelerates the cash cycle as delivery occurs immediately. Further, the buyer must obtain any necessary export or import licenses. Additionally, the buyer is responsible for loading the goods for transportation abroad. From a risk perspective, the buyer takes all risks associated with the transport of the goods, assumes responsibility for clearing customs, and pays all insurance and transportation costs associated with the transaction. When purchasing with EXW terms, the buyer needs to develop estimates for transportation, insurance, documentation, and customs in order to estimate the landed-cost, the cost when the buyer finally receives the merchandise. The buyer under Ex-Works is also responsible to pay all duty and taxes. Any exceptions to the Ex-Works terms must be specified explicitly in the contract. For example, the buyer may wish the seller to load the goods onto a truck.

Beginning exporters often specify EXW for contract terms. This term does in fact reduce seller transaction complexity, transferring it and its associated risks to the buyer. Sellers who are more sophisticated recognize there are market opportunities by providing more of the services and assuming more of the risk. There are also third-party firms like freight forwarders, customs clearing houses, and insurance firms that can mitigate risk for the buyer.

See Also: Export; Freight Forwarder; Import; International Commercial Terms (INCOTERMS); Risk Management.

Bibliography. W. Corley, *INCOTERMS: Rules for Trade Logistics* (Export America, 2002); J. Foley, *The Global Entrepreneur*, 2nd ed. (Jamric Press, 2004); ICC, *INCOTERMS 2000: ICC Official Rules for the Interpretation of Trade Terms* (International Chamber of Commerce, 1999); J. Ramber, P. Rapatout, F. Reynolds, and C. Debattista, *ICC Guide to Incoterms 2000* (ICC, 2000); J. A. Zodl, *Export Import*, 3rd ed. (Better Way Books, 2002).

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Ex-Im Bank

The purpose of the Export-Import Bank of the United States (Ex-Im Bank) is "to assist in financing the export of U.S. goods and services to international markets." The Ex-Im Bank provides export financing solutions that fill gaps in trade financing arising when the private sector is unable or unwilling to assume credit and country risks. The Ex-Im Bank also provides export financing that is competitive with the official export financing support offered by other governments to support U.S. exports and the jobs they represent. The Ex-Im Bank provides pre-export financing, export credit insurance, loan guarantees, and direct buyer financing loans. Since its charter in 1945, the Ex-Im Bank has supported more than $400 billion of U.S. exports in over 150 markets, mostly going to developing markets. Congress has mandated that the Ex-Im Bank's financing is conditioned on not competing with the private sector and a reasonable assurance of repayment.

The Export-Import Bank of the United States was chartered under the Export Import Bank Act of 1945 (12 U.S.C. 635) as amended through Public Law 109-438 on December 20, 2006, and other relevant provisions updated on December 27, 2006. The Ex-Im Bank is an independent executive agency and a wholly owned U.S. government corporation. Congress periodically reauthorizes the Ex-Im Bank, as it did in 2006, extending its authority until September 30, 2011.

The Ex-Im Bank's headquarters are in Washington, D.C., supported by seven regional offices around the country. The Ex-Im Bank is structured around 12 functional areas: the Board of Directors, the Office of the President, the Credit and Risk Management Group, the Export Finance Group, the Small Business Group, the Office of the General Counsel, the Office of the Chief Financial Officer, the Office of Policy and Planning, the Office of Resource Management, the Office of Communications, the Office of Congressional Affairs, and the Office of the Inspector General.

The Ex-Im Bank reports under U.S. generally accepted accounting practices applicable to federal agencies with form and content guidance provided by the Office of Management and Budget Circular A-136. The Ex-Im Bank reports its relative efficiency and effectiveness in an annual report to the U.S. Congress on Export Credit Competition, and in the Export-Import Bank of America competitiveness report. It compares its performance to the other G-7 export credit agencies in terms of policy coverage, interest rates, exposure fee rates, and risk premiums. Additionally, the U.S. Congress established an advisory committee to help the Ex-Im Bank gain additional insight from various sectors of the economy and to review Ex-Im Bank policies and programs with respect to competitiveness. The Advisory Committee holds quarterly meetings.

The Ex-Im Bank has two strategic goals. The first strategic goal is to facilitate U.S. exports and their associated jobs, which represent over 11 percent of the U.S. gross domestic product. The second strategic goal is to facilitate U.S. exports by small businesses. The Ex-Im Bank's charter requires than no less than 20 percent of the exports it finances be direct exports by small business concerns (as defined in section 3 of the Small Business Act). In addition to its strategic goals, the Ex-Im Bank is pursuing an initiative targeting sub-Saharan Africa as a priority region for its efforts in support of the African Growth and Opportunity Act. The Ex-Im Bank has identified the top 12 African markets for U.S. exports and is establishing a foundation for credit underwriting and transactions analysis by African financial institutions, as well as promoting the Ex-Im Bank's products, methods, and standards.

In fiscal year 2007, the Ex-Im Bank approved 2,793 authorizations in the form of either guarantees or export credit insurance amounting to $12,569.4 million in support of exports with an estimated value of $16.041 billion. For fiscal year 2007, the Ex-Im Bank authorized 26.7 percent of its funding in support of direct small business exports.

The Ex-Im Bank's exposure at the end of fiscal year 2007 was approximately $57,424.5 million. The Ex-Im Bank's exposure in terms of economic sectors is as follows: the air transportation sector, 44.5 percent; oil and gas, 12.3 percent; manufacturing, 7.7 percent; power projects, 7.1 percent; and all other sectors, 28.4 percent of its total exposure. The Ex-Im Bank's exposure in terms of geographic location is as follows: Asia, 29.2 percent; Latin America, 21.9 percent; Europe/Canada, 19.3 percent; Africa/Middle East, 13.5 percent; and all other locations, 16.1 percent of its total exposure.

Although normally the Ex-Im Bank denominates its financings in U.S. dollars, it does guarantee notes in certain other foreign currencies. Its total foreign currency exposure of $8,207 million represents approximately 14.3 percent of its total exposure. The bank classifies its credits into 11 categories (1 being the least risky) and maintains an overall risk rating of 4.00 on new authorizations. Over the past five years, the Ex-Im Bank has shifted its portfolio of borrowers toward private-sector borrowers (58 percent) from sovereign or public-sector borrowers.

See Also: Export; Export Assistance Program; Export Financing; Export-Oriented Development; Export Subsidy; Import.

Bibliography. *Export-Import Bank of the United States Annual Report 2007*, www.exim.gov (cited March 2009); *U.S. Export-Import Bank Handbook* (International Business Publications, 2007); J. Wormell, "William H. Becker and William M. Mcclenahan, Jr., The Market, the State, and the Export-Import Bank of the United States," *Business History* (v.47/1, 2005).

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Expatriate

Expatriates are a distinct form of cross-cultural traveler, principally characterized by the duration and purpose of their presence in the host country. An expatriate can be defined as an individual who lives temporarily outside their home country in order to undertake a specific job, project, or assignment. This distinguishes them in particular from tourists, who generally travel for a short period of time to engage in leisure activities, and immigrants who intend to remain in a host country indefinitely. This entry focuses on expatriation in a business context, where it is evident that expatriates are used for a variety of purposes including sales, technology transfer, control of business units, and coordination and integration. The following discussion examines selected issues associated with the management of expatriate staff, including selection, cross-cultural training, and cross-cultural adjustment.

In an increasingly international environment, there are a growing number of opportunities for people to travel to other countries. Naturally, such travel is undertaken for a variety of reasons and for different durations. Consequently, it is possible to distinguish between four different types of cross-cultural traveler: tourists, sojourners, refugees, and immigrants. Tourists travel for leisure purposes, usually for a relatively short period of time. Sojourners travel for a longer, but finite, period of time in order to undertake some form of work or educational activity. Refugees' travel is involuntary, and the duration of their time in the host country can vary widely, although they typically intend to return home as soon as conditions allow. Immigrants travel in order to establish a new life, and intend to remain in the host country indefinitely.

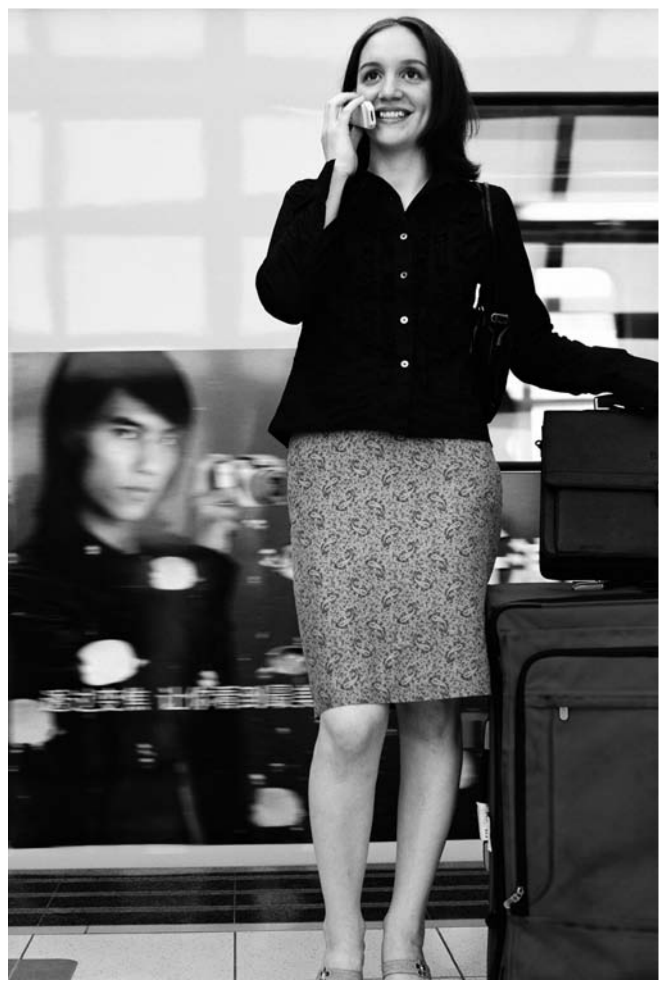
Through common usage, the term *expatriate* usually refers specifically to sojourns undertaken in an organizational context. Expatriates, then, live in a host country for an extended, but finite, period of time in order to fulfill a specific work assignment and are therefore distinguished from other categories of cross-cultural traveler by the purpose and duration of their presence in the host country.

Businesses use expatriates for a variety of reasons. The stages in a company's internationalization enable us to identify different approaches to the use of expatriate staff. With a domestic company, expatriates are used on an ad hoc basis. Visits to other countries will often be quite short, and may be used to reward staff. Individuals are unlikely to be carefully selected, although professional skills and company knowledge must be considered important attributes. It is unlikely that cross-cultural training will be provided. As a company develops its international presence, expatriate assignments begin to increase in frequency and importance. Candidates are again selected on professional competence, but adjustment and language skills are also considered. At this stage expatriates are used for sales roles, to transfer technology, or to exert control. Nevertheless, cross-cultural training is likely to be rather limited.

When a company becomes multinational, the frequency of expatriate assignments may decrease as host-country nationals are appointed to management posts as a result of their local knowledge. Allied to this, the value placed on international experience increases, and therefore expatriates are likely to undertake multiple postings. The desire to build the skills of the individual means that cross-cultural training is likely to be more comprehensive at this stage. As a company becomes global, the emphasis is on integration and coordination between business units, with expatriates being used to facilitate this. High-performing individuals are selected based on professional competence and cross-cultural capabilities. These individuals are likely to receive ongoing cross-cultural training and support in order that they can interact effectively with host nationals.

Using expatriates is expensive, some claim up to $1 million per year per expatriate, and sending organizations are therefore concerned with minimizing the risk of failure. The traditional view of expatriate failure is of premature return to the home country. However, an inability to adjust effectively to the host culture can result in poor job performance without the individual returning home early. This can be especially damaging for the sending organization, with effects including sub-optimal productivity and damage to client relations and organizational reputation. As a result, sending organizations are well advised to apply comprehensive selection and cross-cultural training processes in order to mitigate against the risk of failure.

Early approaches to expatriate selection were based on technical competence, whereby it was believed that the key to international success was an ability to perform a specific job role effectively. However, technical competence is not associated with effective cross-cultural adjustment, and is therefore best considered as a prerequisite for continuation of the selection process. Another approach has been to rely upon previous international experience, based on the argument that the individual has proven themselves capable of operating effectively overseas. This criterion continues to be widely used, and indeed there is evidence to suggest that longer overseas experience is linked to more effective cross-cultural adjustment. More recent approaches focus on personality traits on the basis that certain traits can be associated with an ability to adjust effectively to the host culture. For example, studies have linked higher levels of extroversion, agreeableness, and emotional stability with a desire to stay in post. Similarly, studies have found evidence that



While expatriate employees can be essential when a business begins expanding abroad, costs could run to $1 million each.

problem-focused coping strategies, a learning-focused goal orientation, and higher levels of self-efficacy are associated with more effective adjustment.

Regardless of the selection criteria employed, it is generally agreed that some form of cross-cultural training should be provided. Cross-cultural training aims to facilitate effective adjustment by developing the necessary skills and by creating accurate pre-departure expectations. Content-based models distinguish between information-, awareness-, and skills-based training inputs. Information-based training is the most commonly provided form of cross-cultural training. It tends to take place before departure, and principally aims to support anticipatory adjustment by creating accurate pre-departure expectations. Information is typically provided through written documents, lectures, and audio-visual materials, covering issues related to the job role and host country contexts. Awareness-based training often takes place before departure, and seeks to personalize the host culture by exposing trainees to various scenarios through the use of a cultural assimilator. Through this mechanism, trainees are able to rehearse culturally appropriate behaviors in a safe and controlled environment.

While information- and awareness-based training is specific to the host culture, skills-based training focuses on transferable adjustment skills. This training is more likely to take place in the host country during an orientation period, as it relies upon interaction with host nationals, using behavior modeling, video playback, and role play to develop the skills necessary to engage in culturally-appropriate behaviors.

Upon entering the host country, cross-cultural adjustment becomes a key issue. One model distinguishes between psychological and socio-cultural components of adjustment. Psychological adjustment has an internal focus and is rooted in the concepts of stress and coping. Socio-cultural adjustment has an external focus based on the ability to interact effectively with host nationals. In addition to personality traits, various factors have been associated with more effective adjustment including lower levels of host culture contact and limited cultural distance between home and host cultures.

See Also: Acculturation; Culture Shock; Ethnocentric Human Resource Policy; Home Country; Host Country; Parent Country National; Third Country National.

Bibliography. "Expatriate Taxation—America's Berlin Wall," *Economist* (v.387/8584, 2008); "Expatriate Workers and Taxes: The Tithes That Bind," *Economist* (v.8483/12, June 24, 2006); Michael M. Harris, *Handbook of Research in International Human Resource Management* (Lawrence Erlbaum Associates, 2007); Anne-Wil Harzing and Joris Van Ruysseveldt, eds., *International Human Resource Management,* 2nd ed. (Sage, 2005); Roger Herod, *Expatriate Compensation: A Balance Sheet Approach* (Society for Human Resource Management, 2008); Jonathan Reuvid, *The Corporate Guide to Expatriate Employment: An Employer's Guide to Deploying and Managing Internationally Mobile Staff* (Kogan Page, 2008); Coleen Ward, Stephen Bochner, and Adrian Furnham, *The Psychology of Culture Shock,* 2nd ed. (Routledge, 2001).

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Export

Export is a process in which products are shipped or sent from one country to another country for the purpose of trade or sale; it is the opposite of import. For example, Company A located in the United States sells and sends its products from the United States to Company B located in Germany; in this case, Company A is said to export its products, whereas Company B is said to import (buy from another country) the products of Company A.

Export is not restricted to only physical goods; services can also be exported. Examples of service exports are travel and tourism; transportation; architectural, construction, and engineering services; education and training services; banking, financial, and insurance services; entertainment; information services; and professional business services. Services are more difficult to communicate with consumers and require adaptation to the specific needs of customers. Export and import are important components of international business, as the two together compose international trade. Export is actually is a very popular and relatively easy way to expand into foreign markets. Therefore, it is an important element of global business.

Export has many advantages. Through export, companies can increase their sales and profit margin as the sales price can be higher in foreign countries. As production volume increases in line with export demand, companies are able to decrease their unit cost. Export also provides a kind of spreading of risk, since the exporting company will not anymore depend on only its domestic market; dependence on a single country can be risky in case of an economic or political crisis. Export also decreases the cost of foreign expansion.

However, export also has various disadvantages. As the exporting company does not have physical existence in the foreign market, its knowledge about the foreign market is limited. Therefore, it can miss potential opportunities in the foreign market. Export is also very susceptible to trade barriers and if these barriers increase, companies may have to cancel their export activities. Another fact is that companies themselves do not have power to influence these trade barriers, some of which are tariffs and quotas.

Internationalization

Companies internationalize their operations through different ways (called entry modes) such as sending their goods to other countries (export), establishing sales offices in foreign countries, giving production permission to foreign companies (licensing), partnering with foreign companies (joint venture), acquiring a foreign company, and establishing production and sales facilities from scratch in a foreign country (greenfield investment).

Export does not require much expense and knowledge of the foreign market as much as other entry modes do. Therefore, export is one of the simplest and the least risky ways of internationalization and is usually preferred by small and medium-sized enterprises. The production of the goods generally takes place in the exporter company's country (called domestic market or country); however, marketing, distribution, and customer service activities take place in the foreign country to which the goods are shipped.

Success Factors

There are various issues companies need to consider to be successful in their export activities. First of all, the management needs to have a firm and long-term commitment toward export. Export should not be thought of a daily activity because it requires long-term planning and focus. Second, not every product sold in the domestic market can be sold in other markets. Therefore, companies need to first assess whether their products have potential in foreign markets. Similarity in needs, tastes, preferences, and conditions between the domestic market and the foreign market may be an indication of sales potential in the foreign market. When the products of a company have unique features not available in foreign markets, then this may also indicate the sales potential of the product in foreign markets. Third, demand characteristics also play important roles; the demand for a particular product may be low in the domestic market but very high in a foreign market. In this situation, the product may also have sales potential in the foreign market.

Finding out the sales potential for products in foreign markets may not mean much unless the company is ready for export. As the export operations require additional resources and commitments, companies need to determine whether they are able to commit the required resources for export and whether export operations are in line with the company goals. If the company is ready for export, then a thorough export plan should be made, including the products to be exported and product modifications, if any, export pricing, target market characteristics, and resources necessary for export.

In addition, export requires shipment of products to foreign countries. Therefore, managing logistics in export is an important success factor because the competitiveness of price is also affected by the cost and effectiveness of shipping. In this regard, the parties in the whole logistics process need to be managed well under close and long-term relationship with an understanding of shared goals and mutual benefits.

Companies differ in terms of how they plan and implement their export activities. Some companies use a systematic approach to exporting whereas others do not. The more experienced managers utilize a systematic approach in order to increase the likelihood of success in their export. Such a systematic approach involves assessing global market opportunities, organizing export activities, acquiring needed skills and competencies, and implementing the export strategy.

Types of Exports

As to the organization and implementation of export activities, companies have different approaches classified as indirect and direct exporting. In indirect exporting, some companies buy products from producers in their own domestic market and then export these products. In this case, there is no risk for the producer as its buyer is also a domestic company, which then takes risks and exports the product.

In another form of indirect exporting, some companies export their product through intermediaries. In this approach, the domestic company uses another company that can construct relationships with foreign buyers; export management companies, export trading companies, international trade consultants, export agents, merchants, and remarketers are examples of such intermediary firms. Small and medium-sized enterprises with no or little knowledge about foreign markets often prefer this type of export, and as they gain more knowledge about foreign markets and construct closer relationships with foreign companies, they can switch to direct exporting.

In direct exporting, the producer directly sells or exports the products to the foreign buyer. This type of exporting is the riskiest since the exporter assumes all responsibilities; however, it is the best approach to get highest profits and long-term growth.

Export Pricing

Pricing the products to be exported is a difficult task because companies need to be price competitive and at the same time consider many factors affecting the price. Of course, the export price, like pricing of any product, should be determined so that the company gains profit. There are internal and external factors affecting the export price. The cost of the product is the major factor that is internal to the firm. Other major factors internal to the firm are market search, credit checks, travel expenses, product adaptation, different packaging, transportation, and commissions. The choice of distribution system also has impact on the price; long distribution channels increase costs, lowering profit margins. If products require adaptation or modification, this also adds costs, as the companies need to change their existing production system. However, such modified or differentiated products offer companies opportunities to increase prices.

Some factors external to companies in their export price-setting are supply and demand, location, and environment of the foreign market, such as climatic conditions, exchange rate fluctuations, and governmental interventions and regulations. If there are many factors affecting the price in a market at the same time, then adoption of a single export-pricing (called ethnocentric pricing) is difficult.

Another fact is that a particular product in a country may not be at same product life stage as in other countries. Companies generally charge high prices at the introduction and growth stages. Therefore, if the product is at the introduction or growth stage in the export destination, export price can be high. In most cases, export price is determined according to local conditions (called polycentric pricing) such as demand and supply, competition, and the market price level in the foreign market.

With respect to export pricing, there are various trade and shipping terms that explain who bears various costs associated with the transportation of export products. Ex-Works (EXW) means that the price covers only the sales price of products and the buyer assumes all the responsibility and cost of transportation when the products are ready at the seller's factory. That means that the buyer needs to come to the seller's factory and get the products.

Free carrier (FCA) means that the price covers the sales price of products and the costs associated with loading the products into a transportation means determined by the buyer; the rest belongs to the buyer. Free alongside ship (FAS) means that the price covers the sales price of products and the costs associated with carrying the products to the port and unloading and warehousing them. Free on board vessel (FOB) means that the price covers the sales price of products and costs associated with carrying products to the vessel and loading them into the vessel. Cost and freight (CF) means that the price covers the price of products and costs associated with all transportation; when the seller includes the insurance in the sales price as well, then cost and freight (CF) becomes cost, insurance, and freight (CIF).

Export Payments

There are various conventional methods of getting paid in export: Cash in advance, letter of credit, open account, consignment, and countertrade are payment methods. In the cash in advance method, the payment is received before the products are sent to buyers and in this case the exporter does not need to worry about the payment. However, buyers in this case may have worries as to their cash flow and timing of the shipment because they already paid for the products and if there are delays in the shipment, their sales or production will be delayed too. Therefore, since it creates some pressure in export, the cash in advance method is not a popular method of payment.

As the most commonly used method in export payment, the letter of credit is a kind of agreement between the banks of buyers (importers) and sellers (exporters) that guarantees the payment from the buyer to the seller when the export shipment is obtained. The open account method of payment involves payment from the buyer on account at some time in the future; in this method, the buyer needs to be credible.

In the consignment method of payment, the seller sends the products to an intermediary firm in the foreign country and this intermediary sells the products on behalf of the exporter. However, this method is not appropriate if the seller does not have a good and trustworthy intermediary. The last payment method is countertrade, in which the payment is actually made through other products instead of money.

See Also: Countertrade; Direct Export; Economic Development; Entry Mode; Ex-Factory; Ex-Im Bank; Export Assistance Program; Export Financing; Export Management Company; Export-Oriented Development; Export Processing Zone; Export Subsidy; Export Trading Company; Freight Forwarder; Import; Indirect Export; International Commercial Terms (INCOTERMS); Internationalization Model; Letter of Credit; Trade Balance.

Bibliography. R. Adams and T. Adams, *Start Your Own Import/Export Business: Your Step-by-Step Guide to Success* (Entrepreneur Press, 2003); A. Branch, *Export Practice and Management* (Thomson, 2000); S. T. Cavusgil, G. Knight, and J. R. Riesenberger, *International Business, Strategy, Management, and the New Realities* (Prentice Hall, 2008); T. A. Cook, *The Ultimate Guide to Export Management* (Amacom, 2001); Michael R. Czinkota, *International Business* (Wiley, 2009); Belay Seyoum, *Export-Import Theory, Practices, and Procedures* (Routledge, 2009); C. A. Solberg, *Relationship Between Exporters and Their Foreign Sales and Marketing Intermediaries* (Elsevier, 2006); Unz & Co., "Basic Guide to Exporting," www.unzco.com (cited March 2009).

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Export Assistance Program

National governments have a vested interest in a high export quota. Not only do exports allow for the accumulation of foreign exchange reserves, exports also increase employment levels, improve productivity, and foster overall prosperity. At the same time, governments recognize the formal trade barriers and the practical challenges that companies, especially small and medium-sized ones, face in global markets. Therefore, governments, semi-government institutions, associations and other nonprofit organizations, banks, and other institutions offer support mechanisms in the form of export assistance programs or, as they are sometimes also called, export marketing programs, export promotion programs, or trade promotion programs. While the overall aim of all export assistance programs is to raise firms' competitiveness abroad, the detailed measures taken and instruments applied may vary greatly from country to country.

The support national government export assistance programs offer falls into one of five categories: (1) awareness-building and stimulation of interest, (2) acquisition and distribution of information, (3) training and capacity building, (4) consulting, advice and coaching, and (5) financial assistance. In the area of awareness-building, the basic challenge is that in most national economies, only a small fraction of all firms is actively engaged in exports. Export assistance programs try to increase the share of exporting firms through public-awareness campaigns, media reports, seminars, or conferences.

As far as acquisition and distribution of information is concerned, export assistance programs aim to help identify information needs. They fulfill them through the use of databases or through staff at their own offices abroad. The type of information needed can be very diverse. It stretches from general market information or country risk ratings to complex market data to detailed legal questions. Training and capacity building are of utmost importance to exporting companies. The services of export assistance programs in this area range from simple handbooks to seminars and workshops to whole programs on exporting.

The range of services in the consulting, advice, and coaching category includes simple and practical advice for export beginners as well as more complex tasks such as the organization of trade missions, participations in trade shows, the collection of outstanding bills, or the registration of trademarks. These services are often provided by staff at the export assistance program's head office in the home market or by foreign trade offices abroad. While such foreign trade offices are integrated into embassies in some countries, they are independent in other countries. Financial support services, e.g., in the form of export credit insurance, export loans, or export guarantees, are often provided by national governments or specialized banks affiliated with governments, e.g., export-import banks.

Export assistance programs not only have to be permissible under the anti-subsidy rules of the World Trade Organization (WTO), they also must function efficiently. Various measures have been used in order to test the effectiveness of export assistance programs. Depending on methodology, instruments, countries, and the institutional environment, the results are mixed. They show everything from clearly negative to highly positive correlations between export assistance programs and export success.

With changes in the international business environment, national export assistance programs are also being reinvented. As international trade is becoming ever more important, the future will bring export assistance programs that have been redesigned for new target groups, offering new services through new channels of information and distribution.

Most national providers of export assistance programs are members of the World Conference of Trade Promotion Organizations.

See Also: Economic Development; Ex-Im Bank; Export; Export Financing; Export-Oriented Development; Export Subsidy; Trade Barriers; World Trade Organization.

Bibliography. S. Tamer Cavusgil and Michael R. Czinkota, *International Perspectives on Trade Promotion and Assistance* (Quorum Books, 1990); Michael R. Czinkota, "Export Promotion: A Framework for Finding Opportunity in Change," *Thunderbird International Business Review* (v.44/3, 2002); Michael R. Czinkota, "Why National Export Promotion," *International Trade Forum* (v.2, 1996); "Do Trade Promotion Organizations Boost Exports?" *International Trade Forum* (v.1, 2005); F. H. Rolf Seringhaus and Philip J. Rosson, *Export Development and Promotion: The Role of Public Organizations* (Kluwer Academic Publishing, 1991); F. H. Rolf Seringhaus and Philip J. Rosson, *Government Export Promotion: A Global Perspective* (Routledge, 1989); Timothy Wilkinson and Lance Eliot Brouthers, "An Evaluation of State Sponsored Promotion Programs," *Journal of Business Research* (v.47, 2000); Timothy Wilkinson and Lance Eliot Brouthers, "Trade Promotion and SME Export Performance," *International Business Review* (v.15, 2006).

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Export Financing

In today's business, competition in all export transactions takes place not only in the fields of product quality and pricing, but also in attractive payment terms offered by the exporter to the foreign buyer. Extending credit to foreign customers can be seen as a crucial means of enhancing export competitiveness. Export financing is made up of a set of different instruments and techniques to grant delayed payment for the goods or services sold to the importer. Based on the credit period, the relevant export finance tool-kit divides into short-term export financing and medium/long-term export financing.

Short-term export financing refers to payment periods or loans with a duration of up to 12 months; in some cases the period is extended to 18 months, although no generally accepted strict dividing-line exists between short-term and medium/long-term export financing. The terms of payment stipulated in the export contract are crucial for all export financing activities. For international transactions, the four primary options, ranked from (1) very secure to (4) most risky from the exporter's perspective, are (1) cash-in-advance, (2) letters of credit, (3) documentary collections, and (4) open account.

Some of these instruments, such as letters of credit, include coverage against the risk of nonpayment or default by the foreign importer. In other cases, such as the open account-option, additional export insurance or guarantees are needed to maintain a secure export transaction. The term *trade finance* is alternatively used as a blanket term for the whole range of financial instruments provided by commercial banks to facilitate international transactions in goods and services.

In the case of export sales with an open account payment condition, export factoring is a further option. Factoring firms usually buy the exporter's entire book of foreign trade receivables and pay out the relevant amount, deducting a discount. In a similar manner based on a transfer of title, forfaiting is used if the exporter sells promissory notes signed by the foreign buyer. Many forfaiters are ready to include political risks in discounting the promissory notes and to buy longer-term accounts receivable at deeper discounts.

The main purpose of medium/long-term export financing is to finance sales of capital goods with payment periods from one to five years (medium-term export financing), and even longer in the case of plant construction, infrastructure projects, and development activities. The applicable financial instruments can be differentiated into three approaches:

1. Traditional export financing is structured as a supplier credit scheme. In the export contract the supplier extends credit to the foreign customer, usually by negotiating a down-payment and a series of installments, and then asks for a supplier credit at his commercial bank. In this case, the seller is in charge of all problems caused by nonpayment of the importer because both contracts—the export contract with the importer and the loan contract with his bank—are clearly separated. Therefore the exporter is well advised to buy insurance coverage against the various potential risks of the export transaction. Often, hedging all of these risks may be a pre-condition to receiving a loan from a commercial bank.
2. In a quite different approach, the commercial bank negotiates the credit contract directly with the foreign importer, usually upon recommendation of the exporter. In a so-called buyer credit, the exporter is paid immediately by the commercial bank from the loan proceeds as soon as the exporter has duly fulfilled the export contract. From the exporter's point of view, the entire deal is transformed into a cash transaction in which the bank assumes all of the risk connected with the deal.
3. In specific cases of cash-generating projects, international project financing technique is applied. In structuring the financial flows of a large construction project, loan agreements are closed between banks and a special purpose project company that owns all project assets and controls all cash-outflows from the operating earnings of the specific project. Examples include infrastructure projects such as toll motorways, toll bridges, or power plants frequently structured as a BOT contract (i.e., build, operate, transfer). A comparable result can be achieved by including countertrade in the export financing options: in product buy-back transactions, payment for the construction of a plant is (partly) effected by delivering goods produced by this plant to the exporter.

Government assistance programs and national export credit agencies (ECAs) providing guarantee programs and loans, especially to small and medium-sized exporters, are another significant issue in the field of long-term export financing. These play a particularly important role in the case of political and economic instability in the buyer's country. If the buyer is located in a developing country, multilateral development banks provide funding to firms in the private sector for investing in private projects in developing countries.

When working with the different techniques and structures presented in this article as the typical building blocks of export financing, and when using them to finance a particular international transaction, one will see that there is only a low degree of standardization in different operations. Each individual deal is characterized by its own specific requirements stemming from the business partner or from their country, from the credit period or from the contract details. In most cases, a customized approach is required to arrive at a solution for the financial aspects of the transaction that is acceptable for all participants. This flexibility is the real challenge in successful export financing.

See Also: Countertrade; Ex-Im Bank; Export; Export Assistance Program; Letter of Credit; Risk.

Bibliography. R. Barovick, "Outsourcing Export Financing," *World Trade* (v.16, 2003); International Trade Centre

UNCTAD/WTO, *Finance for Trade* (International Trade Centre UNCTAD/WTO, 2006); United States, *Foreign Operations, Export Financing, and Related Programs Appropriations Bill, 2007: Report Together with Additional Views (to Accompany H.R. 5522)* (U.S. G.P.O., 2006)

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Export Management Company

Export management companies (EMCs) act for contracting organizations as outsourced international trade intermediaries for products or services in overseas markets, usually in lieu of an in-house export or international marketing department. Offering full-service export assistance, EMCs can vary in size, scope, geographic areas of operations, and level of specific technical or product expertise. EMCs handle all aspects and details of the export process, including documentation, regulations, distribution, and sales, and are usually paid on a commission or performance basis. Normally representing an organization's products or product line on an exclusive basis, EMCs work overseas with their own appointed networks of exclusive dealers, distributors, and export representatives in specific target markets.

EMCs operate in two forms: as exclusive distributors who take title (ownership), control, and responsibility of a good or service being exported, or as a sales representative or agent with no title, limited control, and responsibility, and subsequent minimized risk for these products. In this second approach, ownership of the good or service remains with the contracted organization or manufacturer (principal). EMCs are usually liable for all fixed costs associated with an export operation, including internal and external staff and overseas representatives, international travel, and communications. Most EMCs do not maintain their own overseas representative offices, warehousing, distribution, sales, or service subsidiaries, but many maintain strategic alliances with similar companies in selected target markets.

As distributors, EMCs normally operate under a "buy-sell" arrangement and receive specific price discounts from client organizations from which they derive their incomes from. As agents, EMCs usually work on a commission-on-sales basis. Commission rates can vary dramatically from EMC to EMC depending upon the relative competitiveness of a client organization's products in particular markets and the capabilities, capacity, and associated exports of the EMC. Historically, the commission rate has been approximately 10 percent for consumer goods and around 12–15 percent for industrial products. With the rise of services exports, and in the bio-technology, information, communications, and technology exports, commission rates can vary and are normally a function of the price of the product calculated against the relative difficulty of its marketing over time.

In addition to overseas sales and marketing, EMCs can also provide other services to organizations, including participation—on the principal's behalf—in overseas trade shows, conducting of in-market research, localization of product specifications and product adaptation, and lobbying of governmental and regulatory entities.

Technology, communications, and the globalization of trade influence the roles and function of EMCs. Most recently, developments in information and communication technology have closed the gap between domestic and international marketing by making the process of contact and communication with overseas clients easier, and "DIY" exporting more feasible and effective. This is having an effect on the number of organizations that use EMCs, some of whom are countering this trend by offering online export facilitation services and internet-based expertise services themselves.

Aside from a performance-based incentive process and associated motivations, benefits for organizations utilizing EMCs are that they can rapidly acquire a "ready made" export sales and distribution entity that has market and channel access and expertise. This translates to an immediate market presence. Organizations have, subsequently, the potential to shorten the time it takes to evaluate and access a specific target market, and can streamline the target market selection process. EMCs can often dramatically speed up export licensing and regulatory approvals and, if selected for the "distributor" role, can minimize the risk of exporting to an organization by assuming foreign credit risk and the managing of complex and diverse international credit, collections, and nonpayment.

Alternatively, by maintaining an outsourced entity for export development, an organization may not be maximizing the financial benefit of international trade, and can limit the development of internal export expertise, contacts, and sales networks. Most EMCs are smaller firms and have limited financial capacity and internal resource capabilities. Subsequently, economic imperatives can focus their efforts on products or markets that have a higher potential for near-term returns, rather than putting resources behind activities that represent a more strategic export opportunity for the principal. Finally, by using an EMC, an exporting organization can find that it has relinquished control of their product, organization name, and reputation in the export market.

See Also: Distribution; Electronic Commerce; Entry Mode; Export Trading Company; International Division Structure.

Bibliography. Australian Institute of Export, *Export Handbook,* 19th ed. (Australian Institute of Export, 2008); Richard Barovick and Patricia Anderson, "EMCs/ETCs: What They Are, How They Work—Export Management Companies, Export Trading Companies," *Business America* (July 13, 1992); John W. Cadogan, Sanna Sundqvist, Risto T. Salminen, and Kaisu Puumalainen, "Market-Oriented Behavior: Comparing Service with Product Exporters," *European Journal of Marketing* (v.36/9–10, 2002); Thomas A. Cook, *The Ultimate Guide to Export Management* (AMACOM, 2001); Export Trading Company Affairs, U.S. Department of Commerce International Trade Administration, www.ita.doc.gov (cited March 2009); Carl A. Nelson, *Exporting: A Manager's Guide to the World Market* (International Thomson Business, 1999); Justin Paul and Rajiv Aserkar, *Export Import Management* (Oxford University Press, 2008).

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Export-Oriented Development

Export-oriented development was a set of market driven prescriptions based on the policies followed by high-growth developing countries. Their adoption in developing countries was driven by a need to overcome the failures caused by inward-oriented, state-driven industrial policies. Performance of export-led development has been mixed, leading to criticism and the proposal of alternative routes to development based on the creation of sustainable societies.

Industrial policy is defined as an intervention or policy by government that attempts to alter the local sectoral structure of production toward sectors that are expected to achieve higher levels of economic growth. These interventions can be direct, in the form of grants, or indirect, in the form of tariffs, trade restriction, and exchange rate management. Historically, these policies have been used by developing countries in an attempt to move from low to high income status and have been the subject of a significant amount of research to determine successful paths to development.

Prior to World War II, world trade was determined by comparative advantage, with each country producing and exporting the items that they could create competitively. Countries such as those in Western Europe and the United States focused on the production of manufactured goods as they possessed the skills and technology, exporting these goods to developing countries. Nonindustrialized countries specialized in the production of commodities or raw materials, most of which were transformed into finished products by firms in developed countries. During World War II, however, industrialized countries shifted production to military goods, leaving developing countries with shortages of consumer goods. Immediately after World War II, prices of the commodities that the developing countries traded for manufactured goods began falling, meaning that developing countries had to spend more of the foreign exchange they earned from commodity production to import manufactured goods.

As a result of these forces, many low- and middle-income countries began ambitious programs after World War II to move from commodity producers to manufactured-goods exporters. The intent was to promote local industries to produce substitutes for goods that were imported in order to conserve foreign exchange and promote self-sufficiency. Targets were set for industrial investment and output growth, many of which attempted to change composition of industrial output from simple goods requiring little processing to complex manufactured items. Less developed countries' governments employed three major policy tools in the attempt to guide industrial development within the domestic market—direct public investment in enterprises, licensing of private industrial activities, and the establishment of development banks.

The state became the dominant actor in local markets, producing goods directly and regulating the production of other items. The intention was to overcome local limitations by providing the tools required for large-scale industry: modern facilities, the ability to create new products, and distribution capabilities. To help these industries develop, the newly formed industries or infant industries were protected and supported. Protection took the form of tariffs, import quotas, and exchange rate controls to provide a cost advantage to local producers. Industries also were supported through licensing schemes to reduce the cost of capital goods acquisition and low cost loans.

Under these policies, Latin America improved rapidly from 1950 to 1970, with the major economies experiencing sustained growth rates of over 5 percent. Growth ended with global financial liberalization in the 1970s following the breakdown of the Bretton Woods system resulting in increased debt, inflation, and stalled growth during the 1980s in Latin America. Import substitution brought several problems. Heavy protection and subsidy promoted inefficient industries, with customers in these countries forced to pay higher prices than imports for locally produced products. The expected employment benefits in terms of higher-skilled jobs did not materialize, and in many countries the employment situation deteriorated. In many cases, imports actually increased, as infant industries brought in foreign capital goods and paid out royalties to obtain licenses for foreign technology.

While import substitution was failing in Latin America and elsewhere, Japan began its phenomenal sustained growth after World War II, followed by South Korea, Taiwan, Hong Kong, and Singapore. International agencies took notice and began prescribing the practices of these countries to developing countries, encouraging them to shift from state-led to market-led development. Some of these policy lessons were summarized in the form of the "Washington Consensus," a listing of policy prescriptions created by economist John Williamson in 1989.

Generally, governments were encouraged to pursue macroeconomic stability, reduce the role of the state in the local economy and open their markets to international competition in exchange for market access from other countries. Increased international competition would force inefficient local industries to close or upgrade to improve productivity. Opening of financial and product markets would encourage foreign investment, bringing new technology. Finally, increased market access to developed countries would boost exports of locally produced items. The combination of these factors would boost domestic income and increase economic growth.

Criticism

Variations on these policy prescriptions became the dominant development ideology in the 1990s, implemented by countries in Latin America, Asia, and Africa in their pursuit of increased growth. However, many countries did not achieve the promise of high growth and the Asian financial crisis of the late 1990s opened the export-led model to criticism. As the Asian crisis demonstrated, financial liberalization can cause rapid outflows as well as inflows of capital, crippling economies.

The overwhelming focus on exports led to several additional problems. Many developing countries entered the same markets for manufactured goods, resulting in overcapacity and price competition. Income from these exports was therefore reduced as prices were lower than predicted. Some developing countries were willing to reduce the standards of worker and environmental protection to attract foreign investment, with potential long-term damage from environmental degradation. Multinational firms generally tended to make investments with mature or low-skill technology, retaining intellectual property development in developed countries. As such, the promised technological gains were never realized and local industry remained underdeveloped. Developing countries were also vulnerable to volatility in their export markets; slowdown in demand would reduce sales of their exports.

Recently, economists have used the above and other arguments to propose a broader-based view of development. In this perspective, development should take a long-term view and focus on improving the living standards of people in a sustainable manner while being sensitive to local conditions. Countries should also focus on improving the local institutional framework so that they are better able to monitor and control development. The idea is to move away from a series of rigid policy prescriptions to a range of instruments that can be selected to improve local performance in specific economic and social contexts.

See Also: Asian Financial Crisis; Bretton Woods Accord; Comparative Advantage; Economic Development; Export Assistance Program; Import Substitution; Infant Industry Argument; Japan; Latin America; Less Industrialized Countries; State-Owned Enterprises; Sustainable Development.

Bibliography. K. Dervis and J. Page, "Industrial Policy In Developing Countries," *Journal of Comparative Economics* (v.8, 1984); Philipp Fink, *Purchased Development: The Irish Republic's Export Oriented Development Strategy* (Lit, 2004); C. Gore, "The Rise and Fall of the Washington Consensus as a Paradigm for Developing Countries," *World Development* (v.28/5, 2000); P. Sarkar and H. Singer, "Manufactured Exports of Developing Countries and their Terms of Trade since 1965," *World Development* (v.19, 1991); Anjum Siddiqui, *India and South Asia: Economic Developments in the Age of Globalization* (M.E. Sharpe, 2007); J. Williamson, "The Washington Consensus Revisited," in *Economic and Social Development into the XXI Century* by L. Emmerij (Inter-American Development Bank, distributed by Johsn Hopkins University Press, 1997); X. Wang, F. Gao, and J. Qu, "Thought about Development of Export-oriented Economy," *Issues in Agricultural Economy* (v.23/270, 2002); Tatsufumi Yamagata, *The Garment Industry in Cambodia: Its Role in Poverty Reduction Through Export-Oriented Development* (Institute of Developing Economies, 2006).

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Export Processing Zones

Export processing zones (EPZs) are specific geographic locations, physical sites, business premises, buildings and/or assigned localities that have special tax, tariff, or investment incentives and customs (duty) regimes in order to promote export-oriented industry and transactions. Traditionally, EPZs include locations that house special economic zones, free trade zones, free ports, custom zones, commercial free zones, and bonded facilities/warehouses. Not exclusively limited to a specified geographic area or fenced enclave, EPZs can also include single-company, single-industry, or single-commodity zones, as well as technology/science parks, logistics centers, specific areas dedicated to agriculture, aquaculture, and horticulture, and, in some instances, even tourist resorts and passenger transport vessels.

EPZs were originally established with the intention of supporting developing countries by providing enhanced employment opportunities and increased access to foreign capital. EPZs initially segregated the concentration of expertise in the higher economically developed countries to the more technical/scientific areas, while the less economically developed countries focused on more labor-intensive areas. EPZs are often found in jurisdictions where there are geographic or logistic advantages, or where production inputs are comparatively inexpensive—such as labor, raw materials, energy, or physical space—and/or where tax or tariff incentives and existing regulatory environment are favorable for investment. Activities that can take place within EPZs include the manufacture of goods and services, production, processing, assembling, trading, repair, reconditioning, reengineering, and/or packaging/re-packing/labeling of export products or services.

EPZs usually offer infrastructure of a higher standard than that available in a respective domestic economy. Electronics, textiles, clothing, and footwear were the popular industries initially established in EPZs; however, the product and service mix today can include almost any sector and can transform over time as a respective country's economic, industrial, and social development changes. With the increase in traded services export and the proliferation of technical and scientific expertise export, EPZs around the world are counting in greater numbers zones concentrating on biotechnology, financial services, information technology, and information/electronic data processing.

An EPZ, depending upon the country, legislative environment, existing free trade agreements, and relevant jurisdictions, can be established by the public, private, joint sector, or by local, state, or national governments. Initially established by governments, there is a growing trend toward the development of EPZs by private organizations, which tend to offer higher-quality facilities. Firms located in EPZs can usually access, procure, or import duty-free goods from external sources, or from other EPZs, as long as the final product or service is exported. Incentives are provided for the purpose of the eventual export of a good or service. Incentives vary country to country and zone to zone, but can range from tax holidays, duty-free export and import, staff training and employment subsidies, and free repatriation of profits to the provision of facilities, infrastructure, and exemptions from local labor laws. To qualify for incentives, there are normally criteria imposed such as level of investment, industry or industry sector, local content inputs, or levels of local employment.

EPZs are generally viewed today as a competitive method to attract both foreign investment and increase local employment opportunities. In Asia, cities like Hong Kong and Singapore have established themselves as both regional export gateways as well as significant global transshipment centers through the provision of special customs regimes for export processing and transshipment. In North America, one particular permutation of the EPZ has been seen on the Mexican side of the U.S.-Mexico border, where *maquiladoras* have emerged as a convenient method for North American firms to access the comparatively cheaper labor and energy costs of neighboring Mexico. A maquiladora or maquila is a production facility, normally bonded premises, that imports materials and equipment on a duty-free and tariff-free basis for either manufacturing or final assembly, and then reexports the finished or assembled product. A maquiladora facility is often matched by a “twin” production plant or logistics center across the border.

The history of EPZs goes back to the earliest days of cross-border trade, where special areas were often set aside for the barter and exchange of goods, and were often regulated by customs, practices, rules, and laws that were separate from the surrounding area. In more modern times, the establishment of the first export-oriented zone occurred in Spain in 1929. However, it was not until the 1970s that the EPZ concept gained true global popularity with zones established, initially, in the developing economic regions and nations of Asia, Latin America, the Caribbean, and Africa. Since the 1970s, the number and type of EPZs, and the number of hosting countries, have expanded rapidly, and are becoming increasingly popular in former Soviet bloc countries in eastern and central Europe.

EPZs can be viewed as a positive or negative outcome of globalization. On one side of the argument, the development of EPZs can be seen as a way to attract foreign investment, increase exports, support comparatively rapid economic development, and enhance a country’s strategic trading role. On the negative side, EPZs can be perceived as exclusive sites and sources of human, resource, and environmental exploitation that offer limited direct benefit to a country or its people.

See Also: Bonded Warehouse; Duty; Economic Development; Export; Export-Oriented Development; Facilities Location Decision; Free Trade; Free Trade Area of the Americas; Free Trade Zone; Globalization; Maquiladora; Tariff.

Bibliography. Magnus Blomstrom and Ari Kokko, “The Economics of Foreign Direct Investment Incentives,” NBER Working Papers 9489 (National Bureau of Economic Research, 2003); Nathalie Bouché, *Social Impact Assessment (SIA) of Koh Kong Industrial/Export Processing Zone Project* (UNDP Cambodia, 2005); International Labor Organization, “Export Processing Zones,” www.ilo.org (cited March 2009); M. S. Kariuki and N. J. Smith, “Are Export Processing Zone (EPZ) Employers Gender Sensitive? An Analysis of Gender Employer–Employee Labour Relations in Kenyan Garment EPZs,” *Journal of Social Development* (v.16, 2004); William Milberg, “Exporting Processing Zones, Industrial Upgrading and Economic Development: A Survey,” SCEPA Working Papers 2007-10 (Schwartz Center for Economic Policy Analysis, New School University, 2007); R. V. Sannassee, “Employment Creation and Skill Diffusion by Multinationals and Foreign Joint Ventures in the Mauritian Export Processing Zone,” *Journal-Textile Institute* (v.98/2, 2007); Peter G. Warr, “Export Processing Zones—The Economics of Enclave Manufacturing,” Working Papers in Trade and Development, No. 88/5 (Research School of Pacific Studies, Australian National University, 1988); World Economic Processing Zones Association, www.wepza.org (cited March 2009); Salma Chaudhuri Zohir, *Role of Dhaka Export Processing Zone: Employment and Empowerment* (BIDS, 2008).

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Export Subsidies

Export subsidies are attempts by a government to interfere with the free flow of exports. They are payments to a firm or individual for shipping a good abroad. Similar to taxes, export subsidies can be specific (a fixed sum per unit) or ad valorem (a proportion of the value exported). Around the world, the export industry most frequently subsidized is agriculture.

The stated reasoning for export subsidies varies depending upon the product and industry, but proponents frequently invoke the notion of self-sufficiency or national security concerns. When effective, export subsidies reduce the price of goods for foreign importers and cause domestic consumers to pay relatively higher prices. They thus distort the pattern of trade away from production based on comparative advantage and, like tariffs and quotas, disrupt equilibrium trade flows and reduce world economic welfare.

In 2007, for example, the second-largest exporter of sugar was the European Union (EU), in large part because of EU sugar subsidies. Conversely, Mozambique sugar farmers have a difficult time competing in world sugar markets despite their lower production costs because the EU subsidies artificially lower the world price of sugar. In this way, export subsidies often disrupt and impede economic development in less developed countries. In addition, export subsidies can often lead individuals and countries to engage in legislative actions in order to mitigate the impact of export subsidies on them. These activities can include anti-dumping legislation, retaliatory tariffs, and non-tariff barriers to entry. While these activities can sometimes mitigate the negative impact of a subsidy on a particular group of individuals, the expenditure of resources in response to a previous intervention generally does not increase overall economic welfare as the resources employed to mitigate the subsidy's effect could have been used elsewhere in the economy.

Export subsidies have been a subject of discussion and controversy in recent years. The United States and European Community, for example, have had a number of disagreements and failed negotiations revolving around the issue of agricultural export subsidies. Europe's Common Agricultural Policy (CAP) has evolved into a large export subsidy program that harms most European consumers and taxpayers. In 2002, subsidies to European Union farmers were 36 percent of total farm output and twice as high as American farm subsidies. Together with nongovernmental organizations such as Oxfam, the United States has pushed for European agricultural reform in the interests of helping those harmed by the subsidies, but each step is met with threats of retaliatory protectionism by Europe. In addition to constant agricultural challenges, U.S. textile manufacturers often claim that export subsidies on east Asian textiles place them at an "unfair" disadvantage.

Like Europe and east Asia, the United States has used export subsidies to the advantage of some industries. For example, every U.S. citizen pays approximately $13 per year to support cotton production in the United States. These subsidies to cotton producers encourage additional production beyond the scale of the original

The United States has fought export subsidies, but each U.S. citizen still pays about $13 a year toward U.S. cotton subsidies.

market for cotton, thereby creating surpluses. To eliminate the surpluses, the government then subsidizes agribusiness and manufacturers who buy cotton from the United States. In many cases, therefore, the final result of export subsidies are large-scale interventions into an industry, where producers of both raw materials and final consumer goods are being supported. Examples similar to the U.S. cotton industry can be found in nearly every country around the world.

While export subsidies remain a controversial and unresolved issue of international trade, there have been recent calls for the elimination of subsidies. Article XVI of the General Agreement on Tariffs and Treaties (GATT), for example, states,

> If any contracting party grants or maintains any subsidy, including any form of income or price support … it shall notify the contracting parties in writing of the extent and nature of the subsidization, of the estimated effect of the subsidization on the quantity of the affected product or products imported into or exported from its territory and of the circumstances making subsidization necessary.

More recently, the Doha Round of World Trade Organization (WTO) negotiations discussed the possibility of eliminating agricultural subsidies altogether, and, at the Hong Kong Meeting in December 2005, member countries agreed to abolish all agricultural export subsidies by 2013.

While there is momentum building for reductions in export subsidies and greater integration, strong political opposition to reform remains the biggest roadblock. Farming lobbies around the world remain well organized and powerful, and politicians face strong disincentives to engage in agricultural reform. As a result, export subsidies will continue to be a challenging issue in future trade deals.

See Also: Ad Valorem Duties; Banana Wars; Dumping; Duty; Doha Round; Subsidies; Tariff; Trade Liberalization.

Bibliography. H. Adachi and N. Suzuki, "Measuring the Export Subsidy Equivalents in Food Exporting Countries," *Science Bulletin-Faculty of Agriculture Kyushu University* (v.61, 2006); R. Feenstra and A. Taylor, *International Economics* (Worth, 2008); M. Frith, "Bitter Harvest: How EU Sugar Subsidies Devastate Africa, *The Independent* (June 22, 2005); M. Helling, S. Beaulier, and J. Hall, "High Cotton: Why the United States Should No Longer Provide Agricultural Subsidies to Cotton Farmers," *Economic Affairs* (2008); T. Kikuchi and J. Lee, "Export Subsidy Revisited: Implication for Strategic Trade Policy," *Kobe University Economic Review* (v.52, 2006); P. Krugman and M. Obstfeld, *International Economics: Theory and Policy* (Addison-Wesley, 2006); Y. T. Wang, "Product Differentiation and the Export Subsidy Dispute," *Applied Economics Letters* (v.13/14, 2006).

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Export Trading Company

An export trading company (ETC) is a business entity engaged in export trade. It provides export-related services for industries or other economic operators aiming at selling products in foreign markets. An export trading company may warehouse, ship, and insure goods; in addition, it can supply customers with market information. An export trading company can be simply a commercial intermediary or also take title to the product and export for its own account. A special type of export trading company are those organized and operated by producers. These ETCs are structured along multiple- or single-industry lines and can represent producers of competing products. The role of ETCs in world trade is particularly relevant as in a high variety of cases the services of a specialized commercial intermediary reduce the costs of commercial transactions for both buyers and sellers.

In general, ETCs tend to specialize by products in order to better meet the needs of their domestic customers. However, there are also certain types of ETCs that organize themselves and their activities according to the needs of the host countries; in other words, they specialize in countries rather than in products. The patterns of development of the export trading companies may follow rather different trajectories, and greatly vary from country to country. Such diversity is mostly due to the origin of the export trading company as a form of commercial organization that was created and evolved as a response to the needs that each country had in organizing, and handling foreign trade, especially export trade. Conditions and needs of the domestic market, therefore, influenced the development and structure of ETCs. Different legal frameworks (company law), however, are also responsible for the diversity in the organizational structure of ETCs. In the United States, for instance, ETCs operate in accordance with the Export Trading Company Act enacted in 1982. In the same year, also, U.S. banks were permitted to own and operate export trading companies under the Bank Export Services Act.

In functioning as a provider of a wide range of export-related services, an export trading company operates as a bridgehead facilitating trading relations across countries. The origins of the export trading company can be traced back to the early modern period. The direct predecessors of present-day ETCs were the chartered trading companies of the 16th and 17th centuries, such as the British East India Company (EIC) and the Dutch East India Company (Vereenigde Oost-Indische Compagnie or VOC), just to name the most important ones. Organized as joint-stock companies, these trading companies received a royal charter that allowed them to trade in several products, usually spices, silk, and other luxury goods, between their mother countries and India and Asia as monopolies. The trading companies of the early modern period broadened the commercial horizons of European trade, and opened new areas for economic and commercial interaction in extra-European regions.

More recently Japan has offered one of the most interesting and altogether successful examples of export trading companies. The Sogo Shosha, vertically integrated trading companies, have been an efficient tool to serve the Japanese export trade. The specificity of the Japanese export trading companies lies in the close links they established with industries. Conceived as a device to favor the exportation and sale of certain categories of Japanese products, the Sogo Shosha are highly integrated with the industries they serve. In some remarkable cases they originated from the very same industry with which they were expected to cooperate. Mitsui is a case in point. The organization typical to these Japanese trading companies is usually not permitted in the United States or in Europe because of antitrust laws.

The term *export trading company* is frequently used as a synonym for *export management company* (EMC), with which it is also often confused. An export managing company, however, is a different business entity that acts as the export department for one or several producers of goods or services. It can solicit and transact business in the names of the producers it represents or in its own name for a commission, a salary, or a retainer plus commission.

See Also: Antitrust Laws; Company Profiles: East Asia; Company Profiles: Western Europe; Export; Export Management Company; Import; Japan; Mitsui.

Bibliography. P. L. Davies, *Introduction to Company Law* (Oxford University Press, 2002); International Chamber of Commerce, *Guide to Export-Import Basics: Vital Knowledge for Trading Internationally* (ICC, 2008); Charles A. Jones, *International Business in the Nineteenth Century: The Rise and Fall of a Cosmopolitan Bourgeoisie* (New York University Press, 1987); M. C. Levenstein and V. Y. Suslow, "The Economic Impact of the U.S. Export Trading Company Act," *Antitrust Law Journal* (v.74/2, 2007); Justin Paul and Rajiv Aserkar, *Export Import Management* (Oxford University Press, 2008); Ralf Peters, *Roadblock to Reform: The Persistence of Agricultural Export Subsidies* (United Nations, 2006); G. Seer and M. I. Smolka-Day, *Introduction to International Business Law: Legal Transactions in a Global Economy* (Oceana, 1996); M. Y. Yoshinoy and B. L. Thomas, *The Invisible Link: Japan's Sogo Shosha and the Organization of Trade* (MIT Press, 1986).

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Expropriation

Expropriation is a broad term. In Canada, it is analogous to the principle of eminent domain: A government or body empowered by that government expropriates property when it takes it from a private owner without consent and without consent being required; it does this as directed or allowed by an applicable law, it is not punitive, it compensates the owner, and the owner has the right to seek additional compensation if he or she feels entitled to it, which may include expenses beyond the value of the property incurred by the act of expropriation. In much of the world, however, the word is associated with communism's call for the seizure of land and industry by the socialist state, a politically motivated seizure that seeks to improve or restore social justice and the common good.

In the communist sense, expropriation is related to communist land reform, wherein there is little or no private property, and everything is owned collectively by the people and administered by the state (and those it empowers). Because communism cannot be introduced in a vacuum—that is, some other system exists wherever it is adopted—this circumstance can only be created by taking private property from its owners by one means or another, whether through purchase (as in small-scale communes) or expropriation. Sometimes this expropriation leads to redistribution—a sort of Robin Hood approach, presuming we consider the owners to be "the rich"—while in other cases the land is used for collective farms and the like. Quite often there is no compensation.

One historical example of that style of expropriation is the 1917 Decree on Land issued by the Second Congress of Soviets in the aftermath of the October Revolution. This decree, written by Vladimir Lenin, declared that the peasants had seized the lands of the nobility and the church, along with all associated livestock, buildings, et cetera, and that such lands would be put at the disposal of the volost land committees. Leon Trotsky, Lenin's second in command and the founder of the Red Army, was adamant that there would be no compensation for such expropriation; it is worth pointing out that Russia did not have a long history of private property, and so most lands were held by the nobles or the church. As the Soviets further organized in their early years, this decree and others were superseded by the 1922 Land Code, which collated and refined Soviet land law and the regulation of those land committees.

Expropriation is one of the risks involved when businesses buy or invest in land and other properties in other countries. During times of upheaval or revolution, foreign-held lands and buildings may be expropriated with only a token amount of money given as compensation; this may sometimes be politically motivated, especially in countries where the population is unhappy with foreign business activities on their soil. It may merely be politically convenient, since seizing foreign lands poses less risk of alienating a potential constituency than seizing domestic lands would, and revolutions do need to come by their funding somehow. Treaties between nations often prohibit these expropriations or require proper and fair compensation (generally without the means of appeal offered in Canadian expropriation); while revolutionaries staging a coup may not feel they are obligated to uphold older treaties, it is often in their interest to do so, to encourage foreign powers to treat the revolution as a domestic matter that does not require their intervention.

There are other times when a business or its lands may be expropriated with just cause, when a foreign business is operating without consideration for local concerns, and other attempts at redress have failed.

See Also: Centralization; Common Agricultural Policy; Communism; Compensation for Expropriated Property; Indirect Foreign Direct Investment; Risk.

Bibliography. Gregory S. Alexander, *The Global Debate Over Constitutional Property: Lessons for American Takings Jurisprudence* (University of Chicago Press, 2006); Eduardo Engel, *Optimal Resources Extraction Contracts Under Threat of Expropriation* (Economic Growth Center, Yale, 2008); M. Faccio and D. Stolin, "Expropriation Versus Proportional Sharing in Corporate Acquisitions," *Journal of Business* (v.79/3, 2006); Orlando Figes, *A People's Tragedy* (Pimlico, 1997); M. Giannetti and A. Simonov, "Which Investors Fear Expropriation? Evidence from Investors' Portfolio Choices," *Journal of Finance* (v.61/3, 2006); Kaj Hobér, *Investment Arbitration in Eastern Europe: In Search of a Definition of Expropriation* (JurisNet, 2007); Richard Pipes, *Property and Freedom* (Alfred A. Knopf, 1999); T. Sevelka, "Expropriation Claims for Increased Development Costs and Loss of Profit," *Appraisal Journal* (v.73/4, 2005).

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External Debt

External debt, in its most general sense, denotes a payment obligation in which the debtor (entity that obtained resources) and the creditor (entity that supplied the resources) are separate and in essence distinct units. The offshoot of this perspective is that creating or terminating the debt generates a corresponding change in aggregate wealth or resources on the part of both units involved in the transaction.

The entities involved can be corporations, individuals, or countries. For corporations, the debt would then be referred to as corporate debt. Debts always entail a liability that has to be eventually paid back on agreed terms. In the case of relatively small businesses, debt is usually in the form of loans or lines of credit obtained from banks.

Corporate Debt

With respect to relatively large corporations, a major portion of debt takes the form of financial instruments, usually bonds of one form or another. Bonds are borrowing arrangements whereby an issuer or borrower sells an IOU to an investor or lender. By this arrangement, the issuer is obligated to make stated payments to the bondholder on specific dates. A coupon bond obligates its issuer to make fixed nominal payments called coupon payments over the life of the bond. In addition, the issuer pays the lender the bond's face value at the time of expiration (maturity date). The coupon rate then is the coupon payment expressed as a percent of the bond's par value. The terms of the issue, including the coupon rate, par value, the maturity date, and any other legal rights and responsibilities of the issuer and the holder are spelled out in a contract, called an indenture. Sometimes coupon payments are set to zero so that the buyer pays a price below the par value to get a return equal to the price difference when principal is repaid at maturity in the amount of the bond's face value.

Usually firms issue four types of corporate debt, namely debentures, notes, mortgage bonds, and asset-backed bonds. Notes in this context are generally bond issues whereby all obligations are due less than 10 years from the date of issue. A more common maturity for corporate bonds is 20 to 30 years.

Debentures, like notes, are not secured by any specific pledge of property. They do, however, have claim to the issuer's property and earnings because they share the claim of general creditors on all assets owned by the issuer but not specifically pledged to secured debt elsewhere. They also have a claim on pledged assets whenever such assets exceed what is needed to satisfy secured lenders.

Secured debt is that whereby particular assets are pledged as collateral so that investors in bonds have direct claim to the assets given bankruptcy. This type of debt is also referred to as asset-backed bonds. Mortgage bonds are an example of asset-backed bonds secured by real property. The process of raising capital through debt financing is analogous to the initial public offering (IPO) for stocks.

Country Debt

When the entities involved include countries, external debt is defined as the outstanding amount of actual, current, and noncontingent payments of principal and interest by the debtor country that are owed to nonresidents by the residents of the borrower country. The liability has to exist and be outstanding. It is important to establish whether the creditor actually owns a claim on the debtor. The debt liabilities in this case are created through provision of economic value, i.e., financial and nonfinancial assets including goods, services, or transfers by one institutional entity, the creditor to another unit, the debtor, usually under some contractual arrangement. Liabilities can also accrue in this type of borrowing, from legal action such as when taxes, penalties, or judicial awards are imposed by force of law. Liabilities from external debt at the country level also include arrears of principal and interest charges.

Where commitments are made for provision of economic value at a future date, corresponding debt liabilities are not established unless services are rendered, items change ownership or some form of income accrues to the borrower. For example, the components of an agreed loan arrangement that have yet to be disbursed to the beneficiary or export credit commitments not utilized are not part of a country's gross external debt position.

The country-level definition of external debt makes no distinction between required principal payments and interest payments. As a result, interest-free loans are treated as debt instruments even though no interest is paid. Perpetual bonds are likewise considered debt instruments although principal is not repaid on them. The form of payment can be deposits of funds or provision of goods and services. Here future obligations to make payments, rather than the form of payments, determine whether or not a given liability is a debt instrument. Similarly, the timing of payments is irrelevant in this regard.

In order to be considered external debt, the liabilities must be owed by a resident of the borrower country to a nonresident. Residence status in this instance is based on where the debtor and creditor have their centers of economic interest. Thus, what matters is their ordinary location, not their official nationality. Also excluded from the definition of external debt are contingent liabilities. These refer to arrangements whereby one or another specific condition must be fulfilled prior to a financial transaction. This does not imply that guaranteed debt, for example, is excluded. The guaranteed debt is attributed to the debtor rather than the guarantor—until the guarantee is called.

The historical experience of developing countries with external debt highlights benefits and risks entailed in reliance on debt as a major source of capital. In the aftermath of World War II during the rapid economic expansion of the developed countries, less developed countries also enjoyed relatively fast growth rates. However, on account of their domestic savings and foreign exchange gaps, less developed countries increased their external debts to sustain their economic growth. Following the sudden oil price increases of the 1970s and the accompanying episodes of inflation, industrial countries implemented restrictive monetarist policies to stabilize their economies. This led to higher interest rates, which in turn raised costs of debt servicing.

A combination of costly debt service and easy availability of debt from oil surpluses of exporting countries contributed to a buildup of unsustainable debt among less developed countries. Most of this debt was underwritten by governments of industrial countries and multilateral institutions like the World Bank and the International Development Association (IDA). The debt problem deteriorated to a point at which more debtor defaults were likely among nations before debt forgiveness by multilaterals and governments provided bail-outs for highly indebted poor countries. The literature documents cases of default in the past with little consequence to debtors.

See Also: Debt; Debt-for-Equity Swaps; Debt Rescheduling.

Bibliography. P. Alvarez-Plata and T. Bruck, "External Debt in Post-Conflict Countries," *World Development* (v.36/3, 2008); Efraim Benmelech and Nittai K. Bergman, *Collateral Pricing* (National Bureau of Economic Research, 2008); Laurence Booth and Sean Cleary, *Introduction to Corporate Finance* (John Wiley, 2008); J. R. Graham and C. Harvey, "The Theory and Practice of Corporate Finance: Evidence from the Field," *Journal of Financial Economics* (v.60, 2001); Aart Kraay and Vikram Nehru, "When Is External Debt Sustainable?," *World Bank Economic Review* (v.20/3, 2006); *U.S. External Debt and Power* (Council on Foreign Relations, 2008); M. Winkler, *Foreign Bonds: An Autopsy* (R. Swain, 1933); W. Wynne, *State Insolvency and Foreign Bond Holders: Case Histories*, 2nd ed. (Yale University Press, 1951).

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External Labor Market

Labor markets provide a mechanism for employers and employees to agree on terms for exchanging labor input for wages. In accepting an employment relationship, a worker agrees to receive wages (and other inducements) in exchange for submitting to the directives of the employing organization within some zone of indifference. On the labor supply side, individuals adjust their hours of work in the labor force on the basis of changes in income, career opportunities, and other conditions of employment. On the demand side, employers adjust their engagement of labor on the basis of changes in relative prices of labor, the quality of labor, and other constraints. For labor markets to operate efficiently and effectively, mechanisms must be in place to support flexibility and adaptability to changing levels of supply and demand, while conforming to social expectations regarding equity, morality, and so forth.

Labor markets exist within the firm and external to the firm. Internal labor markets are characterized by job ladders in the firm, supported by evaluation systems that reward skill development and worker commitment. Entry to the firm occurs mostly at the bottom of the ladder, and movement up the ladder follows the development of skills. Internalized work often comes with the implicit understanding that employment is permanent, or at least long term. External labor markets, by contrast, are normally more flexible, unless they are tightly regulated by governments or constrained by the behavior of labor interest organizations. External market transactions consist of contractual relationships that specify what each party to the exchange is to deliver. The simplest form of employment contract is the spot contract in which all obligations are fulfilled on the spot, as in the case of hiring day labor without any obligations for the future. To the extent that internal labor markets produce employment stability, internalization makes it expensive and politically difficult to adjust the volume of labor to changing internal organizational and external market conditions. This is the main reason why firms typically externalize labor—draw on external labor markets—when they recruit workers.

Under normal conditions, internalization increases the employer's organizational control over employees, whereas externalization enhances organizational flexibility. Externalization of labor is typically seen as a means to complement internalization and to circumvent some of the problems created by internal labor markets. In some Western countries, the external labor market is extremely dynamic, as in the United States where the proportion of new job-person matches over a five-year period has been estimated to be about 40 percent, with significant variations across age groups. General inter-country comparisons are not very revealing if they ignore differences in labor movement in terms of opportunity factors such as the size distribution of firms in a given industry and the degree of job growth over the business cycle.

Recent Developments

Recent decades have seen significant developments in labor markets in the international arena, as firms are trying to regain some of the competitiveness they have lost because of rising labor costs and the growing success of producers in newly industrializing nations. One strategy many firms use to contain labor costs is to introduce a variety of flexible working arrangements that are expected to improve the link between the level of output and the demand for labor. Some of these arrangements are based on using the external labor market as a source of employment flexibility. The most prominent of these arrangements include increased reliance on subcontracting and the increased use of temporary employment contracts. Both are considered forms of employment externalization. Externalization through the use of temporary workers has the effect of reducing the duration of employed labor in the firm, whereas externalization through subcontracting activities to independent workers is a means of increasing flexibility by reducing administrative control over labor.

Subcontracting involves the replacement of employment contracts in the firm with commercial contracts with external firms supplying specialized inputs. This approach is widely used in industries facing volatile market conditions, such as construction, where workers move from one contract to the next or are laid off until the firm obtains another order. They are also frequently used in industries that rely heavily on project work, as in the cultural sector (e.g., performing arts, film production, writing, and publishing). In these industries, many firms can meet fluctuating demand best by outsourcing activities to specialized organizations and individuals that can supply them at the time when they are needed, while retaining in-house those activities that focus on their core business.

Temporary employment refers to the use of workers hired for a fixed term. These include workers provided by temporary help service agencies, limited-duration hires, and call-ins. In many countries, temporary workers (often referred to also as contingent workers) have comprised one of the fastest growing labor force segments. It would be wrong to view contingent workers primarily as low skilled. Contingent workers include professionals such as engineers, teachers, nurses, and orchestra directors. Many of these temporary workers are highly paid, and there is some evidence that many of them view their temporary employment as voluntary rather than imposed by the state of the labor market. Temporary status may also lead to permanent employment, if the firm uses the arrangement as a recruitment device to observe the worker's qualifications and commitment until a decision is made whether to offer long-term employment.

Research typically explains the use of subcontracted and temporary labor in terms of the advantages contingent employment arrangements produce for the employer in terms of flexible staffing, cost savings, obtaining expertise, and a variety of other benefits. One may distinguish between numerical and functional staffing flexibility. Numerical flexibility refers to the ability to adjust staffing levels to changes in market conditions more easily than what is possible with permanent staff who are protected by government regulations regarding hiring and firing and who expect employment stability. Functional flexibility contributes required skills to the firm that are costly to develop in-house, especially if they are used only sporadically or are difficult to monitor by the employer because control over the use of skills lies with the worker. Drawing workers from the external labor market also provides the firm with cost flexibility to the extent that it can economize on fringe benefits and social insurance payments. And the use of independent contractors allows the firm to provide a broad range of specialized products without incurring the risks from large investments in recruitment, skill training, and labor monitoring.

When are firms most likely to externalize labor? The use of temporary workers is certainly not a new phenomenon. Employers have long organized production around fixed-term (and part-time) positions in order to cope with fluctuating market demand, as in retail and the hospitality industry. What appears to be new is the extent to which firms rely on contingent workers to hold down labor costs. It would also be too simple to argue that firms draw (more) extensively on external labor markets only because high(er) levels of uncertainty in product markets require a strong(er) concern for containing labor costs. A focus on market uncertainty and labor costs is in many cases too narrow. While the employment of contingent workers may help to contain labor costs, organizational factors and job factors may reduce these cost savings.

An important variable to consider is the nature and extent of workflow interdependence. In those cases where activities and jobs are highly interdependent, extensive use of temporary or contract workers carries the risk of disruption and insufficient control over the flow of labor resources. Research suggests that firms are more likely to externalize labor if parts of the production process can be distributed and technologies are available that enable outsourcing and adjusting the volume of output. There are also organizational factors to be considered. If, for example, employers cannot introduce bureaucratic controls—for example, because of union rules or government regulation—to ensure a sufficient level of commitment on the part of short-duration hires, they are less likely to externalize employment. Within any organization, there are a range of "hidden costs" associated with monitoring, motivating, resolving conflicts, and coordinating permanent and nonpermanent workers that limit firms' use of external labor markets.

The evidence shows that there is a clear trend toward increased labor market flexibility in many industrial countries. However, this trend builds on markedly different bases. Extensive reliance on external labor markets has existed in the United States for a long time. Employers in Europe seem to be catching up fast, although in varying degrees in different European countries. Also, the form and nature of labor externalization is different across countries. In Europe, one can observe a north/south divide, with part-time and temporary employment arrangements being more popular with employers in many southern European countries.

Variability in labor externalization is not determined by employment legislation alone. Firms in both high-regulated and low-regulated countries draw on external labor markets, and in many cases the increase in labor externalization in recent decades is similar. There is some debate concerning whether there is convergence or divergence across countries in firms' reliance on external labor markets. Those who argue that divergence is taking place suggest that, despite globalization, firms continue to be embedded in regionally or nationally distinct societal and institutional arrangements. Others who observe international convergence argue that firms' practices are increasingly disembedded of the national context, overriding more regionally or nationally specific institutions or cultural predispositions.

Some also suggest that convergence is a function of business activities becoming internationalized through exposure to customers, suppliers, or alliances with foreign firms. Even enterprises that do not participate in international markets are subject to competitive pressures and regulations. By imitating and learning from each other, firms adopt common organizational practices, including recruiting workers from the external labor market.

See Also: Competition; Globalization; Internal Labor Market.

Bibliography. C. Brewster, L. Mayne, and O. Tregaskis, "Flexible Working in Europe," *Journal of World Business* (v.32/2, 1997); Florence Jaumotte and Irina Tytell, *How*

Has the Globalization of Labor Affected the Labor Share in Advanced Countries? (International Monetary Fund, 2007); John Masters and Grant Miles, "Predicting the Use of External Labor Arrangements: A Test of the Transaction Costs Perspective," *Academy of Management Journal* (v.45/2, April 2002); Jan Rutkowski, *Labor Market Developments During Economic Transition* (World Bank, Europe and Central Asia Region, Human Development Sector Unit, 2006); Vicky Smith, "New Forms of Work Organization," *Annual Review of Sociology* (v.23, 1997).

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ExxonMobil

ExxonMobil Corp. is the world's largest publicly traded oil company, and one of the largest U.S. companies, with $404 billion in revenue in 2007 and a market valuation of $504 billion at year end. In 2007 the Irving, Texas-based company produced roughly 3 percent of the world's oil. The company was formed in 1999 when Exxon Corp., the largest U.S. oil company, acquired Mobil Oil, the country's second-largest oil concern.

When Exxon acquired Mobil in 1999, the merger was the biggest in U.S. history and the largest oil merger ever.

Nearly two-thirds of the company's net income in 2007 was generated through its production of oil and natural gas, which includes fields in the Gulf of Mexico, the Arctic, Russia, the Caspian Sea, offshore West Africa, and the Middle East. ExxonMobil has about 11 billion barrels of oil reserves as of the end of 2007, or 0.9 percent of the world's proved reserves—which ranks it behind government-owned oil companies such as those of Saudi Arabia (the largest), Iran, and Venezuela.

ExxonMobil also has a large worldwide petroleum refining and marketing operation that includes 32,000 service stations. It owns several top-selling global brands, such as Esso gasoline and Mobil 1 motor oil. Its petrochemicals operation is also large and spread around the globe, making, among other products, key building blocks of polyester and plastics.

ExxonMobil had its origins as the largest parts of Standard Oil, the massive petroleum company incorporated in 1870 by John D. Rockefeller and his partners. Standard Oil became one of the biggest and most famous companies in the world, built in part on its efficiency in transportation and refining, and in part on ruthless competitiveness. Standard controlled 90 percent of U.S. petroleum refining capacity by 1880, and dominated the petroleum and kerosene market for several decades. It eventually began acquiring oil-production companies, creating the first vertically integrated oil company. The United States sued Standard under the 1890 Sherman Antitrust Act, and in a landmark 1911 decision, the U.S. Supreme Court broke Standard up into 34 fragments. The largest fragments were Standard Oil Co. of New Jersey (which changed its name in 1972 to Exxon) and Standard Oil Co. of New York (which changed its name in 1966 to Mobil Oil). The year 1911 also marked the first time Standard's sales of gasoline surpassed those of kerosene.

The independent Standard Oil Co. of New Jersey was among the oil pioneers in international expansion, first in Iraq and later in Saudi Arabia. In the late 1920s and 1930s, Jersey Standard also led the way in expanding into petrochemicals.

The oil market changed in the 1960s and 1970s, as power shifted to national oil companies and the OPEC cartel of oil-producing nations. Oil prices rose, and many consumers blamed large U.S. oil companies such as Exxon—in part because higher oil prices pushed Exxon to the top of the *Fortune* 500 list of the biggest American corporations. Both Exxon and Mobil diversified into non-petroleum businesses, including Exxon's failed attempts to enter the computer market and Mobil's brief ownership in the 1980s of the Montgomery Ward department stores. Following these setbacks, the companies focused on their core businesses of oil, gas, and chemicals.

Exxon has long been known as an engineer's company that attracted little public affection, but its single-mindedness developed into a reputation for being environmentally unfriendly after a March 1989 accident involving one of its tankers, the Exxon *Valdez*. The *Valdez* hit a reef and spilled 240,000 barrels of oil into Alaska's Prince William Sound; the incident, which incurred a $2 billion cleanup, struck a chord with the public, bolstering environmental consciousness.

Exxon's emphasis on efficiency (sometimes at the cost of its image) has consistently made it among the industry leaders in such measures as return on capital. Exxon's publicly traded shares typically trade at a premium to those of rival integrated oil companies, which in part enabled Exxon to acquire Mobil in 1999, in what was the largest oil merger ever, to form the current company. The merger, at the time the biggest in U.S. history, took place against a backdrop of ever-larger oil projects and increased industry consolidation. It allowed for economies of scale and cemented ExxonMobil's leadership position.

See Also: Antitrust Laws; Chevron; Corporate Social Responsibility; Downstream; Environmental Standards; Total; Upstream; United States; Vertically Integrated Chain.

Bibliography. *BP Statistical Review of World Energy* (2008); G. Colvin, "Exxon Mobil: The Defiant One—The Big Oil Company Doesn't Care About Alternative Fuels or Pleasing the Greens. Is Its CEO Nuts—or Shrewd?," *Fortune* (v.155/8, 2007); ExxonMobil Corporation, www.exxonmobil.com (cited March 2009); ExxonMobil Corporation and ESSO UK, *UK & Ireland Corporate Citizenship* (ESSO UK Ltd., 2006); William E. Hale, Robert H. Davis, and Mike Long, *One Hundred Twenty-Five Years of History* (ExxonMobil Corp., 2007); M. Ollinger, "The Limits of Growth of the Multidivisional Firm: A Case Study of the U.S. Oil Industry from 1930–90," *Strategic Management Journal* (v.15/7, 1994); "News & Insights—Pump Cash, Not Oil—Mighty Exxon Mobil Is Stinting on Exploration and Bingeing on Buybacks. The Lesson Isn't Lost on Its Rivals," *BusinessWeek* (v.34, May 28, 2007); Nelson D. Schwartz, "Exxon Mobil: The New No. 1—The Biggest Company in America Is Also a Big Target," *Fortune* (v.153/7, 2006); Union of Concerned Scientists, *Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco's Tactics to Manufacture Uncertainty on Climate Science* (Union of Concerned Scientists, 2007); Daniel Yergin, *The Prize: The Epic Quest for Oil, Money & Power* (Simon & Schuster, 1991).

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Facilities Location Decision

Facility comprises the physical resources such as land, plant, machinery, and equipment that are brought together at one geographic location for the purpose of producing particular goods and/or services. Decisions on these resources are therefore of paramount importance for firms, not least because they involve large capital investments; once made, these decisions cannot be easily or cheaply undone. Overall, facilities decisions are concerned with, inter alia, where to locate the organization's production facilities, how large each should be, what goods or services should be produced at each location, and what markets each facility should serve.

Since these decisions aim to generate more profit for profit-oriented organizations or achieve a balance between costs and the level of customer service they provide for not-for-profit organizations, much time and effort needs to be put into identifying and assessing the key variables that make up these decisions because the size and binding nature of the investments make relocation hard to justify. The magnitude of these decisions is such that some organizations may be committed indefinitely to a location once it has been chosen.

The overall objective of choosing one location over alternatives is to secure the best net gains for an organization now and in the long term. In essence, such an overall objective can be achieved through establishing an appropriate balance between three related issues: (1) the spatially variable costs of the operations or costs that change with geographical location, (2) the service the firm is able to provide to its customers, and (3) the revenue potential of the firm. Of these, the last two issues are more related to for-profit organizations simply because of the assumption that the better the service the firm can provide to its customers, the better will be its potential to attract customers and therefore generate revenue. In not-for-profit organizations, however, revenue potential might not be a relevant objective and so cost and customer service are often taken as the twin objectives of the facilities location.

In order to achieve the aforementioned objectives of the facilities location, a number of factors that are believed to influence facilities location decisions need to be taken into account. These are labor factors, exchange rate and currency risk, location costs, attitudes and culture of government and worker toward location decisions, proximity to markets, proximity to suppliers, and proximity to competitors. With regard to labor factors, the primary labor considerations are the costs and availability of labor, wage rates in an area, labor productivity and attitudes toward work, and whether unions are a serious potential problem.

Although wage rates and productivity may make a country seem economical, unfavorable exchange rates may negate any savings. As a result, the values of foreign currencies and their changes need to be taken into account in location decisions. Location costs that are tangible and intangible certainly affect a location decision and therefore should be rigorously calculated. National and local government policies can also facilitate the siting of a new business by how easy or difficult they make the process involved. Cultural variations in punctuality by employees and suppliers make a marked difference in production and delivery schedules.

For many firms, it is extremely important to locate near customers. Firms also like to locate near their raw materials and suppliers, not least because of perishability, transportation costs, and bulk. Furthermore, companies like to locate, somewhat surprisingly, near competitors. This tendency (also called clustering) often occurs when a major resource is found in that region. Italy may be the true leader when it comes to clustering, with northern zones of that country holding world leadership in such specialities as ceramic tile (Modena) and gold jewelry (Vicenza). In addition to the aforementioned factors, selecting a facility location is becoming much more complex with the globalization of the workplace. That is, because of market economies, better international communications, more rapid and reliable travel and shipping, and high differences in labor costs, many firms now consider operating outside their home countries.

Having considered the critical factors influencing facilities location decisions, the question remains as to how to choose the optimal location. Although the facilities location decision is often based on opportunistic factors such as site availability and cost benefits such as government grants and favorable tax rates, a quantitative analysis brings an important perspective to the decision and helps identify the optimal location based on the key benefits an organization is seeking.

Some of the more commonly used techniques regarding the choice of optimal location are weighted-factor method, center of gravity method, location break-even analysis, and transportation model. In the weighted-factor method, a variety of relevant criteria (also called critical success factors) are included in choosing a location. Locational break-even analysis relates to the use of cost-volume analysis to make an economic comparison of location alternatives. The center of gravity method is a mathematical technique used for finding the location of a distribution center that will minimize distribution costs. Finally, the objective of the transportation model is to determine the best pattern of shipments from several points of supply (sources) to several points of demand (destinations) so as to minimize total production and transportation costs.

See Also: Distribution; Globalization; Locational Advantages; Operations Management.

Bibliography. D. Barnes, *Operations Management: An International Perspective* (Thomson, 2008); S. Brown, R. Lamming, J. Bessant, and P. Jones, *Strategic Operations Management*, 2nd ed. (Elsevier, 2005); R. B. Chase, F. R. Jacobs, and N. J. Aquilano, *Operations Management for Competitive Advantage*, 11th ed. (McGraw-Hill, 2006); Alberto Garcia-Diaz and J. MacGregor Smith, *Facilities Planning and Design* (Pearson Prentice Hall, 2007); A. Greasley, *Operations Management* (John Wiley & Sons, 2006); J. Heizer and B. Render, *Operations Management*, 8th ed. (Pearson Education, 2006); T. Hill, *Operations Management*, 2nd ed. (Palgrave Macmillan, 2005); R. Kodali, and S. Routroy, "Decision Framework for Selection of Facilities Location in Competitive Supply Chain," *Journal of Advanced Manufacturing Systems* (v.5/1, 2006); L. J. Krajewski, and L. P. Ritzman, 7th ed. (Pearson Prentice-Hall, 2005); R. G. Schroeder, *Operations Management: Contemporary Concepts and Cases*, 3rd ed. (McGraw-Hill, 2007); N. Slack, S. Chambers, R. Johnston, and A. Betts, *Operations and Process Management* (FT Prentice Hall, 2006); N. Slack and M. Lewis, *Operations Strategy*, 2nd ed. (FT Prentice Hall, 2008); W. J. Stevenson, *Operations Management*, 8th ed. (McGraw-Hill, 2005); R. Wild, *Operations Management*, 6th ed. (Continuum, 2002).

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Factor Endowments

Factor endowments refer to the resources a country possesses. Traditionally, land, labor, capital, and natural resources were considered as important factor endowments determining the prosperity of a nation. A greater endowment of these resources and subsequent exploitation for value-adding activities is expected to lead to more wealth creation and prosperity.

Factor endowments determine the comparative advantage of nations against each other, which subsequently affects the pattern and direction of international trade. There have been several theoretical advancements based on the concept of factor endowment to explain international trade activities. Prominent among these are David Ricardo's theory of comparative advantage and the Heckscher-Ohlin (H-O) model of international trade. The theory of comparative advantage suggests that countries should specialize in products and services in which they have a comparative advantage, even though they may not have an absolute advantage. This theory does not explicitly acknowledge the role played by differential factor endowment in explaining international trade.

The H-O model builds on the theory of comparative advantage to predict that countries will export products for which they have an abundance of input factors and import those for which they lack the input factors. For example, a country with an abundance of capital will export capital-intensive products, whereas a country with an abundance of labor will export labor-intensive products. The H-O model assumes that countries differ only in terms of their factor endowments. Since countries are assumed to be similar in all other aspects, the production costs across different countries will differ depending on the relative factor endowments of a country and the factors needed for the production process. Thus a country with a superior endowment of capital will produce capital-intensive goods cheaper, while a country with a superior endowment of labor will produce labor-intensive goods cheaper.

The concept of factor endowment and the H-O model have been widely used to explain international trade between the countries of the north and the south. The countries of the north are traditionally viewed as having superior capital endowment, whereas the countries of the south have an abundance of labor. The flow of capital-intensive goods from the north and the labor-intensive goods from the south in the late 19th and early 20th century can be attributed to their relative factor endowments. The economic prosperity of the countries in Europe and North America are also attributed to their attractive endowments.

However, empirical analyses show that the flow of trade may not always be between countries with different factor endowments. In fact, a large proportion of international trade is between countries with similar factor endowments. Wessily Leontif, in trying to verify the H-O model, found that the United States, in spite of being rich in capital, exported labor-intensive products, which is contrary to the predictions of the H-O model. This observation led many economists to propose changes to the way we look at factor endowments. For example, some suggestions include looking at capital, not just in terms of financial capital but also in terms of human capital.

Labor in the United States may be more productive than other countries, providing the United States with a rich endowment of human capital. Thus, what we consider an export of labor-intensive commodities may in fact be an export of human capital–intensive commodities. Some economists also suggested that the factor endowments may be less important than the demand conditions. This hypothesis, known as the Linder hypothesis, suggests that demand conditions between different countries determine the flow of trade such that countries with similar demand conditions trade with each other.

Michael Porter proposed that a nation's competitive advantage is determined by the factor conditions, demand conditions, related and supporting industries, and strategy, structure, and rivalry in an industry. The factor conditions in Porter's model relate to the factors which are created (such as skilled labor, infrastructure, and capital), rather than inherited (such as the traditional factors of land, labor, natural resources, etc.). Thus, even though the differential factor endowments between different countries may not be able to fully explain the trade flow across all countries and in all industries, it does help in understanding the competitive advantage of nations.

See Also: Comparative Advantage; Competitive Advantages of Nations; Heckscher-Ohlin Model; Linder Hypothesis; Trade Liberalization.

Bibliography. Julien Gourdon, Nicolas Maystre, and Jaime De Melo, *Openness, Inequality, and Poverty: Endowments Matter* (World Bank, Development Research Group, Trade Team 2006); B. Guo, 2005. "Interaction between Endowment Factor and Internationalized Demand," *Journal of*

Global Business (v.31, 2005); Y. Hu, M. C. Kemp and K. Shimomura, "A Factor Endowment Theory of Endogenous Growth and International Trade," *Review of Development Economics* (v.9/4, 2005); Joseph Paul Kaboski and Trevon D. Logan, *Factor Endowments and the Returns to Skill: New Evidence from the American Past* (National Bureau of Economic Research, 2007); E. Leamer, *The Heckscher-Ohlin Model in Theory and Practice* (Princeton Studies in International Economics, 1995); Michael E. Porter, *The Competitive Advantage of Nations* (Free Press, 1990); H. Zhou, "Factor Endowment, the Choice of Technology, and the Volume of Trade," *International Economic Journal* (v.21/4, 2007).

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Fair Trade

The modern fair trade movement evolved in Europe during the 1960s as an outgrowth of leftist student organizations protesting multinational corporations' "exploitative" trade relationships with producers in economically vulnerable developing countries. In 1968 the United Nations Conference on Trade and Development adopted "Trade not Aid" as its mantra, and focused its transnational organizational efforts on establishing a commercial fair trade framework between multinational corporations ("importers") and economically developing nations ("exporters").

Since 1994 the European Union (EU) has been on record supporting fair trade, with the European Parliament passing the Resolution on Fair Trade in 1998, and the European Commission in 1999 adopting the Communication from the Commission to the Council on Fair Trade. On July 6, 2006, the European Parliament unanimously passed "Fair Trade and Development," a resolution suggesting the development of an EU-wide policy on fair trade.

Fair trade advocates argue that there is both a market failure associated with the present international trade system and a long-term commodity crisis adversely affecting developing-country producers. Addressing the former criticism, Oxford University professor Alex Nicholls and Charlotte Opal, director of product development, Transfair USA, argue that the present international trade system results in market failure, as

> key conditions [e.g., perfect market conditions, access to markets and credit, and the ability to switch production techniques and outputs in response to market information] on which classical and neoliberal trade theories are based are notably absent in rural agricultural societies in many developing countries. … [Thus, these fundamental assumptions] are fallacious in the context of agricultural producers and workers in developing countries.

Furthermore, concerning the latter criticism, as a result of unregulated competition in global commodity markets since the 1970s, prices for many agricultural developing-country exports, including cocoa, coffee, cotton, and sugar, have fallen by 30 to 60 percent. Fair trade advocates do not believe that current market prices for many agricultural commodities reflect the actual costs of production, including environmental and social costs absorbed by producers, and therefore recommend a stable minimum price system remedy.

According to a definition developed in December 2001 by an informal group of four major international fair trade import federations, which include the Fairtrade Labelling Organizations International, International Fair Trade Association, Network of European Workshops, and the European Fair Trade Association, popularly referred to by the acronym FINE:

> Fair Trade is a trading partnership, based on dialogue, transparency and respect that seek greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers—especially in the South. Fair Trade Organizations, backed by consumers, are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade.

The fair trade principles referred to in the above FINE definition include the following guidelines:

Sorting fair trade coffee in Guatemala. The International Fairtrade Certification was in use in 58 developing countries by 2007.

- Fair Price. Farm and handcraft cooperatives are guaranteed a "floor" price from importers (referred to as a "Fair Trade Minimum"); in addition to this minimum guaranteed price, a premium price (referred to as a "Fair Trade Premium") is added by importers for the sale of certified organic farm products, for example.
- Fair Labor. Agricultural and handcraft workers are entitled, when they deem necessary, to the freedom to associate (i.e., the opportunity to join a labor union), equal employment opportunities, safe working conditions, and to receive living wages. Also, no forced labor or exploitative child labor is employed in the production process.
- Market Access and Sustainable Trading Relationships. Importers will make every effort to develop long-term, direct purchasing relationships with agricultural and handcraft cooperatives, thereby eliminating so-called middlemen in the supply chain; increasing profit margins for producers; and further developing farmers and crafts peoples' knowledge base and business skills, thus allowing them to effectively compete in the global marketplace.
- Democratic Cooperative Organizations and Community Development. In free association, farmers and craft workers democratically, and transparently, decide how to invest fair trade revenue in sustainable business operations and, with their Fair Trade Premium revenue, community social, economic, and environmental development projects.
- Environmental Sustainability. Farmers utilize environmentally safe and sustainable agricultural production methods that protect owner/employee health and preserve the ecosystem for future cultivation.
- Consumer Awareness. By informing consumers of the need for social justice and trade opportunities, fair trade organizations advocate for developing country producers to acquire consumer support for reform of international trade rules, leading to an equitable international trade system (as the current system of international trade is "unfair").

When discussing fair trade, there are generally two complementary approaches to trading/marketing agricultural and craft products to consumers:

- Integrated Supply Chain. Fair trade organizations, also referred to as alternative trading organizations, employ their marketing expertise (including public awareness campaigns) to import and/or distribute their clientele's products to consumers.
- Product Certification. Products complying with established fair trade international standards are formally certified, utilizing a consumer-friendly labeling "mark," to have been produced, traded, processed, and packaged according to the applicable specifications listed in the international standards.

Fair trade products are, whenever possible, verified by a credible, independent assurance system. The fair trade product certification system is designed to allow consumers to identify a product (generally, although not exclusively, agricultural in nature) by a "mark" that informs him/her that it meets certain environmental, labor, and development standards (based upon the fair trade principles described above) in all aspects of production and distribution in the supply chain.

In 1997 the Fairtrade Labelling Organization (FLO) was formed as a centralized "umbrella" organization of 12 fair trade labeling organizations (now consisting of 23 member organizations, traders, and external experts), and in 2002, FLO initiated its International Fairtrade Certification Mark (or the Fair Trade Certified Mark in the United States and Canada), which is granted for a product inspected and certified by its independent certification body, FLO-CERT (which itself follows the ISO 65 standard for product certification). FLO-CERT, created in 2004 (along with FLO International, the standard-setting entity), operates with a network of 72 independent inspectors who regularly audit producer and trade organizations to verify and report on organizational (producer and trader) fair trade practices.

As of 2007 the International Fairtrade Certification is used by 632 organizations in 58 developing countries on a range of products, including bananas, cocoa, coffee, cotton, footballs, fruit juices, herbs, honey, nuts, spices, sugar, and wine, among others. In 2007 fair trade–certified product sales were $3.62 billion globally, with the 2005 Just-Food Global Market Review forecasting fair trade–certified sales of $9 billion in 2012, and $20–25 billion by 2020.

Criticisms of Fair Trade

Opponents of fair trade argue that this concept is similar in application to a farm subsidy. As such, they posit that establishing a Fair Trade Minimum price for a product, which in many cases exceeds the market price, encourages existing producers to expand production while signaling new producers to enter the market—the result being excess supply leading to lower prices in the non–fair trade market. While the fair trade market may benefit such producers in the short-run, there are potential long-term effects on country development and economic growth. For instance, economic theory suggests that when low prices result from surplus production, in this case when artificially raising prices, it will only encourage expanded supply and the misappropriation of human capital into less productive economic activities. Other critics of fair trade argue that the present fair trade standards (as they pertain to product certification) are not strict enough or call for the establishment of a fairer, autonomous trading system not beholden to major retailers and multinational corporations.

Proponents of fair trade respond to critics, especially those employing the above mentioned market price distorting argument, by claiming that fair trade pricing does not "fix" prices, but establishes a product price floor to ensure that farmers and craft workers can meet their cost of sustainable production should market prices fall below this minimum sustainable level. They further argue that the Fair Trade Minimum price is not a "fixed" price, but only represents an initial starting point for business negotiation, as many fair trade producers who deal in differentiated products, such as coffee bean growers, routinely earn above this price floor for their higher quality, blends, packaging, and social responsibility features associated with their products. Moreover, fair trade proponents argue that, beyond the direct market benefits, there are other nonmarket benefits associated in the fair trade value chain, including increased technical assistance, democratization of markets, and crop diversification programs.

See Also: Cooperatives; European Union; Free Trade; Less Industrialized Countries; Multinational Corporations; Sustainable Development; United Nations Conference on Trade and Development.

Bibliography. Daniel W. Drezner, *U.S. Trade Strategy: Free Versus Fair* (Brookings Institution Press, 2006); M. G. Hayes, "On the Efficiency of Fair Trade," *Review of Social Economics* (v.64/4, 2006); Peter Hulm, "Fair Trade," *International Trade Forum* (v.2, 2006); Stefan Mann, "Analysing Fair Trade in Economic Terms," *Journal of Socio-Economics* (v.37/5, 2008); A. Nicholls and C. Opal, *Fair Trade: Market-Driven Ethical Consumption* (Sage, 2004); Laura T. Raynolds, Douglas L. Murray, and John Wilkinson, *Fair Trade: The Challenges of Transforming Globalization* (Routledge, 2007); Martin Richardson and Frank Stähler, *Fair Trade* (University of Otago, 2007); Ruben Ruerd, *The Impact of Fair Trade* (Wageningen Academic, 2008); J. Weber, "Coffee Enthusiasts Should Confront Reality," *Cato Journal* (v.27/1, 2007); Edwin Zaccai, *Sustainable Consumption, Ecology and Fair Trade* (Routledge, 2007).

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Family Leave

Family leave is a policy providing employees a job-protected leave from employment during a period of unusually demanding family responsibilities. The main reasons for family leave are the arrival of a new child or the serious illness of a child, spouse, or parent. The intergenerational structure of family leave is particular to the United States. Most other countries have maternity or parental leave policies that are separate from any policies providing leave for the care of an ill spouse or parent. Because the United States is unique in this respect, the discussion below centers on family leave policy in the United States. A more extensive international comparison of parental leave policy is found under the heading "maternity leave."

Until 1993, the United States was one of the few industrialized countries without national family leave legislation, and the United States still stands out in having particularly minimal support for employees. At the federal level, the 1993 Family Medical Leave Act (FMLA) governs family leave policy. The FMLA requires public employers and private employers with 50 or more workers to offer job-protected family or medical leave of up to 12 weeks for qualifying employees (those who worked at least 1,250 hours for the employer in the previous year) who need to be absent from work as a result of the employee's own serious illness, the serious illness of a child, spouse, or parents, or the arrival of a new child by birth, adoption, or foster care. The FMLA does not provide paid leave, although it does require employers who provide health insurance to continue coverage during the leave period. The FMLA does not apply to employees who care for in-laws, grandchildren who care for grandparents, or same-sex couples. Because of limitations on who qualifies, the FMLA covers fewer than half of the nation's private sector employees.

The historical origins of the FMLA lie in a long debate between protectionist policies for mothers and children and equal rights in the workplace for women. Beginning in the 19th century, many states passed protective legislation placing limits on women's work, excluding them from night shifts and hazardous duties, for example. The rationale for special treatment for women was their reproductive and maternal role. However, in the 1960s, the equal rights movement challenged protective legislation, arguing that it limited women's role in the workforce. Title VII of the 1964 Civil Rights Act prohibited employment discrimination on the basis of sex, and the 1978 Pregnancy Discrimination Act further established the principle that men and women were to be treated equally when they were unable to work for medical reasons.

By the 1980s, as legislators were beginning to craft federal family leave policy, the course was set toward a policy that would treat men and women workers equally. Democrat Pat Schroeder introduced the first family leave bill in Congress in 1985. The 1985 bill was voted down, as were subsequent bills in 1986 and 1987. In 1990 Congress passed a family leave bill that President George Bush vetoed. As federal initiatives foundered, many state legislatures enacted state-level family or parental leave policies, beginning with Connecticut in 1987. By the time President Bill Clinton signed the FMLA into law in 1993, 32 states had adopted state-level leave policies.

After the passage of the FMLA in 1993, the frontier in family leave policy shifted back to the states. California in 2004 was the first state to enact paid family leave. In California, all workers who pay into the system receive benefits of roughly 55 percent of wages while caring for a new child or seriously ill family member. Washington State became the second state to provide paid family leave in 2007, and New Jersey passed a paid family leave measure in 2008.

Leave policies of other nations differ from those of the United States in three major respects. First, the policies of other nations tend to provide longer periods of leave. The average leave provided in OECD nations is 10 months as compared to less than three months in the United States. Second, most countries provide some sort of wage replacement. A Harvard/

While 1993 legislation provided some relief for U.S. caregivers, average leave in some countries is still over seven months longer.

McGill study of 173 nations found that 169 guarantee paid leave to women in connection with childbirth, and 66 provide paid paternity leave to fathers. Finally, the policies of most other countries apply universally (to all mothers, fathers, or parents) rather than only to employees meeting certain qualifications.

See Also: Benefits; Maternity Leave; Work/Personal Life Balance.

Bibliography. Carl C. Bosland, *A Federal Sector Guide to the Family and Medical Leave Act and Related Litigation* (Dewey Publications, 2007); Lisa Guerin and Deborah England, *The Essential Guide to Family and Medical Leave* (Nolo, 2007); J. Heymann et al., *The Work, Family, and Equity Index: Where Does the US Measure Up?* (Harvard, 2007); S. Tanaka, "Parental Leave and Child Health Across OECD Countries," *The Economic Journal* (2005); J. Waldfogel, *What Children Need* (Harvard, 2006).

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Feng Shui

Feng shui (pronounced "fung-shway"), literally "wind and water," is a 3,500-year-old Chinese body of knowledge, the "science of placement," that advances the proposition that the buildings humans use can affect the quality of their lives. The design system is directed to allow users of an environment to benefit from *qi*, or *chi*, the flow of natural life energy. According to feng shui, every element in the physical world has its own type of energy, or "life force." The energy types correspond to elemental materials in nature, such as fire, water, earth, metal, and wood. Feng shui masters hold that chi can cause disorder and destruction unless corrected. Once chi flows properly, balance results and the obstacles and impediments in relationships, careers, family, health, and wealth-building are under control.

Feng shui is becoming popular in the West, believed to assist individuals and workers improve their quality of life. By understanding the flow of chi in an environment, feng shui practitioners claim they can learn what is lacking and make simple physical changes to improve life. In a business setting, feng shui attempts to helps owners and employees work smarter, not harder, by aligning the energy in a work space. Some Western architects incorporate feng shui techniques into their building and space designs to create a dynamic and harmonious environment to maximize productivity.

Feng shui can be used to select the location for a new facility. Paint palettes, building materials, lighting, furniture, orientation of the building and objects, and even retail product placement are designed using feng shui principles. In some cases, the beginning of construction and grand opening are decisions based on feng shui concepts. Office layout, location of work spaces (particularly desks), use of water (fish tanks, fountains), landscaping, and reflecting surfaces receive special attention from feng shui concepts.

In Asia, feng shui influences the design of most buildings and workplaces in China, including Hong Kong, Malaysia, Taiwan, and Singapore. The Coca-Cola Company, Donald Trump, Universal Studios, Virgin Atlantic, and Merrill Lynch have incorporated feng shui concepts into their buildings. At Hong Kong Disneyland, examples of feng shui design include a ballroom of 888 square meters, because eight is a number of fortune; there are no fourth-floor buttons in elevators, because pronunciation of the number four is like the Chinese word for death; cash registers are close to corners or along walls, where their placement is believed to increase prosperity; the theme park opened on September 12, told by its feng shui consultant that it was a lucky day.

Examples of using feng shui might include placing the most powerful employee farthest from the ingress door. No doorways should face each other, all corners should be rounded. Desks should be placed as far back from the entry door as possible and oriented to the door, but not directly across from the door. Plants must be healthy, water features available. The placement of mirrors is deliberate and important. For each feng shui principle, there is a corresponding rationale.

In searching for a home, some tips are that buyers should not buy if the main door is obstructed by a lamp post, a tree or an electrical pole; if the door is tilted in any way; if a beam runs across the door, inside or out; if the door is below a second floor bathroom. A kitchen should not be located in the center of the house, or where the kitchen has a stove in the center (island). Open man-made drains directly in front of a house are considered bad luck. Property where the road curves into the house, like a blade, is to be avoided, as well as alleys, narrow or wide, opposite the property. Irregularly-shaped bedrooms should be avoided; the best kind of bedroom is a square with no sloping ceilings or low ceilings.

The philosophy of feng shui has six schools of thought: the Form School, East-West School, Flying Stars School, Black Sect Tradition, Advanced Water Dragon School, and Four Pillar Astrology. The Form School concentrates on the observation of the environment inside and outside. The outside focus is on four animals (turtle, dragon, phoenix, and tiger); colors; mountains, rivers, and trees; and neighboring buildings and streets. On the inside, the School concentrates on pathways, furniture placement, color schemes, and walls and windows and their placement. East-West School determines specific locations and orientations, based on compass readings, for beds, desks, and people using a room.

The Flying Stars School is an advanced school based on compass readings, and includes consideration of the year the home or office was built. This School is the only one that takes the time factor into consideration. A Flying Stars consultant claims to be able to tell what has happened in the past and avoid similar patterns in the future. Corrections are based on five elements (water, wood, fire, earth, and metal) to restore energy balance. The Advanced Water Dragon School is more advanced, very specialized and more detailed than the Flying Star School. Four Pillar Astrology is not so much a feng shui school, but uses astrology in combination with feng shui to personalize adjustments.

Black Sect feng shui is a combination of Chinese and Tibetan Buddhist, Taoist, and folk wisdom, coupled with modern psychology and design principles. It includes individual meditation by the user, holding that the spiritual precedes the physical, and must also be adjusted for perfect harmony. It adjusts environments and the people in them.

See Also: Asia; China; Hong Kong; Malaysia; Singapore.

Bibliography. Linda Cahan, *Feng Shui for Retailers* (ST Media Group International, 2005); *Feng Shui Times*, www.fengshuitimes.com (cited March 2009); Evelyn Lip, *Feng Shui for Success in Business* (Marshall Cavendish Editions, 2008); “Make Feng Shui Work for You,” *Career World* (v.37/1, 2008); Stephen P. Robbins and Timothy A. Judge, *Organizational Behavior* (Prentice Hall, 2009); Kevin Walters, “What Can We Learn from an Ancient Chinese Practice? The Relevance of Feng Shui,” *Planning* (v.73/11, 2007); Darrin Zeer, *Office Feng Shui: Creating Harmony in Your Work Space* (Chronicle Books, 2004).

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Fiat

The history of the Italian carmaker Fiat, also FIAT (i.e., Fabbrica Italiana Automobili Torino, that is, the Italian Automobile Factory of Turin), has shaped the development of Italy’s car industry and has been considered the icon of Italian capitalism. Today, Fiat produces in 61 countries with 1,063 companies that employ over 223,000 people. The 2007 revenue was equal to €58,529 billion and the net income was equal to €2.054 billion.

The company was founded in 1899 by a group of investors including Giovanni Agnelli, who eight years later became the main shareholder. Shortly after World War I a transformation in the system of production was undertaken along the lines of Taylorism. But it was not until the end of World War II that a system of mass production could develop. Thanks to the Marshall Plan and the European Recovery Program, a reorganization of the system of production was undertaken. During the Italian golden age of economic growth, the internal market expanded. The Turin firm may also have benefited from this as a result of heavy protectionism.

Starting from the early 1990s the automobile manufacturer experienced a major financial crisis. Among the causes: A loss of market share in Italy and Europe, and the downward trends in market demand; in many of the emerging economies that Fiat entered, registrations stagnated. As a result of the enormous debts accumulated, the major Italian banks intervened for the recapitalization of the company. After an early-terminated alliance with General Motors and an additional financial intervention of the banking system, both a major restructuring of the corporate organization and a redefinition of shareholders’ prerogatives

A 2007 Fiat 500 model on display in Turin, Italy, the city in which the now international car company was founded.

were undertaken. After 2004, Fiat managed to reaffirm the brand at home and expand abroad. In 2005, under CEO Sergio Marchionne, the Italian carmaker saw its first profits after four years of significant losses.

Among the factors that contributed to the success of Fiat, four appear to have played a key role. The first factor was diversification. The company invested both in vertical integration and in other sectors. Among the current productive activities: Fiat automobiles represent the core business of FIAT; industrial vehicles (IVECO); agricultural and construction equipment (CNH Global); metallurgical products and components (Teksid, Marelli, Comau); services (Toro Assicurazioni); and publishing and communication (*La Stampa*, *Itedi*, and *Italiana Edizioni*). The second was protectionism. In the early stages the company benefited from the closed market. In the postwar period, tariffs and quotas were also high while the mass market and mass marketing were developing. After the golden age, the company gained the status of national champion, and only under the pressure of the European Union was the Italian car sector liberalized in the early 1990s. The third, internationalization. From the early stages, Fiat exhibited a marked international attitude due to an undeveloped domestic market. This affected all initial production and the choice of markets.

In recent years, Fiat continues to try to broaden its market share in Italy, in Europe, and elsewhere in the world. In 2007, Fiat's market share in Italy was 24.7 percent, and its market share in Europe was 6.2 percent. The last factor contributing to Fiat's success is management. Among the most influential people: Giovanni Agnelli, the founder; Vittorio Valletta, who played a key role in the reconstruction of the company after World War II; Gianni Agnelli, the founder's grandson and chairman between 1966 and 1996, who undertook a significant reorganization of the company management. Sergio Marchionne, who became CEO in June 2004 shortly after Umberto Agnelli's death, introduced a major change in managerial organization. In 2009, Fiat was involved in the U.S. government rescue of Chrysler Corporation, forming a partnership with the ailing U.S. auto maker.

See Also: Entrepreneurship; Italy.

Bibliography. Giuseppe Berta, *La Fiat dopo la Fiat: storia di una crisi, 2000-2005* (Mondadori Editore, 2006); Valerio Castronovo, *Fiat: Un Storia del Capitalismo Italiano: [1899-2005]* (Rizzoli Editore, 2005); Stephan Faris, "The Turnaround: How Fiat, Once a Wreck of a Car Company, Got Hot Again," *Fortune* (v.155/9, May 14, 2007); "Fiat: Rebirth of a Carmaker," *Economist* (v.387/8577, April 2008); Francesca Fauri (1996), "The Role of Fiat in the Development of the Italian Car Industry in the 1950's," *Business History* (v.70/2, 1996).

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Fiat Money

Fiat money is a form of money that has no intrinsic value. Its value as money is based on faith in the government that issues it. This faith comes from the general understanding that the government will not create too much money nor too little. Fiat money is not backed by any commodity and therefore has no value in use other than its use as money. The name comes from the Latin word *fiat*, meaning "by decree." Fiat money has value as "legal tender" simply because the government decrees it does. Most countries today have fiat-based monetary systems.

Fiat-based monetary systems traditionally begin as commodity-based monetary systems. Commodity money has both monetary and nonmonetary uses (e.g., gold, silver, beads, shells, tobacco, etc.). Commodity money serves well as money as long as the commodity is more valuable as money than it is in its nonmonetary use. In an effort to protect or store these commodities, "representative money" (e.g., coins and paper) is issued that can be traded and easily converted into this commodity. When demand and supply conditions of the commodity or of the representative money change so that it is no longer easily converted, the representative money is either devalued or it transitions to fiat money.

In order for an object with no intrinsic value to become acceptable for use as money, certain network effects must be overcome. In other words, why do people trust it as money? An individual will only accept fiat money if he or she knows that others will accept it as money as well. This acceptance can come through government decree right away, or it can arise gradually through a system of representative money and/or fractional reserve banking.

Monetary systems based on fiat money have often historically come into existence during times of war. This happens when the expense of war exceeds the available government stock of the commodity being used as money or backing representative money. Representative money fails and governments issue fiat money to pay the expenses or debt of war. Often in these instances, governments issue too much fiat money leading to periods of high inflation. During these periods, fiat money loses its ability to serve as a store of value. Examples go back in history, such as the siege of Faenza in 1241, the cases of Germany during the Thirty Years War (beginning in 1618) and later World War I, and, even more recently, in Iraq following the 1991 Gulf War. In extreme cases, the paper it is printed on becomes more valuable as a source of fuel for generating heat than as money.

Fiat money can also evolve as part of a fractional reserve banking system. Fractional reserve banking came into existence when banks (or goldsmiths) would accept deposits in gold and issue paper notes in exchange. Patrons could redeem these notes for gold at any time. Rather than conduct transactions in gold, they began conducting transactions in notes which were lighter in weight and readily accepted. Because people would occasionally exchange notes for gold, bankers would keep a fraction of the gold in the vaults to meet daily withdrawals. They would loan out the rest, thereby creating money through issuing more notes than they kept in gold to back it up. This system works as long as not everyone wants their gold at once. Modern fiat systems today work in much this same manner except that notes are no longer convertible to gold and are instead backed by trust in the government that they will always have value. To maintain this trust, governments must exercise restraint in their willingness to create and destroy money.

Much of the Western world today converted to fiat monetary systems when the United States officially severed all ties of its currency to gold with the abolishment of the Bretton Woods system in 1971. Major Western countries had tied the value of their currencies to the U.S. dollar, which was convertible to gold. When there were many more reserves held in dollars than the United States could possibly redeem in gold, it was eventually forced to abandon the gold exchange system, effectively creating a worldwide fiat system.

See Also: Bretton Woods Accord; Fixed Exchange Rate; Flexible Exchange Rate Regime; Money Supply.

Bibliography. Luis Araujo and Braz Camargo, "Information, Learning, and the Stability of Fiat Money," *Journal of Monetary Economics* (v.53/7, 2006); Peter Howitt, "Beyond Search: Fiat Money in Organized Exchange," *International Economic Review* (v.46/2, 2005); Jumpei Tanaka, "Is Higher Confidence of Fiat Money Necessarily Desirable?," *Economics Letters* (v.95/2, 2007); H. Varian, "Economic Scene; Paper Currency Can Have Value Without Government Backing, but Such Backing Adds Substantially to Its Value," *New York Times* (2004); F. R. Vlede, "Lessons from the History of Money," *Economic Perspectives* (1998).

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Financial Hedge

A financial hedge is a transaction that reduces the risk of adverse price movements in an existing investment position. It typically involves taking an offsetting position in a related derivative financial instrument. The key derivative instruments are forwards, futures, swaps, and options, and they are commonly used to protect positions in foreign currency, commodities, stocks, and bonds.

For example, the exchange rate risk associated with a foreign currency receivable or payable at a future date can be hedged by entering into a forward contract to buy (payable) or to sell (receivable) at a fixed rate on a specified future date. This locks in a guaranteed value for a future cash flow, irrespective of market fluctuations. An alternative to hedging privately with a bank using an "over-the-counter" (OTC) forward contract is to use an exchange-traded futures contract. For example, if an inflow of currency is expected in the future (an underlying "long" position), then selling futures (going "short") will ensure that any loss in the spot value of the currency is counteracted by a gain on the short futures position.

Futures contracts may not provide a perfect hedge, either because the underlying asset is different from that underlying the futures contract or because the expiration date of the futures contract does not match the delivery date of the asset or because the standardized value of the futures contracts does not match the value of the underlying exposure. As a result, the spot price of the asset and the futures price will not converge on the expiration date, giving rise to "basis risk." Although they might not provide a perfect hedge, futures contracts, in contrast to forwards, are tradable and thus allow a hedge to be unwound prior to maturity.

Whereas forwards and futures contracts oblige two parties to make an exchange in the future, and are thus useful to hedge known exposures, an "option contract" gives one party the right, but not the obligation, to buy (a call option) or sell (a put option) an asset, under specified conditions, for a fee (the option "premium"). Options are thus useful to hedge in situations where the exposure is not known with certainty. For example, a company bidding for a foreign competitor may purchase a foreign currency call option to lock in a guaranteed price, in home currency terms, for the transaction, but may let the option expire without exercising it if the deal falls through prior to maturity.

Price risk may also be hedged by means of swap contracts, which involve two parties agreeing to exchange future streams of cash flows according to a prearranged formula. Swaps can be regarded as portfolios of forward contracts, represented by the streams of cash flows, or "legs," of the swap. These are determined by reference to either interest rates, exchange rates, equity prices, or commodity prices. Although the first swap contracts were only negotiated in 1981, swaps are now the most heavily used derivative product.

Although most financial hedging involves the use of derivative products, it is also possible to construct financial hedges using the "cash" (or "spot") markets. For example, a company can hedge against the currency risk associated with future payables or receivables by constructing a "money market hedge." This involves borrowing and investing funds via the money markets and using the spot rate to lock in the amount to be received or paid. A company expecting to receive foreign currency from a client in three months may borrow the present value of the receivable now, discounted at the foreign interest rate, and immediately convert the amount into the home currency at the prevailing spot rate. This money is then invested for three months at the home interest rate. When the foreign currency is received in three months, it is used to pay off, in full, the foreign currency loan. Because no exchange of currency occurs at this point, the future spot rate has no bearing on the outcome. If "interest rate parity" holds—that is, if the difference in interest rates between two currencies is equal, but opposite, to the difference between the spot and forward exchange rates—then a money market hedge would produce the same outcome as a forward market hedge.

Although financial hedges reduce potential losses in the event of adverse price movements, they also incur an opportunity cost if the underlying investment being hedged against makes money. Investors therefore need to make a careful judgment about future market conditions before deciding whether or not to hedge.

See Also: Exchange Rate Risk; Forward Market; Futures Markets; Hedging; Interest Rates; Option; Swap.

Bibliography. Richard M. Bookstaber, *A Demon of Our Own Design: Markets, Hedge Funds, and the Perils of Financial Innovation* (Wiley, 2007); Patrick Cusatis and Martin Thomas, *Hedging Instruments and Risk Management: How to Use Derivatives to Control Financial Risk in Any Market* (McGraw-Hill, 2005); John M. Halstead, Shantaram Hegde and Linda S. Klein, "Hedge Fund Crisis and Financial Contagion: Evidence from Long-Term Capital Management," *Journal of Alternative Investments* (v.8/1, 2005); Andrew W. Lo, *Hedge Funds: An Analytic Perspective* (Princeton University Press, 2008); Adam Zoia and Aaron Finkel, *Getting a Job in Hedge Funds: An Inside Look at How Funds Hire* (John Wiley & Sons, 2008).

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Financial Market Regulation

Regulation of financial markets and the persons and companies involved in financial transactions is pervasive, and the goals of financial regulation are many. Governments and regulators seek to protect consumers and investors from being taken advantage of by those with more expertise or information. To this end, regulation prohibits fraud and manipulation of markets, and imposes affirmative duties to disclose important information to customers or investors and to act in their best interests. Regulation also seeks to preserve and strengthen the stability of banks and other large financial institutions. Financial regulation evolves in response to the changing circumstances brought about by financial innovation and the continual integration of global financial centers.

Banking

Perhaps the most fundamental type of financial institution is a commercial bank or other depository institution. Banks provide the essential economic function of matching up individuals and institutions desiring to save funds with those seeking capital to borrow for investment or other purposes. Regulation of commercial banking primarily involves protecting the funds of depositors, ensuring the soundness of banks, and protecting consumers from unfair lending practices. In the United States, banks are regulated by several authorities at the state and federal level.

Bank regulation stems in part from what is thought to be banks' inherent instability. Banks typically lend more capital than they have in reserves. If a significant portion of bank loans go bad, or if too many depositors withdraw their funds at once, a bank risks insolvency. To prevent collapses and runs by depositors, governments have established safety nets, such as deposit insurance and the ability of central banks to lend in times of distress. In part because the government stands ready to provide capital to banks, it also comprehensively regulates their activities by requiring banks to disclose their practices and balance sheets and to keep a minimum level of capital in their reserves.

To reduce the risks banks take, the law may prohibit the types of activities a bank may engage in. In the United States, commercial banks are prohibited from owning stock in public companies, although bank-affiliated financial holding companies may provide insurance services, deal in securities, and underwrite new issues of securities. In countries like Germany, by contrast, banks often have large shareholdings in public companies and exercise control over management. To protect consumers who borrow from banks, regulation may require disclosures of important costs and risks to consumers, place a cap on the rate of interest charged on bank loans, and prohibit excessively risky loans to unqualified borrowers.

Raising Funds With Securities

Selling (or issuing) securities to raise investment funds is an activity widely regulated by financial regulators. Two basic types of securities are stocks and bonds. Stocks give investors an ownership stake in the company and often rights to control the company through voting. Bonds, which are a form of debt and generally safer than stocks, entitle an investor to periodic interest payments and the repayment of their investment principal at a fixed time in the future. Issuing securities to the general public requires a company to register under the Securities Act of 1933 and disclose important financial information about itself. Companies are also subject to criminal and civil liability for making false disclosures. U.S. regulation is unique in the ease with which it permits investors to bring group lawsuits against companies and their executives and the high level of enforcement by federal regulators.

Furthermore, when a company's securities are traded in secondary markets such as the New York Stock Exchange (NYSE), the Securities and Exchange Act of 1934 requires the company to make continual, periodic disclosures in the form of annual and quarterly reports, and also upon the happening of certain important events such as the announcement of a merger. In connection with purchasing and selling securities in secondary markets, individuals and companies are required to disclose significant shareholdings in other companies and prohibited from trading based upon inside information not known by the public.

Derivatives Regulation

Another type of investment product is known as a derivative. A financial derivative is a security whose value is derived from the price of some other asset or metric, such as stocks or stock indices. A common type of derivative is an employee stock option that gives an employee the right to purchase stock in their own company at a predetermined price. Another type of derivative is a futures contract, which obligates one party to deliver an asset to another on a specified date. Two other types of derivatives are swaps and forwards.

In the United States, derivatives are typically regulated by a particular financial regulator based upon what underlying asset they reference. Options on stocks and currencies that trade on exchanges are regulated by the Securities and Exchange Commission (SEC). Futures and options on assets other than stocks are typically regulated by the Commodity Futures Trading Commission (CFTC). Futures on single securities or narrow-based stock are regulated by both the SEC and the CFTC.

Trading On and Off Exchanges

Regulation applies to the trading of securities and derivatives by regulating the venues on which trading takes place and manner of trading on different venues. Organized stock exchanges and derivatives exchanges are regulated in the United States as self-regulatory organizations (SROs) registered with the government. The NYSE and the NASDAQ Stock Market, as well as futures and options exchanges such as the CME Group, are SROs that have a duty to regulate and discipline the companies and brokers-dealers that utilize the exchange. Exchanges must also seek approval from the government for any changes to their internal rules. Trading of securities and derivatives that does not take place on an organized exchange takes place "over-the-counter" (OTC) and is generally subject to less governmental oversight. Derivatives are overwhelmingly traded OTC, with interest rate and foreign currency derivatives constituting most types of OTC derivatives.

Investment Funds

When a company pools together money from the public and invests their money in a group of securities, that investment fund is subject to wide-ranging regulations that are designed to protect the public investors. The most widely utilized type of investment fund is a "mutual fund." Mutual funds must disclose their holdings and investment objectives to investors, daily calculate their net asset value and stand ready to redeem investors' capital, and have a board of directors to oversee the activities of portfolio managers. Mutual funds are generally restricted in their ability to charge a performance fee to investors, or engage in short selling, derivatives trading, and borrowing money to finance investments. In contrast, the regulatory situation is much different in the case of hedge funds (private investment funds utilized by wealthy individuals and institutions). Regulation does not require hedge funds to disclose information to investors, nor does it prohibit them from charging performance fees or engaging in the aforementioned trading strategies. However, hedge funds are subject to regulations.

Investment Advisers, Brokers, and Dealers

Financial regulation also applies to intermediaries that facilitate securities trades. An investment adviser is someone who gives advice to others, including investment funds, about whether to buy or sell securities. Advisers must be registered with the government if they advise a public investment company (such as a mutual fund), or advise a sufficient number of clients or funds with significant assets under management. Regulation requires advisers to put the interests of their clients above their own. A broker is a person or company that charges a price for buying and selling securities or soliciting or negotiating such trades for others. Brokers are typically subject to more stringent regulation than advisers. Mandatory broker duties include fair dealing with clients, being licensed by the government or a private self-regulatory body, executing trades for clients with a sufficient mix of price, speed, and certainty, and making sure that the securities recommended to customers are suitable for their financial circumstances and goals. A dealer is a person or company in the business of buying and selling securities, typically because the dealer owns enough of a certain security to make a market by fulfilling the buy and sell orders of customers.

See Also: Basel Committee on Banking Supervision; Central Banks; Chicago Mercantile Exchange; Citigroup; Debt (Securities); Disclosure Requirements; Financial Markets; Market Maker; Mortgage Credit Crisis of 2008; Securities and Exchange Commission; Stock Exchanges.

Bibliography. Terry Arthur and Philip Booth, "Financial Regulation, the State and the Market—Is the Financial Services Authority an Unnecessary Evil?" *Business Economist* (v.38/3, 2007); Paul Barnes, *Stock Market Efficiency, Insider Dealing, and Market Abuse* (Ashgate, 2008); Lisa L. Broome and Jerry W. Markham, *Regulation of Bank Financial Service Activities: Cases and Materials* (Thompson West, 2008); Michael Cichello and Robert Kieschnick, "Product Market Competition, Regulation, and Financial Contracts," *Quarterly Review of Economics and Finance* (v.45/1, 2005); P. M. Johnson and T. L. Hazen, *Derivatives Regulation* (Aspen, 2004); Hal S. Scott, *International Finance: Transactions, Policy, and Regulation* (Foundation Press, 2008); L. D. Soderquist and T. A. Gabaldon, *Securities Law* (Foundation Press, 2007); Stephen Weatherill, *Better Regulation* (Hart Publishing, 2007).

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Financial Markets

Financial markets provide a way for people, companies, institutions, and even governments to get the money necessary to pay for a variety of purchases for goods, services, and large capital projects. The financial markets provide a mechanism for people to buy and sell financial instruments such as stocks, bonds, commodities, and other securities. In earlier times the financial marketplace was physical, but with the advent of computers it has become "virtual" as well.

Modern financial markets evolved from older trading markets. The modern markets are more efficient because they have been able to assemble a much larger number of investors than in earlier times; they are also able to offer a much wider array of securities for trading. Financial markets have undergone many changes in the last 300 years. Many of these changes are designed to protect capital, to increase fungibles, to increase liquidity, and to provide for trading at low transaction costs. Access to financial markets has also grown enormously with the advent of computers.

Students of financial markets have developed the efficient-market hypothesis (EMH). Developed by Eugene Fama of the University of Chicago, the hypothesis claims that financial markets are "informationally efficient." In effect this proposes that information on stocks, bonds, commodities, property, and other traded assets is well enough understood that the prices of the traded items result from full knowledge. The EMH is similar to assumptions of classical economics that said that an economy had perfect mobility of labor, capital, information, and other market affecting factors. These assumptions were rather gratuitous and not completely realistic.

Another assumption of the EMH is that it is impossible to outperform the market with knowledge that the market already has. News affects financial prices. It is unknowable and acting without it is like acting with the expectation that luck will provide the answers. The rise of news sources in the 1700s accompanied the development of the Industrial Revolution. News of ships affected insurance rates; news of weather, wars, and world problems affected prices. The individual who possessed advanced knowledge could beat the market in some instances. The case of Nathan Rothschild trading on news of the outcome of the Battle of Waterloo is a classic case of trading on knowledge before others get the news.

Markets may be general or specialized. Trading in general markets includes all manner of securities. Trading in specialized markets is limited to only one or a few commodities or securities. When markets are made they create a "space" for people to engage in exchange. The market may have only a few traders or a great many bidding for the values being traded. Free markets allow individuals to trade with few or no restrictions. Command economies seek to dictate the course of the trading or its outcome. Many of the financial markets today are the product of mixed economies. That is, they are free markets that are regulated and in many instances directed. In such cases the market, instead of being the aggregate of possible buyers and sellers who are trading something, includes government directions for political, moral, or social purposes, which, however nobly justified, distort the market.

If financial markets did not exist it would be very difficult for many projects to be financed. If the project is a school or something that is of social importance but will not directly generate income it still takes money to pay for the school or project. Financing a project on a "pay-as-you-go" basis can be seen in some countries where even short-term loans are rare, so people save, build, save some more and then build some more rather than using a financial market to pay for a project.

Banks are key institutions in the financial markets. They use the deposits of their depositors when pooled together as capital for lending. The loans, mortgages, and other financing activities performed by banks are the basis of the modern financial system. However, financing often requires more assets than a single bank has to lend. The use of a stock exchange or syndicated borrowing allows banks to participate but to not have excessive exposure to default risks because they are able to syndicate the financing.

Borrowers

There are a variety of borrowers that enter into the financial markets. They include individuals, corporations, governments, publicly traded joint-stock companies, and other private institutions. Individuals seek loans from banks for short-term financing. Sometimes the loan may be for capital consumer goods such as a refrigerator. Or it may be for much larger financing in order to buy an automobile or a mortgage for a house or a farm.

Companies are constantly seeking capital for both short term financing or for longer term projects. For instance the financing of automobiles means that the dealer has to have an inventory and then has to see that the automobile is paid for through borrowing if the purchaser does not have the cash to make the purchase. If credit is easy then financing is readily available, even at subprime rates. However, if corporations cannot finance their inventories or sales until payment arrives then it is difficult to do business except with older methods of cash on delivery. For example, college textbook stores buy millions of dollars worth of books every year. They usually pay the textbook company after the arrival of the books. Sometimes payment is made after the income is generated from the sale of the books; without financing business would be slower and at a much lower volume.

Governments are borrowers of huge sums of money. In many countries spending by the government exceeds the revenue from taxes, fees, and other sources. Budget deficit borrowing is a nearly universal practice. The collateral for the loans is in theory the entire country. However, collecting by a lender would be difficult unless another government were to become its collector. In the 19th century this was a frequent practice. Public corporations may be government-owned enterprises such as post offices, railroads, or utilities such as the Tennessee Valley Authority. These types of institutions also engage in significant financing. They often borrow through the use of international agencies that facilitate lending through the foreign exchange markets.

Organization

Financial markets are either domestic or international. With the rise of computers and global trading the world's assets have become available for lending. Consequently financial markets may be domestic but with foreign assets that are hard to distinguish. Or trading or borrowing may be international for domestic purposes by a government or for a local project. Much of the debt of the United States is owed to foreigners; on the other hand billions of dollars have been invested in foreign countries through the World Bank or foreign aid.

Markets that handle billions of dollars in exchanges have to be organized to facilitate the volume in trades and values. So "market" often refers to the exchanges where board of trade or other kinds of organizations facilitate transactions. These are stock exchanges, bond exchanges, commodity exchanges, or other exchanges for the trading of values. They may have a physical location such as the New York Stock Exchange, or the Chicago Mercantile Exchange. Or with the emergence of the internet they have an electronic system of exchange such as that of the NASDAQ. With electronic trading between institutions through computer programs the exchanges are executed in huge volumes and values. Globally the move is to electronic exchanges that can handle volume in the billions of dollars per hour or more.

Financial markets do more than provide places of exchange. Capital markets enable businesses and others to raise capital for business operations, investments, projects, or other activities. They also allow the use of derivatives for the transfer of risk. In the case of currency markets they provide a mechanism of international trade.

Capital markets may be primary markets or secondary markets. In primary markets money is raised by the issuance of new securities. Funding sought by governments, businesses, or other institutions can be raised by sale of new stock or new bonds. Capital marketing is usually done by a syndicate of securities dealers who act as underwriters. The process of underwriting a new issue of a security, called an initial public offering (IPO), usually produces cash for the borrowers, investments for the lenders, and fees for the securities dealers. The details of the IPO have to be stated clearly in the investment prospectus. In the United States a prospectus that is deceptive in some way can put those responsible into serious legal jeopardy. Many other countries also have stringent requirements for capital investment prospectuses.

Financial markets that are secondary capital markets are used for the exchange of securities that have been on the market for some time. For example, shares of General Electric that were issued 25 years ago would be in the secondary market and probably traded as part of the liquidation of an estate or for other reasons that made it practical for the investor to sell them. Secondary markets can exist in any type of good. Flea markets are a basic example of a popular secondary market. In financial markets the "aftermarket" is the market that exists just after the issuance of a new IPO. It is in effect the beginning of the trading in that market. Mutual funds are a way to invest in a basket of stocks, but with the aid of mangers who can supervise the investments.

Submarkets

There are a number of ways to array the types of financial markets as a variety of submarkets. The capital markets include the stock markets and the bond markets. Stock markets provide mechanisms for trading that finances corporations through the introduction of new public offerings of shares of a new company or of additional shares of an established company. For a new business such as a computer or stem cell company, shares purchased from it by investors offer the company a way to get capital and share with purchasers a way to invest in the growth potential of the company. Sometimes the investment may be a speculative play, but so is trying a new variety of seeds or a new crop for which a market has to be developed. In both instances the speculation is a gamble but it is based upon, or should be, much more rational calculations than games of chance at a casino.

Bond markets are mechanisms for financing all manner of projects. Borrowing from banks or other sources of capital and using the money for schools, hospitals, roads, dams, or other infrastructure projects that generate long-term cash flows of interest and the return of principal have been traditionally practiced for decades. Laws in the United States exempt interest paid to states or localities from federal taxation in order to encourage this type of financing. It lowers the cost of the borrowing for the states or localities by making the investment easier to repay at a lower cost and by allowing investors to go untaxed.

Commodity markets are centers for the exchange of livestock, grains, or other agricultural products or the exchange of metals or other non-agricultural items. Diamond exchanges in the diamond centers are commodity markets, as are local cattle sale barns. High volume sales are those through exchanges such as the Chicago exchange.

Money markets allow businesses or other institutions to engage in short-term borrowing of large sums of money. For many institutions the "petty cash" of their huge number of investors is a large sum that can be profitably loaned without concern that all investors will want all of their petty cash at one time.

The market in derivatives is relatively new. It provides a mechanism for exchanging instruments that carry a higher risk of default and loss because the underlying values may include subprime loans. Using derivatives allows for the management of risk.

Futures are contracts for the future delivery of something, usually a commodity such as sugar to a bakery, or cotton to a spinning mill. The futures contract locks in a price for the producer who is in effect a commodity consumer at the time of delivery and use. By hedging on the price, which for the industrial user is a form of cost averaging, the futures market creates futures contracts that permit speculators to maintain and stimulate the market.

Forwarding contracts are sold in forward markets. They are a form of financial market securities. Forward contracts are agreements between buyers and sellers to buy something at a future time for a set price. For a grower of the hops used in making beer the spring forwarding contract locks in a price guarantee. The brewer is also guaranteed a product at a known price at a future time that will allow for the continued brewing of the beer. However, if the brewer were to sell the forward contract in a forward market the brewer would collect the price of the hops before they were delivered. The forward price is different from the spot price, which is the price for immediate delivery.

Insurance markets are centers of exchange for distributing risks. In the days of the sailing ships the risks of sea voyages were high. As it was known that a few of those ships would be lost, the selling of shares in voyages of many ships was a way of spreading the risk. Today all manner of risks are insured against, from ships at sea to sexual misconduct by clergy. The insurance markets provide a way for engaging in risk management as a hedge against losses. The losses are contingent upon some act of nature, or in more recent times some kind of malfeasance. Without insurance markets many forms of activity would be viewed as too risky. On the other hand some critics have charged that insurance may make the insured less risk-averse than they should be.

Foreign exchange markets are centers for currency changing. Doing any kind of business other than bargaining requires some type of medium of exchange. Currencies are the most efficient media of exchange. Some currencies such as the dollar, the euro, the yen, or the Swiss franc are in much higher demand than are the currencies of countries that are war torn, economically depressed, or not heavily engaged in the global economy. Currency exchanges, through computers, now more than ever permit global trade to take place at much higher levels and at much higher rates than ever before. The retail currency trading market is global. It is called the "retail forex" meaning the retail foreign exchange (or retail FX) market. It has become the center of huge payment transfers. Retail currency trading allows currency speculations and currency exchanges to set the price of currencies based on supply and demand for those currencies as they are needed to pay for goods and services in the global market.

The foreign currency exchange rates ("forex") market is a subset of the larger foreign exchange market. Its prices are set by market forces. The participants in the markets are individuals and companies. At the present time many companies offer off-exchange foreign currency futures as well as option contracts.

The FX market had perhaps $90 trillion available around the world for investments until the credit crisis of 2008. However, it still is the center for the exchange of currencies between large banks, currency speculators, governments, and others. As goods are traded, and tourists collectively spend billions in dollars or other currencies, the daily volume in currency exchanges as currencies seek repatriation is huge. The Bank for International Settlements supervises and coordinates the regulations that promote stable international currency exchanges.

See Also: Bank for International Settlements; Bonds; Chicago Mercantile Exchange; Currency; Currency Speculators; Foreign Exchange Market; Forward Market; Futures Hedging; Interest Rates; Markets; Mortgage Credit Crisis of 2008; Option; Stock Exchanges.

Bibliography. Richard A. Brealey, *Principles of Corporate Finance* (Irwin/McGraw-Hill, 2007); John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, *The Econometrics of Financial Markets* (Princeton University Press, 1996); Stephen G. Cecchetti, *Money, Banking, and Financial Markets* (McGraw-Hill Companies, 2007); Lawrence J. Gitman, *Principles of Managerial Finance* (Addison Wesley, 2008); A. A. Groppelli and Ehsan Nikbakht, *Finance* (Barron's Educational Series, 2006); Arthur J. Keown, John D. Martin, David F. Scott, and J. William Perry, *Foundations of Finance: The Logic and Practice of Financial Management* (Prentice Hall, 2007); Charles D. Kirkpatrick and Julie R. Dahlquist, *Technical Analysis: The Complete Resource for Financial Market Technicians* (Pearson, 2006); John J. Murphy, *Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications* (Prentice Hall Press, 1999); Frederic S. Mishkin and Stanley G. Eakins, *Financial Markets and Institutions* (Addison Wesley, 2008); Frederic S. Mishkin, *Economics of Money, Banking, and Financial Markets* (Addison Wesley, 2006); John J. Murphy and Joseph Murphy, *The Study Guide for Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications* (Penguin Group, 1999); Frank Partnoy, *Infectious Greed: How Deceit and Risk Corrupted the Financial Markets* (Henry Holt & Company, 2004); Anthony Saunders and Marcia Millon Cornett, *Financial Markets and Institutions* (Irwin/McGraw-Hill, 2005); Jeremy J. Siegel, *Stocks for the Long Run: The Definitive Guide to Financial Market Returns & Long-Term Investment Strategy* (McGraw-Hill Companies,

2007); George Soros, *The New Paradigm for Financial Markets: The Credit Crisis of 2008 and What It Means* (PublicAffairs, 2008); Benn Steil and Robert E. Litan, *Financial Statecraft: The Role of Financial Markets in American Foreign Policy* (Yale University Press, 2008); Martin Wolf, *Fixing Global Finance* (Johns Hopkins University Press, 2008).

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Financial Reporting

Financial reporting maintains the official records of a business's financial activity, in the form of specific financial statements. The purpose of financial reporting is to strike the right balance between a complete accounting of the relevant data, and a legible, understandable presentation. The "audience" of such reports can, and generally will, include parties within the company who need to know the business's position and progress; labor unions and parties with a similarly vested interest in the business's well-being; shareholders or prospective investors and their agents; external authorities such as lending institutions and government tax authorities; and the general public.

Financial reports provide a picture of the company's activity at a particular time or over a particular period of time. The standards to which reports are held are determined both by the Generally Accepted Accounting Principles, which adhere in the United States, and the International Financial Reporting Standards (IFRS) adopted by the International Accounting Standards Board. In the United States, adherence to IFRS is being phased in gradually, with all American companies expected to adopt them in their accounting practices by 2014. Currently, IFRS obtains in the European Union (EU), Australia, the nations making up the Cooperation Council for the Arab States of the Gulf, India, Pakistan, Hong Kong, Malaysia, Singapore, and Russia.

Most sets of accounting standards call for four basic financial statements. The balance sheet presents the company's financial situation at a specific point in time—generally the end of the fiscal year. The company's assets and liabilities are listed in full. The assets minus the liabilities are the net worth of the company—the shareholders' equity, as it is sometimes called. The balance sheet is the most basic financial statement, a product of the double-entry bookkeeping system (though individuals employing the single-entry bookkeeping system used for balancing personal checkbooks can also determine their net worth with such a balance sheet). Of course, the net worth of a company (or an individual) is not the same as its available cash, since much of what it owns will be in assets such as equipment, inventory, real estate, intellectual property, and so on. These various assets will be listed on the balance sheet. Contingent liabilities are also listed: liabilities that may or may not need to be paid at some point in the future, such as those owed from lawsuits pending, or the expense of upholding a warranty or money-back guarantee. Ideally, the balance sheet will note the likelihood of loss associated with each contingent liability (large companies issuing warranties have a general sense, as demonstrated by their past fiscal records, of how much those warranties cost them).

An income statement, profit and loss statement, or simply P&L, is narrower than the balance sheet, and accounts for the company's net income. The net income is also called the bottom line, coming as it does at the end of a sequence of subtractions (the expenses), which follow the top line: the revenue, all the money collected by the company. The net income is how much the company is "actually making," over a given period of time. The income statement will note different kinds of expenses, such as the depreciation associated with capitalized fixed assets, the administrative expenses spent on running the business, and the sales expenses incurred by the process of getting the product to the customer (including sales commissions, freight, and advertising). Irregular items are noted in a special section, such as discontinued operations, natural disasters, relevant changes in government or industry regulations that affect the business, and changes to the business's accounting practices. The income statement also reports the earnings per share.

The statement of retained earnings records the changes in a company's retained earnings over a specific period of time. It is usually presented along with a balance sheet and a P&L, and essentially expands the coverage of the changes to the company's net worth, through profits, losses, changes in assets, and so forth.

The cash flow statement is of special interest to lenders, contractors, and other parties interested in letting the company be in debt to them. It looks specifically at the company's cash inflow and outflow, which has special importance in the short term because a company that is worth a great deal but has little cash on hand will have difficulty paying its bills.

Financial reports are included as part of a company's annual report, made available to shareholders. Blue chip corporations have traditionally issued expensive, elaborate annual reports, often hardcover and filled with photographs; as the internet has provided faster ways of making information available, this has become less common.

See Also: Corporate Accounting; Disclosure Requirements; Impact Financial Statement Analysis; International Financial Reporting Standards.

Bibliography. James Bandler, *How To Use Financial Statements* (McGraw-Hill, 1994); Thomas R. Ittelson, *Financial Statements* (Career Press, 1998).

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Financial Statement Analysis

Financial statement analysis is a methodology that enables stockholders, potential investors, creditors, and managers to evaluate past, current, and future performance of a company by examining relationships among financial statement elements. It involves examining trends, making industry comparisons, and analyzing the financial health and growth prospects of a company. Financial statement analysis can be performed independently by interested parties, by companies themselves, or by financial analysts who study certain industries and provide information so that investors can make informed decisions with respect to the purchase and sale of stocks, bonds, and other financial instruments. Financial statement analysis is comprised of three types of analyses: ratio analysis, horizontal analysis, and vertical analysis.

Ratio analysis is the most popular form of financial statement analysis. It is used to express relationships among selected items on financial statements and is useful for intracompany, intercompany, and industry average comparisons. Intracompany analysis compares a company's prior year with the current year, intercompany analysis compares a company with its competition, and industry averages compare a company with industry benchmarks or norms (e.g., those provided by organizations such as Moody's, Standard and Poor's, or Dun and Bradstreet).

Ratio analysis can be expressed as a percentage, rate, or proportion and is generally classified into four categories. Liquidity ratios (e.g., current ratio, acid test ratio, inventory turnover ratio, working capital) measure a company's ability to meet it current obligations, i.e., those due within a year. These ratios are of interest to short-term creditors (e.g., bankers, suppliers). Solvency ratios (e.g., debt-to-equity ratio, times interest earned ratio) gauge a company's ability to meet long-term obligations and survive over the long term. These ratios are of interest to stockholders and long-term creditors. Profitability ratios (e.g., return on assets, asset turnover ratio, return on equity, gross profit ratio) provide an indication of a company's operating success. These ratios are of interest to creditors and investors. Finally, market indicator ratios (e.g., price earnings ratio, dividend yield ratio) relate the market price of a share of stock to what investors would be willing to pay.

Horizontal or trend analysis involves analyzing financial statement data by comparing both dollar and percentage changes for a given company over time to determine the increase or decrease that has taken place. Although this type of analysis can be used for comparison between two years, it is more informative when several years can be compared and a trend can be depicted. Horizontal analysis can be detailed (e.g., comparison of each line item on the financial statements). Alternatively, selected items may be extracted (e.g., sales, net income) to analyze trends for specific financial statement items.

Horizontal analysis requires restating financial statement items as a percentage of some selected base year. For example, if a 10-year period (e.g., 1997–2006) is being considered, each item in the analysis could be restated as a percentage of the corresponding item in 1997. Information is presented with the most recent year appearing first (e.g., 2006, 2005, ... 1997). Horizontal analysis is primarily used for intracompany comparisons.

Vertical analysis evaluates financial statement data at a given point in time by expressing each financial statement item as a percent of some base amount. This approach produces what is referred to as common-size financial statements. Balance sheet items are commonly expressed as a percentage of total assets (e.g., Cash Percentage = Cash/Total Current Assets) while income statement items are commonly expressed as a percentage of sales (e.g., Net Income Percentage = Net Profit/Sales).

Vertical analysis is particularly useful for comparisons between companies of different sizes. Comparisons that ignore size can be quite misleading. For example, if Company A has a higher net income than Company B, this is not an indication that Company A is performing better than Company B, unless both companies have the same sales revenue. To realistically assess the performance of each company, the net income of each entity would need to be expressed as a percentage of the sales revenue of each entity. This conversion to common-size financial statements reduces bias when comparisons are made between companies of differing sizes. Vertical analysis is used for both intracompany and intercompany comparisons.

Financial statement analysis that is used carefully can provide valuable information about a company's financial health and future growth prospects. However, the following caveats should be noted: (1) Financial statements are based on historical costs. Thus, they do not reflect replacement costs or inflation; (2) Companies use different accounting policies (e.g., depreciation valuation and inventory valuation). Footnotes to financial statements should therefore be carefully reviewed to ascertain the accounting policies used. When policies differ, it will be necessarily to restate the data for the companies being analyzed using a common policy in order to make a meaningful comparison; (3) Ratios can be calculated using different variations. The composition of items that are used in the calculations should therefore be investigated in order to make a valid comparison; (4) Financial statements contain many estimates (e.g., uncollectible receivables, contingent losses). Users should therefore be wary that inaccurate estimates will provide inaccurate ratios and percentages.

See Also: Corporate Accounting; Disclosure Requirements; Financial Reporting; Impact Financial Statements; International Financial Reporting Standards; Managerial Accounting.

Bibliography. Ray H. Garrison, Eric W. Noreen, and Peter C. Brewer, *Managerial Accounting,* 12th ed. (McGraw-Hill, 2008); Paul D. Kimmel, Jerry J. Weygandt, Donald E. Kieso, *Financial Accounting: Tools for Business Decision Making*, 5th ed. (Wiley, 2009); Jane L. Reimers, *Financial Accounting: A Business Approach*, 2nd ed. (Pearson Educational Ltd., 2008).

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Finland

Finland, one of the five Nordic countries, is a small, open economy, with a population of 5.5 million people. Finland is a republic and a parliamentary democracy. It is officially bilingual, with a Finnish-speaking majority and Swedish-speaking minority (6 percent). Finland was a part of Sweden until 1809, when it was annexed to Russia as an autonomous Grand Duchy. Under Russian rule, the country experienced extensive economic autonomy. In 1917 Finland gained independence.

Finland belongs to the 20th richest countries in the world measured by gross domestic product (GDP) per capita. It is also ranked as one of the most competitive economies, renowned for some large global corporations, mainly the mobile phone producer Nokia. Also, the largest Finnish paper companies, StoraEnso and UPM, are among the largest paper corporations in the world, ranking third and sixth, respectively, in 2006.

Finland is a successful late-comer, experiencing a rapid catching up by exploiting the advantages arising from the international division of labor. The country has actually been one of the fastest-growing economies in the world over the last century, but the economy has also been highly volatile. Finnish industrialization took off in the late 19th century. The industrial development was also swift in the inter-war period, while the 1930s Depression, measured in GDP figures, was reasonably mild. The favorable development continued after World War II and by the 1980s Finland had caught up with the leading industrial nations. In the early 1990s the country was, however, hit by a deep depression called forth by a simultaneous collapse of the extensive trade with the Soviet Union and an international recession, combined with severe domestic economic and structural problems. Finland experienced negative growth during three subsequent years (1991–93), adding up to a total fall in GDP of about 10 percent, followed by debt-deflation problems, a severe banking crisis, and high unemployment. In the late 1990s, the recovery was swift. The international economic boom, Finnish membership in the European Union (EU) in 1995, the expansion of new branches and the success of some large corporations—"the Nokia phenomenon"—promoted the recovery.

By being a small, open economy, Finland has been heavily dependent on its export sectors. Historically, forest industry products (timber, sawn goods, pulp, and paper) sold in the Western market can be seen as the key to Finnish economic success. Today, exports are more varied, comprising electronics, metal and machinery products, and paper. Paper export is still significant, but the branch has suffered from structural problems, while new branches have expanded.

Trade with Russia has also been significant. Before independence, Russia formed the main export market, while in the postwar period bilateral trade with the Soviet Union was extensive, the exports amounting to 26 percent of total exports in its peak year of 1982. Finland exported primarily metal and textile products to the Soviet Union, and imported oil. This trade ended in 1991 with the collapse of the Soviet Union. Russian trade was, however, growing again by early 2000.

Finland's historical, political, and economic development shows many similarities with the other Nordic countries, but Finland's development path has also had its distinctive marks. The Finnish economy has been more crisis prone than the other Nordic economies. The country was long dependent on one single, highly cyclical branch (the forest industry), but the economic policy also aggravated the cycles. Finland has also been susceptible to outside shocks, most notably the wars.

Finland is a capitalist market economy, but its model of capitalism has undergone profound and sometimes abrupt transformations over time. The late 19th century was a period of economic liberalism, while the postwar period until the 1980s was marked by state intervention and strict regulation. In the 1980s and 1990s, a liberalization and opening up occurred and the economy went through swift structural and institutional transformations, leading to a rapid growth in the inflow and outflow of capital and foreign direct investments (FDIs), decartelization, cross-border mergers with primarily Swedish companies, and a new corporate culture. The new regime was a result of Finland becoming increasingly integrated in the global economy and a member of EU in 1995, but also of a new ideological environment more favorable toward competition and the promotion of market forces.

Also some persistent features—path dependencies—are discernable in the Finnish model. A stress on enhancing growth, by keeping the investment rate high and by promoting the export sector, has been thoroughgoing. The role of the state has been prominent, although transforming over time. During the regulative environment of the postwar decades, direct state intervention was extensive. State companies have been widespread and in spite of privatization policies since the 1990s, the state is still a significant owner in big business, Nokia being an exception.

See Also: European Union; Foreign Direct Investment, Horizontal and Vertical; Nokia; Russia; Sweden.

Bibliography. Susanna Fellman, "Growth and Investment: Finnish Capitalism, 1850–2005," in *Creating Nordic Capitalism—The Development of a Competitive Periphery,* S. Fellman, M. Iversen, H. Sjögren, and L. Thue, eds. (Palgrave Macmillan 2008); Mika Maliranta, *Competition in Finland: Trends Across Business Sectors in 1994–2004* (Ministry of Trade and Industry, Helsinki, 2007); Markku Maula, Gordon Murray, and Mikko Jäaskeläinen, *Public Financing of Young Innovative Companies in Finland* (Edita Publishing, 2007); Jari Ojala, Jari Eloranta, and Jukka Jalava, eds., *The Road to Prosperity: An Economic History of Finland* (Suomen Kirjallisuuden Seura, 2006).

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Fixed Costs

Total fixed costs are constant over a defined time period. Examples might include certain salaries and wages, depreciation, insurance premiums, heating, rental charges, property taxes, and fixed interest charges. They are “fixed” only in the sense that they do not vary in total with the short-term planned activity levels of the organization. In the long term, all costs are variable since they can be adjusted to new levels of activity following expansion or contraction.

Many costs are partially fixed. A telephone bill may contain a fixed equipment rental element and a variable call charge. Although fixed costs do not vary with activity, they can be changed by management action. Staff can be recruited or dismissed, depreciation policies can be changed, reward systems may change, insurance can be switched to more competitive suppliers, etc. A policy decision is required by management to alter the cost structure of the business. For example, managers may change payment of the sales force from salary to a salary-plus-commission basis. The total amount paid to the sales force may increase or decrease or even stay the same, but payment will now be part fixed and part variable.

Variable costs vary in direct relationship with changes in an identified causal factor (driver). So, twice as much glass is used to produce two cars as one. Fixed costs remain unaltered despite changes in their identified causal factors. Thus, the cost of employing a pension administrator will be the same whether there are 150 or 200 on the payroll. The level of variable costs is largely a technical matter—the cost of glass will be a function of the number of cars produced. But the level of fixed costs will largely be a matter of discretion for management. There may come a point at which there are not enough people on the payroll to justify a pension administrator and managers may decide to outsource this work. In general terms, when scale or activity in the causal factors change, total fixed costs will remain unchanged but unit fixed costs will change (total fixed costs divided by total units of causal factor).

The reverse is true of variable costs. Within the range of planned activity (the relevant range) for a given configuration of land, labor, and capital, fixed costs will not vary. If the scale or arrangement of this configuration is changed, then the cost structure of the business changes and will need to be redefined for business control purposes. The operational gearing or leverage of the firm describes its cost structure as a ratio between revenue minus variable cost and its profit. The higher the proportion of fixed costs in its cost structure, the higher will be the firm’s operational gearing ratio. The higher the ratio, the more exposed is the firm to large swings in profitability as market conditions change.

The behavior of fixed costs in relation to increasing levels of output is a source of scale economies. It is also a principal feature of a number of important management accounting decision support techniques. Cost-volume-profit analysis focuses on the break-even level of output which a firm must achieve to cover its total fixed costs. Only after this level does the firm achieve profits. Contribution analysis is used to optimize the use of productive resources when in short supply. Contribution is defined as price minus unit variable cost. The residual represents a contribution to the fixed costs of the business. The purpose is to maximize the contribution these scarce resources (or limiting factors) make to the firm’s fixed costs.

This form of analysis is also used for make-or-buy decisions, or decisions whether to accept special orders on terms that do not fully recover total accounted costs. This situation might arise when the firm has idle capacity. In such situations the important point is to consider only the relevant costs. In deciding to accept a contract at a discounted price, the fixed costs are irrelevant to the decision since they will not change whatever decision transpires. Provided the discounted price covers the variable cost involved in production and distribution of the contract volume, the business will be better off accepting it and making some contribution to its fixed costs. The differentiation between fixed and variable costs provides the basis for flexible budgeting. Budgets are set with an assumed level of output. In reality this level changes and the budget will be flexed with the variable element changing in relation to the actual level of activity, the fixed level remaining unaltered.

See Also: Cost Structure; Make-or-Buy Decision; Managerial Accounting; Pricing; Variable Costs.

Bibliography. Robert J. Carbaugh, *Contemporary Economics: An Applications Approach* (M.E. Sharpe, 2008); David Donaldson and Krishna Pendakur, “The Identification of Fixed Costs from Consumer Behavior,” *Journal of*

Business and Economic Statistics (v.24/3, 2006); Colin Drury, *Management and Cost Accounting* (South-Western, 2008); Sasha Galbraith, *Anatomy of a Business: What It Is, What It Does, and How It Works* (Greenwood Press, 2007); Charles T. Horngren et al., *Introduction to Management Accounting* (Pearson Prentice Hall, 2008).

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Fixed Exchange Rate

A fixed exchange rate is a monetary regime adopted by a nation's government or its central bank in the context of its international trade and finance to maintain a fixed price of its currency in terms of the currency (or a basket of currencies) of its major trading partner(s). The fixed exchange rate is achieved through a nation's intervention (buying and selling) of the designated currencies on the foreign-exchange market, a private entity. This activity by the monetary authority of a nation compensates for the disequilibria of the demand and supply between the local and foreign currencies resulting from market fluctuations and subsequently keeps the exchange rate on the desired target.

The fixed exchange regime is also referred to as a pegged exchange system, in which case a nation's currency is pegged to a major world currency such as the U.S. dollar or euro at a particular rate. A country with a fixed exchange rate regime maintains a sufficient amount of the foreign currency that it pegs to (e.g., US$) in its foreign exchange reserves in order to keep its foreign exchange regime solvent. Suppose that China fixes its currency yuan with US$. After agreeing to purchase a number of Boeing airplanes from the United States, a large quantity of US$ is demanded (or bought) by supplying (or selling) the yuan in order for the Chinese buyer to pay Boeing. Consequently, the amount of US$ decreases while the quantity of Chinese yuan increases at the foreign-exchange market. Accordingly and to counterbalance for its fixed exchange rate, the monetary authority in China will need to demand (buy or revalue) yuan from and supply (sell or devalue) US$ to the foreign-exchange market. The reserved currency or value in this case could either be in the form of cash or U.S. Treasury bonds.

Countries with a fixed exchange rate regime also need to intervene when the interest rates of the two countries are at disparity. Using the same two-country example above, when the United States lowered its interest rate during the credit crisis to save the economy in 2008, Americans demanded more yuan for higher expected asset returns in China. The central bank in China will need to infuse more yuan and buy back US$ at the foreign-exchange market. The foreign exchange reserve increases when the country runs a balance of payments (BoP) surplus and decreases when BoP is in deficit under a fixed exchange rate regime.

In more recent years, a modified version was developed within the fixed exchange rate regime adopting a narrow band around the target rate for small adjustments. Under the European Exchange Rate Mechanism, member nations have a fixed exchange rate to the European Currency Unit (ECU). The central bank of a nation may intervene to stabilize its currency if it moves out of the 2.5 percent range, plus or minus, with the ECU.

A fixed exchange rate regime provides a higher level of certainty and control for traders in goods, services, and currencies. Because it is shielded from day-to-day fluctuations in the foreign exchange market, international trade and investment becomes less volatile and incurs limited speculation. Under a well-managed fixed exchange rate regime, where there are absences of expectations in devaluation of the local currency, inflation is contained and investments in domestic assets are protected.

Nonetheless, the fixed exchange rate regime may cause a BoP crisis when there is excessive demand in the foreign exchange reserve that ultimately brings foreign currency down to zero and when the system becomes depleted. The cause of the crisis could be due to a serious deficit in the BoP with the reserve currency country because the fixed exchange rate regime does not follow market mechanisms and the lack of transparency of the system, which may also be mismanaged by the monetary authority, could cause high expectations of devaluation of the local currency. This anticipation from investors could lead to capital flight (swapping of domestic assets for foreign assets) and cause the fixed exchange rate regime to collapse.

While they offer fewer options for monetary policy, fixed exchange rate regimes can work well for less developed nations.

Under a fixed exchange rate regime, government has less control of its monetary policy for either expansion or contraction to maneuver its economy because the local currency needs to be maintained at a certain level relative to the foreign currency to keep the fixed exchange rate valid. However, the system may be suitable for less developed nations where the benefit of running a fixed exchange regime exceeds its cost in an economy that seeks an optimal level of development and control.

See Also: Exchange Rate; Flexible Exchange Rate Regime; Floating Exchange Rate.

Bibliography. Gianluca Benigno, Pierpaolo Benigno, and Fabio Ghironi, "Interest Rate Rules for Fixed Exchange Rate Regimes," *Journal of Economic Dynamics and Control* (v.31/7, 2007); Ronald MacDonald, *Exchange Rate Economics: Theories and Evidence* (Routledge, 2007); Inci Ötker and David Vávra, *Moving to Greater Exchange Rate Flexibility: Operational Aspects Based on Lessons from Detailed Country Experiences* (International Monetary Fund, 2007); Sergio Rebelo and Carlos A. Vegh, "When Is It Optimal to Abandon a Fixed Exchange Rate?" *Review of Economic Studies* (v.75/3, 2008); Romain Veyrune, *Fixed Exchange Rate and the Autonomy of Monetary Policy: The Franc Zone Case* (IMF, 2007).

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Flag of Convenience

A ship flies a flag of convenience if it is registered in a country other than its country of ownership. A more formal definition is as follows:

> The flag of a country with easy or lax maritime regulations and low fees and taxes, flown by ships that register their vessels in such countries, even though their ownership and main cruising areas are elsewhere.

Maritime tradition follows "the rule of the flag"—in other words, the specific flag flown by a ship determines the country's law to be applied, regardless of which court has personal jurisdiction over the parties involved, be they owners, operators, or crew.

At the present time it appears that approximately half the world's tonnage of merchant ships is registered under flags of convenience, and while (as suggested by the above-provided definition) reduced cost is a prime motivator, be this either operating costs because of low wages or the avoidance of taxes, the circumvention of "inconvenient" environmental regulations is now emerging as a significant consideration, with fishing boats, for example, ignoring conservation agreements entered into by their home countries. This situation has caused Franz Fishler, former European Union commissioner for fisheries, to describe flags of convenience as the scourge of today's maritime world. The possibility of abuse of the system to benefit arms smugglers or human traffickers is another rampant concern.

Ships registered in the United States have to be manned by American crews. Elsewhere, problems are perceived to stem from such aspects as language differences that make communication between seafarers difficult. Poor crew conditions, inadequate training, questionable safety records, and the abandoning of crew members in distant ports—all such activities have called into question the operating of a scheme that many commentators have found reprehensible. One safeguard is the international Ship and Port Facility Security Code, which requires minimum standards for vessels entering the waters of its signatory nations. Thus the United States Coast Guard can inspect vessels entering American territorial waters and refuse entry to any exhibiting significant defects.

Panama was the first nation to become a flag of convenience country and remains, to this day, the most significant flag of convenience country as measured either by gross tonnage or number of vessels (and by a very considerable margin; the *CIA World Factbook* is a useful source of comparative data). But Panama does at least have a reputation for having adopted a "responsible" attitude toward an activity that is elsewhere considered reprehensible, since it is claimed to have given rise to the adoption of lax labor laws and low safety standards, thereby leading to a reduction in revenue for countries that apply stricter standards. Thus in the Panamanian case its own consulates deal with the necessary paperwork and collect the registration fees. Compare this with the situation of "Liberian" registration (run by a company based in Virginia), or "Cambodian" registration (operated from Singapore). In other words, registration does not even have to occur in the country where the vessel is supposedly based. Interestingly, to offer a flag of convenience facility it is not even necessary to possess a seaboard. Thus, ships may even be registered in La Paz (Bolivia is landlocked) or Mongolia (the largest landlocked country in the world).

The sinking of the oil tanker *Prestige* off the Spanish coast in 2002 heightened concern over who should pay for the damage in such a circumstance, and there is much opposition to the flag of convenience system and the abuses to which it is seen to give rise (in fact, of the absolute tonnage lost to maritime accidents in 2001, 63 percent of the total was accounted for by just 13 flag of convenience registers). Various international bodies have come down heavily on the practice, including the World Wildlife Fund, which is attempting to develop a review of the system and ensure that flag states (the country in which a vessel is registered) meet their responsibilities in applying and enforcing international shipping standards, and that the guilty party is held responsible for the consequences of poor shipping standards and practices. Additionally, the International Transport Workers' Federation, in association with the International Maritime Employers' Committee, now collectively negotiates pay scales for seafarers on flag of convenience ships.

There are, inevitably, supporters of, as well as detractors from, the flag of convenience system. The principal argument mounted here is likely to be that of arguing that the owners of a vessel engaged in international trade should be unencumbered in their choice of jurisdiction (the concept of laissez-faire taken to its logical conclusion, perhaps). Other advantages may exist in terms of a sophisticated maritime court structure and/or vessel financing possibilities. But the overriding consideration has to be that of keeping operating costs lower than would be imposed through registration with a (largely) non–flag of convenience nation such as the United States or United Kingdom.

See Also: Environmental Standards; Panama; Smuggling; Transportation.

Bibliography. Matthew Gianni and Walt Simpson, *The Changing Nature of High Seas Fishing: How Flags of Convenience Provide Cover for Illegal, Unreported and Unregulated Fishing* (Australian Government, Department of Agriculture, 2005); William Langewiesche, *The Outlaw Sea: A World of Freedom, Chaos, and Crime* (North Point Press, 2004).

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Flexibility

Flexibility in the workforce (also known as alternative work arrangements or nonstandard work arrangements) is comprised of flexibility in working time, flexibility in work location/space, flexibility in the number of workers within a firm's workforce, and flexibility in employee skills and abilities. Such arrangements enable firms to more closely match their labor force needs with the demand for labor, and thus have become more desirable in recent times when just-in-time production, globalization of the workforce, and changing customer preferences and demands have required companies to alter how they allocate human capital. Flexibility has been associated with "work-life balance" (also called "family-friendly benefits" or "arrangements"), where employees negotiate or utilize policies for shifting work hours and location to accommodate personal commitments along with their work priorities.

The use of flexibility in work allocation has been in use for years, but this notion has been particularly prominent during the last 25 years. During and for a period after the Industrial Revolution, as work and working hours became standardized, the "nine-to-five" workday and the "40-hour" workweek became commonly expected. This was also congruent with the more typical family life, where the (male) head of household was likely to be the wage earner. However, as shifts in consumer preferences, family arrangements, globalization, new technologies, and other recent issues have impacted the dynamics of the firm and the labor force, the focus on working hours and location for employees has changed to meet these challenges. In addition, employees have had to become flexible and many have had to expand their skill bases to meet firm demands for particular competencies. Larger firms tend to develop and implement policies that enable workers to take advantage of flexible work arrangements and to allow managers to utilize discretion in their allocation. Smaller firms usually use much more informal agreements, with individuals negotiating with employers for individualized deals with respect to flexibility in work.

Work flexibility manifests itself in a variety of formats. Historically, shift work, though often entailing consistent work hours, has been considered to be an alternative work arrangement, since this can often require employees to work during the nighttime hours. The most common types of flexibility for the internal workforce involve variability of work hours. This can include the compressed work week, where workers condense a full week's worth of work hours into fewer days; and flextime, where employees can shift their work hours to any hours of the day, as long as they are present and/or available in the firm for a set of core hours each day (for example, between the hours of 10 A.M. and 2 P.M.). Part-time work can also fall into this category, with some companies utilizing job-sharing arrangements for jobs that lend themselves well to this. Job sharing can allow two part-time employees to share one position, and often there is one day of "overlap" where one partner can hand off the week's work to the other job-share partner.

Workplace location can contribute to work flexibility: Many organizations have utilized telecommuting as a way to accommodate individuals who need flexibility in their work hours or work space. Telecommuting can involve working from employees' own homes, or from satellite offices. When employees need to be in a variety of offices, employees can sometimes engage in hotelling, where employees set up a temporary office for a day in a vacant cubicle or office at a firm or client site. Contingent/contract work also falls under work flexibility, particularly in terms of using external labor. This type of precarious work (also called temporary work) often entails fixed-term contracts for workers who are contracted to the firm, but are not employed as permanent employees. In this case, employees have the ability to work at multiple firms for short periods—but companies often do not have to pay these workers healthcare and other benefits, making them a less expensive and highly flexible source of labor. A different form of flexibility, called functional flexibility, relates to employee flexibility in terms of skills (also called multiskilling).

There has been considerable discussion of the ethics of introducing flexibility in the workplace. Flexibility in the workforce has been implemented by many firms to the benefit of both employers and employees. It has proven advantageous to those who need to balance work and personal commitments, particularly skilled workers. For firms, being able to schedule work in a just-in-time manner to accommodate product supply and demand more appropriately, to account for fluctuations in production due to seasonality, nuances in the economy, changing customer tastes, etc., has helped them to become more competitive players in the global market.

While there have been numerous benefits to both parties, there have been some documented problems with overreliance on workforce flexibility. In some firms, innovation has been stifled, as there are often low levels of commitment to the employer by such workers. In addition, these employees often do not have access to training and other benefits that firms often provide to their core and permanent workforce. In effect, they have a different psychological contract than their permanent and full-time counterparts, whereby they feel less connected to their employers. In addition, there have been demonstrated occupational health problems with nonstandard workers.

See Also: Social Pact; Staffing Levels; Work/Personal Life Balance; Working Hours.

Bibliography. Maria Lorena Cook, *Politics of Labor Reform in Latin America: Between Flexibility and Rights*

(Penn State University Press, 2009); E. Jeffrey Hill, Alan J. Hawkins, Maria Ferris, and Michelle Weitzman, "Finding an Extra Day a Week: The Positive Influence of Perceived Job Flexibility on Work and Family Life Balance," *Family Relations* (v.29/22, 2001); E. Jeffrey Hill et al., "Defining and Conceptualizing Workplace Flexibility," *Community, Work & Family* (v.11/2, 2008); James Manning, "Managing Flexibility: How Time Management Systems Are Helping to Change Attitudes Towards Flexible Working," *Training Journal* (April 2008); G. Maxwell, L. Rankine, S. Bell, and A. MacVicar, "The Incidence and Impact of Flexible Working Arrangements in Smaller Businesses," *Employee Relations* (2007); Deirdre M. McCann, *Regulating Flexible Work* (Oxford University Press, 2008); Jonathan Michie and Maura Sheehan, "Labour Market Deregulation, 'Flexibility' and Innovation," *Cambridge Journal of Economics* (v.27/1, 2003); Ruud J. A. Muffels, *Flexibility and Employment Security in Europe Labour Markets in Transition*. (Edward Elgar, 2009); William C. Robinson, "Ethical Considerations in Flexible Work Arrangements," *Business and Society Review* (v.110/2, 2005); I. U. Zeytinoglu, ed., *Flexibility in Workplaces: Effects on Workers, Work Environment and the Unions* (IIRA/ILO, 2005).

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Flexible Exchange Rate Regime

In contrast to the fixed exchange rate regime, the flexible exchange rate system encompasses various forms of exchange rate regimes that allow the exchange rate of two nations to be determined by the demand and supply of the currencies in the foreign-exchange market. The term *floating exchange rate* is also used to describe the general form of the flexible exchange rate in the system. In principle, the flexible exchange rate system is driven by a free market force while allowing some variations of central bank intervention. Major forms of exchange rate regimes under the flexible exchange rate system include freely floating (or clean floating) and managed floating (or dirty floating). In some cases, adjustable peg and crawling peg are also considered part of the flexible exchange rate system.

In the early 1970s, countries with major currencies, such as the United States, began to adopt a flexible rate system after the collapse of the Bretton Woods system, under which a fixed or pegged exchange rate regime prevailed. Though the majority of the developing nations still remained on the fixed exchange rate at the time, many had shifted to more flexible exchange rate systems such as the adjustable peg, crawling peg, and managed floating exchange rate systems.

What caused the movement from a fixed to a more flexible exchange rate system in this 20-year period for the emerging markets, though via a gradual process, were (1) sharp changes in value in major currencies that these nations tied their currencies to, (2) slower growth of more developed nations that launched opportunity seeking in the developing nations, (3) steep rise in the interest rate worldwide that encouraged a more flexible exchange rate system, (4) debt crisis as a result of overexpansion or huge capital inflow that put pressure on local currencies, and (5) inflation problems that called for changes in monetary policy that are more suited for a flexible exchange rate regime. In short, during these volatile times, a more flexible exchange rate regime was demanded for countries under fixed exchange rate regimes to adapt quickly and to be able to survive in the international trade and investment market. In other words, as the financial market globalized and the developing economies were more closely integrated with those of the more developed, the international exchange rate system had moved toward forms that allow nations to work more cooperatively and efficiently.

Though quite a few developing countries shifted to a more flexible exchange rate system after the mid-1990s, many still adopted the system with various degrees of control through central bank intervention or managed floating. This trend was due to the nations' smaller economies and relatively thin financial markets that were intolerant of extreme volatilities. In addition, many of these nations depend heavily on their exports or imports, and any big swings in their foreign exchange rates could cause serious imbalances in their balance of payments (e.g., a sudden depreciation in a nation's currency accompanied by a large import would cause a huge increase in its deficit in balance of payments).

However, in terms of the effect of the flexible exchange rate system on the domestic economy, and compared with that of the fixed exchange rate regime, the flexible exchange rate is more suitable when there are large inflows of capital transmitted to a developing economy. In China's case and in order to achieve stability in its economy, given the size and speed of its growth in the past 20 years, a crawling peg or managed floating exchange rate regime is more appropriate when its market is inundated with large inflows of capital. In other words, a crawling peg or managed floating exchange rate regime is more apt to alleviate the upward pressure for its currency to appreciate in a progressive manner. And in many cases, a specific form of the flexible exchange rate, e.g., managed floating, that is adopted by the central bank and is believed to be the most appropriate at the time usually work in synchronization with a nation's economy at a particular development stage. While the freely floating exchange rate may contribute to inflation at times, proper use of the monetary policy, such as interest rate increasing, will not only address the inflation problem but also encourage imports, one of the autocorrection responses from the market that further reduces inflation pressure.

Nonetheless, the flexible exchange rate system, with various degrees of government intervention, still requires a nation to be equipped with an adept regulatory establishment, a solid banking structure and supervision, and a free market that permits free information transmission to pave the way for the system to work efficiently and well.

See Also: Fixed Exchange Rate; Floating Exchange Rate.

Bibliography. Francesco Caramazza and Jahangir Aziz, *Fixed or Flexible? Getting the Exchange Rate Right in the 1990s* (IMF, April 1998); Jose De Gregorio and Andrea Tokman, *Flexible Exchange Rate Regime and Forex Interventions: The Chilean Case* (Banco Central de Chile, 2004); Domenico Fanizza, *Tunisia's Experience with Real Exchange Rate Targeting and the Transition to a Flexible Exchange Rate Regime* (International Monetary Fund, 2002); G.-J. Jo, "Changes in Misalignment of the Korean Won: Towards a Flexible Exchange Rate Regime," *Global Economic Review* (v.33/1, 2004); Sayera Younus, and Mainul Islam Chowdhury. *An Analysis of Bangladesh's Transition to Flexible Exchange Rate Regime* (Bangladesh Bank, 2006).

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Floating Exchange Rate

Floating exchange rate is the price of a nation's currency in terms of the price of the currency of another nation that is determined by the foreign exchange market based on the demand and supply of the currencies. For example, if the equilibrium level of US$1 is at ¥107 on a particular day, the exchange rate between U.S. dollars and Japanese yen is said to be ¥107/US$. When demand for yen increases, the value of yen appreciates and the floating exchange rate reaches ¥105/US$. In order for the floating exchange rate to work, currency systems in both the United States and Japan need to be in the floating exchange rate zone.

After the establishment of the Smithsonian Agreement in 1971 when the U.S. dollar was devalued to $38 for an ounce of gold (from $35), a wider band with 4.5 percent fluctuation was adopted in the fixed exchange rate system. When the U.S. dollar was devalued again in 1973 to $42.22 for an ounce of gold, the United States and other nations began the floating exchange rate system.

There are, however, two forms of floating exchange rate in the system, the managed floating and the freely floating; the former was adopted initially in 1973. A mirror image of the adjustable fixed exchange rate system, where government intervenes to keep the exchange around a pegged rate, the managed floating exchange rate regime follows the principle of a floating exchange rate yet with government intervention, though with reluctance, to prevent extreme movement of its currency that could interfere with its trade and investments in the international market. In the freely floating case, a country allows its currency to fluctuate based solely on the market mechanism of currency trading. Strictly speaking, a nation's exchange rate under the floating system depends on the demand and supply of the nation's currency relative to other currencies in the foreign-exchange market.

The rationale behind the floating exchange rate system is its "auto-correction" mechanism. For example, when the interest rate was reduced by the Federal Reserve Bank in the United States in 2008 during the credit crisis, the U.S. dollar depreciated initially relative to currencies of its major trading partners, a phenomenon that makes U.S. goods and services less expensive to foreign buyers. However, the U.S. dollar also appreciated from time to time during the year due to high demand for the dollar as its exports accelerated and spending increased from international tourists.

The demand and supply of a country's currency is largely influenced and counterbalanced by the movement of its balance of payments, the effect of its monetary policy, and the dynamics and expectations that global trades bring to its economy on the foreign exchange market. And when the fluctuation of the currency becomes too volatile, e.g., there is too much demand for U.S. goods that could cause higher inflation, the central bank may step in to buy dollars back, a form of managed floating exchange rate, in order to maintain the currency within a desirable boundary.

While the floating exchange rate system provides the balance power to a country's currency through the automatic correction of demand and supply in the foreign exchange market, the system also tends to be better protected from any unexpected economic or monetary movement of its trading partners. For example, under normal circumstances, when inflation in China reaches its 12-year high, its currency should depreciate to the level that U.S. importers would not pay a higher price than that before the inflation for China's exporting goods. Unlike the fixed exchange rate regime, countries under the floating exchange rate system do not need to maintain their currency at a fixed level. Subsequently, central banks are free to exert monetary policies needed for domestic economic development without interfering with its exchange rate system.

However, there are side effects under the floating exchange rate regime. In the freely floating case, because not all information that involves currency movement, such as future or forward contracts, is immediately available for investors and traders and the automatic adjustment process may take time to adjust depending on the market and economic conditions of involved nations, risk of loss due to high currency volatility can be high. In addition, a freely floating exchange rate system provides the opportunity for speculation, which could cause currency to deviate from its true equilibrium zone and therefore create greater uncertainties and losses in the international trading markets.

See Also: Fixed Exchange Rate; Flexible Exchange Rate System.

Bibliography. Fernando M. Gonçalves, *Accumulating Foreign Reserves Under Floating Exchange Rates* (International Monetary Fund, 2008); James R. Lothian and Cornelia H. McCarthy, "Real Exchange Rate Behaviour Under Fixed and Floating Exchange Rate Regimes," *The Manchester School* (v.70/2, 2002); Dominick Salvatore, *International Economics* (Prentice Hall, 2007).

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Focus Groups

Focus groups are a popular qualitative research methodology that engages a number of respondents who are simultaneously involved in the discussion of a topic (or number of topics). Focus groups have been used in a wide range of disciplines such as consumer research, marketing research, human resource studies, and others. They are mainly used during the exploratory phases of a research project, when usually little is known about a specific phenomenon or topic under investigation. The method could also be used to interpret quantitative data collected in the past, contributing to the better understanding of the phenomena in question. In business contexts it could be used to initiate "brainstorming" about new products/services offered and/or practices followed by a provider.

A key to the success of a focus group is the interaction among participants. Interaction is highly desirable and crucial when the researcher would like to explore the dynamics of a specific group of respondents regarding a specific issue. Hence, an important decision when setting up the groups of respondents is the selection of either homogeneous or heterogeneous groups. The decision depends on the research question. It is common, though, that researchers usually select respondents who share some characteristics such as age, lifestyle, or experiences. The advantage of a homogeneous group is that it gives participants a sense of safety expressing their views among peers with a number of similarities, a situation that generally enhances unbiased communication. On the other side, heterogeneous groups could inspire participants in a new way of thinking.

While internet surveys have become popular because they lower costs, they sacrifice some useful aspects of traditional focus groups, such as face-to-face interaction among participants.

Another key to the success of a focus group is the skill of the researcher, who is usually the moderator of the discussion. He/she is responsible for guiding the discussion so as to capture specific topic(s) of particular interest for the study. It is important that he/she should collect information by making respondents reveal their personal views and by making participants contrast them with those expressed by others in the group.

Process

The researcher first decides on the number of groups required to collect information about the topic. The appropriate selection method is purposive (and not random) since respondents are selected based on their ability to contribute to the specific topic(s) of discussion. Next is the selection of a homogeneous or heterogeneous type of group. Respondents within groups are selected based on a recruiting protocol, which describes their characteristics. Relative with the number of groups used in a study, it is generally accepted that the researcher keeps adding groups until the additional information gained is minimal (or else the researcher achieves the level of theoretical saturation as manifested by the responses from existing groups).

The literature proposes that groups should be comprised of six to 12 respondents. The rationale is that the lower the number of participants, the greater their interaction. In addition to the above, there are some practical issues to be taken into consideration. One of them is the duration of the session (a rule of thumb is around two hours so as to allow time to build rapport). Also, the researcher should carefully select the location where the group discussion will take place, taking into consideration convenience, ease of access, and lack of distractions from the environment. The internet had made this easier, allowing researchers to set up groups online.

Even though there is always the option of hiring a professional moderator, in most cases it is the researcher who plays that role. An important advantage of the latter is his/her familiarity with the topic of discussion. One drawback may be their lack of experience in playing that role. The researcher as a moderator should bear in mind his/her level of involvement. This depends on the topic of discussion. However, the logic of the method is to stimulate participants to interact and to intervene when needed. In order for the moderator to increase the effectiveness of the focus group, he/she should design the interview guide before the start of the discussion. A pre-test of the whole process would also be an advantage.

One way of analyzing information collected could be via content analysis. The advantage for a researcher being the moderator too is that he/she will have a better feel for the data collected and will perform a better quality analysis.

Advantages and Disadvantages

One major advantage of focus groups as a type of scientific inquiry is the rapid collection of desired information, since a number of respondents give their views simultaneously. This also saves money. Moreover, participants may express their views in their own words and be stimulated by the views expressed by others in the group.

One downside of the method is that the recruitment of participants may be time consuming unless the researcher has them ready at hand. Recruitment becomes even more problematic (both in terms of time and money) when the number of appropriate respondents is small, not easily accessible, and widely dispersed in a country. Another disadvantage is the usually small number of questions/topics raised. Also, participants may be influenced by the moderator's presence. Building on the above, participants may be unwilling to reveal their views in front of others. Furthermore, the researcher should be very careful with the use of findings. Due to the limitations stemming from the respondents used, the findings are not generalizable (statistically). What the researcher could try to achieve (if required) is analytical generalizability.

Variations

An interesting variation of the "traditional" focus group type of inquiry is the so-called two-way focus groups. Its difference is that instead of one person acting as the moderator, there is a whole group of moderators. There are in effect two groups; one comprises the participants and the other the moderators.

The increasing use of the internet as a viable tool for conducting social sciences and/or business research introduced an additional type of focus groups; namely online focus groups. Internet communications help researchers overcome the issue of distance among participants. Consequently, such focus groups cost less to run. There are two types: synchronous (all participants provide answers simultaneously) and asynchronous (participants receive an e-mail with other participants' responses and reflect on them). An important advantage is that they encourage participants to provide honest responses taking advantage of their anonymity. The results are also real-time. Furthermore, respondents can express their views without being distracted by others. However, they may feel demotivated due to the need to type their responses using keyboards, leading to either fewer or shorter responses. Another disadvantage is that it is restricted to participants who have internet access. Finally, the researcher cannot make notes on the participants' body language.

See Also: Consumer Surveys; Market Research; Research Methods: Mixed Methods; Research Methods: Qualitative; Research Methods: Quantitative.

Bibliography. Michel Callon, Yuval Millo, and Fabian Muniesa, *Market Devices* (Blackwell Publishing, 2007); David Carson, Audrey Gilmore, Chad Perry, and Kjell Gronhaug, *Qualitative Marketing Research* (Sage, 2001); Robert J. Kaden, *Guerrilla Marketing Research: Marketing Research Techniques That Can Help Any Business Make More Money* (Kogan Page, 2006); Bonita M. Kolb, *Marketing Research: A Practical Approach* (Sage, 2008); V. Kumar, David A. Aaker, and George S. Day, *Essentials of Marketing Research* (Wiley, 2007); Colin Robson, *Real World Research* (Blackwell Publishing, 2002).

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Follow-the-Leader Theory

Follow-the-leader theory is an investment strategy that calls for investing money in the areas where already successful investors are putting it. It is essentially a form of momentum investment strategy, and reflects economist John Maynard Keynes's comparison of the stock market to a beauty contest: Just as the most beautiful woman on the dais only wins if she's voted for, the strongest stock only rises in value if people buy it. Objective strengths are not sufficient, without the subjective perception of them.

Though there is some intuitive sense to the theory, it also swims against the current of the stream of popular consciousness, which says that in the stock market, one should buy low and sell high. Momentum investment strategy in general calls for buying high and selling higher, and follow-the-leader theory generally adheres to that in practice, even if it does not prescribe it in so many words.

The strict form of momentum investment strategy invests in securities that have had high returns in the last quarter (or year, depending on the investor) while selling those with low returns in the same period. The risk is obvious—what goes up can rarely keep going up forever—but advocates point out that using this strategy can lead to benefiting from the poor judgment of other investors in the market. It was originally principally advocated by Chicago fund manager Richard Driehaus—one of Barron's 25 most influential people of the 20th century in the mutual fund industry—and is similar to the positive feedback investing that super-investor George Soros used in the 1960s and 1970s.

To the extent that investing involves chance, that it is like and feels similar to gambling, momentum investment strategy ascribes value to the hot hand. When it is good, it will stay good; when it is bad, it will get worse. That this is significantly true a significant percentage of the time is the underlying predictive model of the strategy, and if your portfolio is diversified, it need not be true all of the time—no investment strategist would suggest all your eggs go in one basket, no matter the quality of the basket.

While "momentum investing" puts the emphasis on the movement of a stock's price, and the perceived tendency of that movement to continue, follow-the-leader theory shifts the emphasis to those early adopters who can afford to take the initial risks (or take them anyway), the trailblazers making the initial push the momentum develops from. In a sense, what follow-the-leader theory does is codify and prescribe a natural human tendency to assume that takers of action know what they are doing. If someone in a long, slow-moving line at the grocery store gets out of the line and moves to another one, someone else will often follow him even if the reason for the move is not apparent.

The mutual fund newsletter *The No-Load Fund Investor* has been putting this theory into practice since 1976, in the form of its Persistency of Performance system, which buys the top-performing diversified stock fund of the previous year, with some modifications. While the average diversified fund has a 14 percent annual return, NLFI's POP has a 21.5% percent return, a more than 50 percent increase. Others take that approach and apply it to stock sectors instead of specific stocks or funds, creating a portfolio of stocks from whichever sectors performed the best in the previous year.

There are obvious potential pitfalls. Although recent performance is often an indicator of future health, there is always an element of volatility in the market. The combination of momentum investing with the dotcom bubble would have led to enormous returns ... for a while. Depending on just what was purchased and when, the dotcom portfolio could be pretty meager today, and a Dutch tulip portfolio would have seen tremendous gains for a brief period before crashing back down to near-worthlessness.

See Also: Financial Markets; Seasonality.

Bibliography. Narasimhan Jegadeesh and Sheridan Titman, "Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency," *Journal of Finance* (n.48, 1993); Jack D. Schwager, *The New Market Wizards: Conversations With America's Top Traders* (Wiley and Sons, 1992); Garth Rustand, *Investor Protection Workbook: Investors-Aid Guide to Protecting Investment Returns* (IA Investors-Aid Inc, 2007); George Soros, *The Alchemy of Finance* (Simon and Schuster, 1987); Peter J. Tanous, *Investment Gurus* (New York Institute of Finance, 1997).

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Food and Agriculture Organization

Founded on October 16, 1945, the Food and Agriculture Organization (FAO) is the United Nations agency charged with the mission of leading and coordinating activities to eliminate global hunger. The organization's Latin motto—*fiat panis*—translated into English as "let there be bread!" reflects its primary focus on promoting global food security, especially among impoverished rural areas of the world. After its beginnings at the First Session of the FAO Conference in Quebec, Canada, its headquarters was moved to Washington, D.C., in 1948 and to Rome, Italy, in 1951. With 191 states and the European Union as members, the FAO functions as a forum for member nations to engage in policy debate and negotiate agreements relating to food production, distribution, and nutrition. In particular, the FAO serves an important function as a source of information and knowledge for developing nations to improve their food production productivity and the effectiveness of food marketing systems. In 2003 the FAO joined other international organizations, nongovernmental organizations (NGOs), and private sector organizations to form the International Alliance Against Hunger to work in partnership toward the eradication of global hunger through advocacy, accountability, resource mobilization, and coordination.

The FAO's major activities, detailed in its Program of Work, are funded through member contributions determined at the Conference of Member Nations every two years. At the biennial conference, members meet to elect a council comprised of 49 member nations, which governs for three years. Members also elect the director-general to head the agency's eight departments—agriculture and consumer protection; economic and social development; fisheries and aquaculture; forestry; knowledge and communication; natural resources management and environment; technical cooperation; and human, financial, and physical resources. Importantly, the conference reviews the FAO's key programs and policies and approves its plans and budget for the following period. Two major financial initiatives were introduced in 1994 to improve the FAO's efficiency. First, the structure of the agency has been decentralized, streamlining procedures in order to save costs. Second, the

The Food and Agriculture Organization strives to help farmers like these women who produce cowpeas in Nigeria.

organization's two-year budget was frozen at $650 million from 1996–97 to 2001 and has since gradually increased, but has not kept pace with inflation.

Programs designed to elevate hunger and promote its elimination are the core of the FAO's work. A centerpiece initiative, the Special Program for Food Security (SPFS), aims to reduce the number of people suffering from hunger by half by 2015. To achieve this goal, projects are implemented in over 100 countries, with about 30 of them developing and implementing National Food Security Programs by mid-2007. Another key FAO initiative was leading the promotion of integrated pest management for rice promotion in Asia during the 1990s. Through bilateral funding from a number of developed countries, hundreds of thousands of farmers were trained under the Farmer Field School (FFS), a group-based learning process.

Apart from the operational programs deployed in target nations, the FAO works to raise public awareness and financial support to address the problems of hunger and malnutrition facing millions of the world's people. One example of the FAO's efforts to these ends is TeleFood, a campaign of concerts and sporting events launched in 1997. This campaign has attracted donations that are used to fund projects to assist small-scale farmers to produce more food for their families and local communities. Most prominent of these efforts is the Goodwill Ambassadors Program initiated in 1999. FAO Goodwill Ambassadors are drawn from a wide field of achievements—the arts, entertainment, sports, and academia—to garner public support for the campaign against world hunger. As part of its informational role, the FAO's statistical division generates extensive time-series data on agriculture, nutrition, fisheries, forestry, food aid, land use, trade flows, and population from over 210 countries and territories. This is made accessible through the online multilingual database FAOSTAT.

Despite the progress, the FAO has also attracted much criticism, particularly since the 1970s. Over the years, critics have described the organization as increasingly inefficient, irrelevant, politicized, mediocre, and losing focus on its purpose to combat global hunger. Several high-profile summits, reports, and audits have expressed serious concerns about the FAO's effectiveness. Radical changes to its culture and management systems have been recommended to improve its efficiency and refocus its strategic priorities.

See Also: Less Industrialized Countries; Nongovernmental Organizations; World Health Organization.

Bibliography. Fabrizio Bresciani and Alberto Valdés, *Beyond Food Production: The Role of Agriculture in Poverty* (Edward Elgar and the Food and Agriculture Organization of the United Nations, 2007); G. Hambidge, *The Story of FAO* (Van Nostrand, 1955); J. B. O'Brien, "F. L. McDougall and the Origins of the FAO," *Australian Journal of Politics & History* (v.46/2, 2000); R. W. Phillips, *FAO: Its Origins, Formation and Evolution 1945–1981* (Food and Agriculture Organization, 1981); Amy L. Sayward, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945–1965* (Kent State University Press, 2006).

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Ford Motor

Ford Motor Company started its operations in 1903 in Michigan State, led by Henry Ford and 11 of his partners. Their original capital was only $28,000, but this group of people would create one of the largest businesses in the world, one of the most popular American corporate icons, and one of the most popular brands of all time. In fact, 2008 is the year that the company's famous Ford Model T—the car that made driving available to the masses—celebrated its 100th anniversary. Since then, the company has produced more than 330 million vehicles and has grown to rank third worldwide in the production of vehicles. These performance levels create annual sales figures that are easily comparable to many countries' gross domestic product.

It is worth noting that at the time of the company's birth, there were 15 other vehicle manufacturers in Michigan State and 88 in the United States. However, up until that point a vehicle was a premium product that addressed only a niche segment of the American market, i.e., affluent consumers. It was Henry Ford who first believed the opposite and clearly stated that the car should be addressed to the masses. The premise behind this innovative thinking was that this was the only way to develop further the stagnated market for car manufacturing. His vision was to produce and sell a car at such a price that everybody would have the financial capacity to buy one.

Ford managed to reduce production costs by inventing the production line. At that time, manufacturing a car took 12 hours. Through Ford's new technique, manufacturing time was reduced to only 93 minutes. At the same time, he virtually doubled factory workers' salaries and established an 8-hour-per-day workload. The outcome of these transformations was simple: The company's employees could now afford to buy a car. In parallel with these changes, he strived to convince U.S. governmental authorities to develop a system of roads that would crisscross the states. As a result, the growth of car sales was phenomenal and by 1912, there were already 7,000 dealers of Ford vehicles in the United States. Therefore, among other achievements, Henry Ford can be also considered one of the pioneers of the franchising scheme.

Ford has been international almost since its inception, first expanding its activities to create Ford Motor Company of Canada in Ontario. Now it is represented in more than 200 countries on all continents selling vehicles of several types, employing almost 300,000 people, and having contracts with 60,000 suppliers. This globalized outlook of the firm is manifested in its expanded brand portfolio, too. After a wave of megamergers in the automobile industry, Ford Motor Company owns popular brands such as Lincoln, Mercury, Mazda, and Volvo.

Ford Motor is both a quintessential American company and a global one, with a presence in 200 countries.

Part of the explanation behind the success story of Ford Motor Company is its long-standing involvement in the electronics industry. In 1956 the company acquired Aeronutronic and thus entered the defense and aerospace industry. This strategic move would later play a major role in high-profile technological success. In the same vein, the company acquired a major producer of consumer electronics and home appliances in the early 1960s. Owning firms with resources and skills necessary for the creation of cutting-edge technologies was a great plus to Ford Motor's activities. In a synergistic fashion, the mother firm took advantage of these resources and added value to its final products by offering modern, cutting-edge vehicles. A manifestation of this successful early involvement with the electronics industry is obvious now: The firm is able to offer affordable and available on-the-road connectivity for personal electronics to its consumers.

The major legacy of the firm, though, is its contribution to the evolution of mass production and overall to managing a production-based business. The assembly line of the first Ford factory became the reference point for all mass methods of production around the world. In a sense, a new form of industrial revolution was born and the management of businesses entered a challenging era, which is still taught as an exemplar of management in many business schools around the world.

See Also: DaimlerChrysler; General Motors; Manufacturing; Toyota; United States.

Bibliography. Russ Banham, *The Ford Century: Ford Motor Company and the Innovations That Shaped the World* (Artisan, 2002); Ford Motor Company, www.ford.com (cited March 2009); Henry Ford, *My Life and Work: An Autobiography of Henry Ford* (BN Publishing, 2008); William A. Levinson, *Henry Ford's Lean Vision: Enduring Principles from the First Ford Motor Plant* (Productivity Press, 2002).

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Forecasting

Business organizations compete more effectively in a global economy when they are able to use information from the past to predict future events. One of the tools is forecasting. A forecast is a statement or prediction about a future event and the act of making this prediction is called forecasting. Forecasts are used in government organizations to predict inflation rates, unemployment rates, welfare payments, gross national product, interest rates, money supplies, and various planning indicators. These forecasts are called economic forecasts. Forecasts that are concerned with rates of technological progress, like introducing new products and services that require new plants, equipment, and technology, are called technological forecasts. Projections for a company's products or services, finances, human resources, and supply chain management are called demand forecasts or microeconomic forecasts.

Forecasts can also be classified with respect to the length of future time horizon covered by the forecast. If a forecast has a time span up to one year but is generally less than three months, it is called a short-range forecast. For example, job scheduling, job assignments, planning purchases, demand planning, sales planning, and production levels planning are examples of short-range forecasts. They are usually implemented by the operations managers. If a forecast has a time span from three months to three years, it is called a medium-range forecast (or intermediate forecast). These types of forecasts are used by middle managers and are implemented in sales planning, budget planning, production, and resource planning. If a forecast has a time span of three years or more, it is called a long-range forecast. These types of forecasts are used by the top level of management or strategic managers when making decisions about locating a new facility, expanding an existing facility, investing in a new venture, introducing a new product or new service, and planning capital expenditures.

The forecasts generated within the firm must be understood and appreciated by its decision makers. It is important to understand the forecasting process and forecasting methods to make proper decisions. In general, there are two types of forecasting methods: quantitative and qualitative. If time series data are available, then quantitative methods will be used. A time series consists of data that are collected, recorded, or observed over chronological moments of time, for example, daily sales of a commodity, weekly sales of Dell computers, quarterly returns of a specific investment, and annual consumer price indices. The time series prediction is based on the assumption that the future is a function of the past. A forecaster is looking at what happened over a period of time in the past and uses past data to predict future.

Time series are analyzed by distinguishing certain patterns: trends, seasonality, cycles, and random or irregular component. Trend represents the gradual increase or decline in time series over a period of time. Seasonality is a pattern of change in the data that repeats itself after a period of weeks, months, quarters, or years. These patterns are easy to observe in sales time series that show customers' demand similarities in each season of the year or in electrical or gas consumption, which is determined by weather and temperature changes. Cycles are the fluctuations around the trend pattern and usually they occur every several years, for example, inflation, weak economy, and real estate prices. Random or irregular patterns are caused by chance or very unusual events, like hurricanes, floods, accidents in the workplace, rapid declines in the stock market, and other hard to predict issues.

Basic tools in quantitative forecasting are the naïve approach, moving average, weighted moving average, exponential smoothing, linear regression, trend analysis, and Box-Jenkins methods.

While quantitative methods use time series, qualitative forecasting methods use the opinions of experts to predict future events. Qualitative forecasting methods employ judgment, experience, intuition, and other factors. The oldest qualitative method is the Delphi method, which was developed by the RAND Corporation and is based on a panel of experts. A series of extensive questionnaires is distributed to the panel participants, who provide inputs to the decision makers before the forecast is determined. After the first round the ideas are summarized and grouped, so the number of possible forecasts is reduced. This process is continued until some consensus is reached. Consumer market survey is another example of a qualitative forecasting method. This method is based on customers' or potential customers' opinions regarding future purchasing plans. Jury of executive opinion forecast is based on a group of high-level experts who, often with the use of some other methods, arrive at the forecast of future demand.

Usually an effective forecaster is able to combine both good judgment and quantitative forecasting techniques to arrive at the best decision. In order to select an appropriate forecasting method, the forecaster must be able to define the nature of a forecasting problem, analyze the nature of the data, and describe capabilities and limitations of useful forecasting methods for given time series. The quarterly *Journal of Business Forecasting: Methods & Systems* provides articles about how to develop and utilize good forecasts. The *International Journal of Forecasting* is a main domain for research papers on forecasting methods.

See Also: Business Cycles; Supply Chain Management.

Bibliography. Michael Abramowicz, *Predictocracy: Market Mechanisms for Public and Private Decision Making* (Yale University Press, 2007); George E. P. Box, Gwilym M. Jenkins, and Gregory C. Reinsel, *Time Series Analysis: Forecasting and Control* (Wiley, 2008); Paul Saffo, "Six Rules for Effective Forecasting," *Harvard Business Review* (v.85/7–8, 2007); Stephen Satchell, *Forecasting Expected Returns in the Financial Markets* (Academic Press, 2007).

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Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act (FCPA) of 1977, amended in 1988 and 1998, prohibits companies or their personnel and agents from paying, or arranging to pay through intermediaries, bribes to foreign officials and certain other recipients. The FCPA criminalizes such bribery. As amended, the statute applies to all businesses organized under U.S. law and to all foreign businesses issuing securities within the United States. The statute, amending the Securities Exchange Act of 1934, also subjects those businesses and even purely domestic enterprises to accounting and internal control requirements for maintaining accurate records and financial statements.

The anti-bribery provisions cover U.S. securities issuers (including foreign firms), domestic concerns, or any person acting on behalf of any of the preceding who uses any means or instrumentality of interstate commerce to offer or transfer anything of value in virtually any form to foreign officials or certain other recipients inside or outside the United States in order to influence corruptly favorable policy action. Under some circumstances, minor "facilitating" payments (i.e., "grease") to expedite otherwise required clerical action by low-level officials are exempted by the FCPA. The U.S. Department of Justice maintains an informative Web site.

The FCPA was a by-product of the Watergate scandal investigations. In an amnesty program, over 400 U.S. firms admitted to the U.S. Securities and Exchange Commission (SEC) to having made "questionable payments" abroad. Congress passed, and President Jimmy Carter signed, the FCPA. The Ford administration opposed criminalization and favored a purely disclosure approach.

Although in 1977 nearly all countries prohibited bribery of their government officials, the FCPA was the first statute to prohibit business bribery or bribery efforts (including offer or authorization) concerning another country's officials. Only Sweden, in 1978, followed the U.S. lead. A lively controversy concerned whether U.S. firms were placed at a competitive disadvantage when other firms could bribe with impunity. A number of European countries effectively permitted tax deductibility of such bribes. The empirical evidence on this issue arguably remains mixed. The controversy led to 1988 amendments relaxing some aspects of the original FCPA. These amendments permitted certain affirmative defenses concerning promotional or marketing expenses (such as entertainment), payments permitted under foreign laws such as certain political contributions, and use of agents.

The FCPA 1988 amendments instructed the U.S. president to marshal international anti-corruption cooperation in order to reduce the near uniqueness of the U.S. posture. A set of international conventions emerged in the late 1990s. The Organization of American States (OAS) adopted the first anti-bribery convention in 1996; the Organisation for Economic Co-operation and Development (OECD) acted in 1997. The FCPA 1998 amendments implemented U.S. adherence to the OECD convention and also expanded scope of coverage. The UN Convention Against Corruption was adopted in 2003. There are other regional conventions, such as those of the European Union, the Council of Europe, and the African Union. Member states of these conventions are at various stages of adopting implementing legislation and carrying out enforcement activities.

The FCPA provides severe penalties for firms and individuals violating anti-bribery and accounting provisions. The latter can receive prison sentences. U.S. enforcement has increased following the 2002 Sarbanes-Oxley Act and the UN Oil for Food Program scandal. In 2004 the Department of Justice and SEC reportedly initiated five new actions. In 2005 the number was 12; in 2006, 15. In the first half of 2007, there were about 100 active investigations. U.S. actions included Volvo and Baker Hughes. Enforcement is increasing overseas. Statoil in Norway, Siemens in Germany, and BAE in the United Kingdom have faced major corruption investigations.

See Also: Bribery; Corruption; Gift-Giving; Lobbying; Nepotism; Sarbanes-Oxley.

Bibliography. Sharie A. Brown and Brian S. Chilton, *Foreign Corrupt Practices Act* (National Legal Center for the Public Interest, 2007); Richard L. Cassin, *Bribery Abroad: Lessons from the Foreign Corrupt Practices Act* (Lulu.com, 2008); Alvaro Cuervo-Cazurra, "The Effectiveness of Laws Against Bribery Abroad," *Journal of International Business Studies* (v.39/4, 2008); Robert W. Tarun, *The Foreign Corrupt Practices Act: A Primer for Multinational General Council* (Baker & McKenzie, 2008); Duane Windsor, "The Development of International Business Norms," *Business Ethics Quarterly* (v.14/4, 2004).

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Foreign Direct Investment, Horizontal and Vertical

There has been a tremendous growth in foreign or international investment since 1990s. The underlying reasons for such international flows of capital can be attributed to several factors. International investment, for example, allows capital to find the highest rate of return, helps the owner of capital to diversify his or her lending and therefore reduces the associated risk, contributes to further development and spread of best practices in corporate governance and accounting rules, and finally it prevents the government from pursuing poor policies.

The aforementioned advantages of the free flow of capital across national borders can be realised through two primary kinds of international investment: (1) Foreign Portfolio Investment (FPI) and (2) Foreign Direct Investment (FDI). While FPI is defined as investment in a portfolio of foreign securities such as stocks and bonds, it does not entail the active management of foreign assets. In other words, FPI is "foreign indirect investment" in that it represents passive holdings of foreign securities not least because the investor does not have control over the securities' issuer. Exchange rates, interest rates, and tax rates on interest or dividends are factors that directly impact on FPI.

In contrast, FDI refers to those investments that involve an equity stake of 10 percent or more in a foreign-based enterprise. FDI requires the direct and active hands-on management of foreign assets. An example of FDI is when a Japanese company takes a majority stake in a company in America, Iran, or elsewhere. In comparison to FPI, FDI requires exercising management control rights, inter alia, the rights to appoint key managers, and to establish control mechanisms. Due to the importance of management control and the need to managing foreign operations, many firms these days even invest in a large equity of up to 100 percent just to be able to exercise management control rights.

The key difference between FDI and FPI therefore is that FDI investors not only take both ownership and control positions in the domestic firms, but also are regarded as the managers of the firms under their control. In other words, while FPI investors gain ownership positions in the domestic firms, they do not exercise control over domestic firms and must therefore delegate decisions to managers, thereby limiting their freedom to make decisions because the managers' agenda may not be always consistent with that of the owners. Based on such argument or more specifically due to an agency problem between managers and owners, FPI projects are managed less efficiently than FDI projects. This in turn has resulted in a dramatic rise in FDI in recent decades and led some international business scholars to view it as an important aspect of globalization.

Overall, the basic entry choices into foreign markets can be categorized into three strategies: exporting, licensing, and FDI. As it is often the case, successful exporting can provoke protectionist responses from host countries, thereby forcing firms to choose between licensing and FDI. There are three reasons that may compel firms to prefer FDI to licensing: (1) FDI reduces dissemination risk—i.e., the risk associated with unauthorized diffusion of firm-specific know-how; (2) FDI results in more direct and tighter managerial control over foreign operations; and (3) FDI promotes the transfer of tacit knowledge through "learning by doing."

While gains to host countries—i.e., recipients of FDI—from foreign or international investments are many, in comparison to other foreign investments, the advantages of FDI can take several other forms. Given the appropriate host-country policies and existence of reliable and sufficient infrastructure, it is expected that FDI, at a micro level, contributes to the transfer of technology or even triggers technology spillovers.

This clothing factory in the Al Tajamouat Industrial City in Jordan has worked to attract foreign investment.

As FDI comes in many forms and therefore results in new varieties of capital inputs, it promotes a healthy competition in the domestic input market. The host country could also benefit from training and development of its workforce as FDI helps human capital formation across different economic sectors. Clearly, all these in turn contribute to the economic growth of the host country.

In addition to these economical benefits, FDI could also improve environmental and social conditions in the host country by, inter alia, transferring "cleaner" technologies, thereby leading to more socially responsible corporate policies. At a macro level, FDI contributes to international trade integration not least because it results in a more competitive business environment for multinational companies (MNCs). MNCs compete globally through investing their assets into domestic markets of different host countries.

Types of FDI

There are two main types of FDI: One is horizontal and the other is vertical. Horizontal FDI arises when a firm duplicates its home country–based activities at the same value chain stage in a host country through FDI. For example, Ford assembles cars in the United States. Through horizontal FDI, it does the same thing in different host countries such as the United Kingdom (UK), France, Taiwan, Saudi Arabia, and Australia. Horizontal FDI therefore refers to producing the same products or offering the same services in a host country as firms do at home.

While a horizontal pattern occurs when MNCs through FDI produce the same product or service in different host countries, vertical FDI takes place when a firm through FDI moves upstream or downstream in different value chains—i.e., when firms perform value-adding activities stage by stage in a vertical fashion—in a host country. In other words, a vertical FDI arises when a multinational firm fragments the production process internationally, thereby locating each stage of production in the country where it can be done at the least cost. For example, if Peugeot (the French automaker) only assembles cars and does not manufacture components in France, but in the UK, it can be said that Peugeot enters into components manufacturing through FDI. This pattern is called "upstream vertical FDI." In a similar vein, if Volkswagen (the German automaker) does not engage in car distribution in Germany and, instead, invests in car dealerships in Saudi Arabia (a downstream activity), it can be said that Volkswagen is engaged in "downstream vertical FDI."

While horizontal and vertical FDI serve different purposes, the bulk of FDI seems to be horizontal rather than vertical. As mentioned earlier, when a firm engages in horizontal FDI, it establishes multiplant operations that duplicate similar products and services in multiple countries. This implies that a firm's motive to adopt a horizontal pattern is mainly because it facilitates market access—as opposed to reducing production costs—and subsequent market share expansion. However, with vertical FDI firms engage in both FDI and exports. Unlike horizontal FDI in that the two countries involved are of similar size, and the nature of their operations resembles more of a pair of developed countries, in vertical FDI patterns, the home country is usually much larger and the two countries involved in FDI operations look like a developed home country and a developing host country. Put simply, in horizontal FDI patterns, the main objective to be met is how best to serve the host market (abroad), whereas in vertical FDI models, the primary objective of a firm is how best to serve the domestic (home) market.

Political Perspectives

Since FDI requires the flow of capital across national borders, it has always been intertwined with politics. Viewed in this way, three different political perspectives to FDI can be identified: radical view, free market view, and pragmatic nationalism. The radical view, which can be traced back to Marxism, treats FDI as a vehicle for exploitation of domestic resources, industries and people. Those governments who hold a radical view are hostile to FDI and therefore are in favor of nationalizing foreign firm assets or putting into place mechanisms to discourage inbound foreign firms' operations. The free market view, on the other hand, is more in favor of FDI and promotes its rationale not least because it enables countries to tap into their absolute or comparative advantages by specializing in the production of certain goods and services. According to the free market view, FDI can be regarded as a win-win situation for both home and host countries. While prior to and during the 1980s the radical-based view FDI was more common in Africa, Asia, Eastern Europe, and Latin America, the free market–based FDI is now more influential across the world and in particular in emerging economies such as Brazil, India, and China.

Finally, the third view, which reflects the current dominant perspective toward FDI and is practised by most countries around the world, is called pragmatic nationalism. Based on a pragmatic nationalism political view, FDI is only approved when its benefits outweigh its costs. For example, this view holds that FDI in the Chinese auto industry should only take the form of a joint venture (JV). By adopting such restrictive policies, the Chinese government helps the domestic auto industry learn from their foreign counterparts.

In short, FDI refers to direct investment in (10 percent or more of) business operations in a foreign country. It has benefits and costs for both the host (recipient) countries and home (source) countries. In respect to the benefits of FDI to host countries, FDI helps improve a host country's balance of payments; it can create technology spillovers; it creates advanced management know-how; and it creates jobs both directly and indirectly. However, loss of sovereignty, adverse effects on competition, and capital outflow are the primary costs of FDI to host countries. Similarly, the benefits of FDI to home countries are: Repatriated earnings from profits from FDI; increased exports of components and services to host countries; and learning via FDI from operations abroad.

In addition to all these pros and cons of FDI and its cost-benefit implications for both the host and home countries, certain issues need to be taken into account by a foreign firm before deciding to operate in cross-border markets. For example, justification of FDI in light of other foreign entry modes (e.g., outsourcing and licensing), paying enough attention to the fit between the location advantages with the firm's strategic goals, and familiarity with the institutional constraints of the host countries are all key determinants of successful FDI operations.

See Also: Economic Development; Foreign Portfolio Investment; Globalization; Home Country; Host Country; International Capital Flows; Joint Venture; Multinational Corporation; Value Chain.

Bibliography. B. Bora, *Foreign Direct Investment: Research Issues* (Routledge, 2002); H. Braconier, P. J. Norback, and D. Urban, "Multinational Enterprises and Wage Costs: Vertical FDI Revisited," *Journal of International Economics* (v.67/2, 2005); P. Braunerhjelm, L. Oxelheim, and P. Thulin, "The Relationship Between Domestic and Outward Foreign Direct Investment," *International Business Review* (v.14, 2005); P. Buckley and N. Hashai, "A Global System View of Firm Boundaries," *Journal of International Business Studies* (v.35, 2004); M. Cannice, R. Chen, and J. Daniels, "Managing International Technology Transfer Risk," *Management International Review* (v.44, 2004); S. Feinberg and S. Majumdar, "Technology Spillovers From Foreign Direct Investment in the Indian Pharmaceutical Industry," *Journal of International Business Studies* (v.32, 2001); M. Hanafi and S. Rhee, "The Wealth Effect of Foreign Investor Presence," *Management International Review* (v.44, 2004); E. Iankova and J. Katz, "Strategies for Political Risk Mediation by International Firms in Transition Economies," *Journal of World Business* (v.38, 2003); G. Itay and A. Razin, "Foreign Direct Investment vs. Foreign Portfolio Investment," NBER Working Paper 11047 (National Bureau of Economic Research, 2005); J. R. Markusen and A. J. Venables, "A Multi-Country Approach To Factor-Proportions Trade and Trade Costs," NBER Working Papers No. 11051 (National Bureau of Economic Research, 2005); T. H. Moran, E. M. Graham and M. Blomström, *Does Foreign Direct Investment Promote Development*? (Peterson Institute, 2005); M. W. Peng, *Global Business* (Cengage Learning, 2009).

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Foreign Exchange Market

The foreign exchange market, also referred to as the "forex" or "FX" market, is the market in which currencies are traded and exchange rates are determined. The forex market as we know it today can be dated back to 1971 when the Bretton Woods Agreement ended. This agreement had pegged the world's major currencies to the U.S. dollar from 1944 until 1971. Its demise ushered in the era of floating exchange rates and currency volatility.

The forex market is open 24 hours a day, five days a week, with currencies traded in all of the world's major financial centers. As the Asian centers close, the European centers open, and as they close the North American centers open, and eventually the Asian centers open again. The main centers for forex trading are London, New York, and Tokyo. The forex market is the largest and most liquid financial market in the world, with a daily average turnover of approximately US$3.2 trillion, according to the 2007 Triennial Central Bank Survey of Foreign Exchange and Derivative Market Activity, conducted by the Bank for International Settlements (BIS).

The forex market is classified as an "over-the-counter" (OTC) market, as most transactions are facilitated via a global network of dealers, communicating through connected computer terminals and by telephone rather than on a centralized exchange (though a segment of the foreign exchange market comprises currency futures and options, which are traded on exchanges). These dealers mostly work for the world's major banks and so the forex market is also referred to as an "interbank" market. The rates quoted in the market are visible to all banks, although each bank must have established a credit relationship with another in order to transact at the rates quoted. Some deals in the forex market are facilitated by forex brokers who match counterparties for a fee. These brokers have been adversely affected by the increased use of the internet since the mid-1990s, which has resulted in much of their business migrating to more efficient online broking systems used only by banks. Retail traders (individual investors) comprise a small part of the forex market and may only participate indirectly through brokers or banks.

Transactions in the forex market can be undertaken on a spot, forward, or swap basis. A spot transaction requires almost immediate delivery of foreign exchange (in practice, the delivery date, or "value date," is normally the second business day following the transaction). A forward transaction requires delivery at some future date. The exchange rate is determined at the time of the transaction but payment and delivery are not required until maturity. Forward exchange rates are normally quoted for value dates of one, two, three, six, and twelve months. They are often used by companies that wish to lock in an exchange rate today for future delivery of a currency in order to hedge against foreign exchange risk. A swap transaction is another way of locking in a forward rate and involves the simultaneous exchange of one foreign currency for another, with both purchase and sale conducted with the same counterparty. A common type of swap is a "spot-against-forward" swap in which a dealer buys a currency in the spot market and simultaneously sells the same amount back to the same counterparty in the forward market. According to the 2007 BIS Survey, spot transactions account for less than one-third of global forex turnover, while forwards represent 11 percent and swaps more than 50 percent of all transactions. The four most commonly traded currencies in the forex market are the U.S. dollar, the euro, the Japanese yen, and the British pound.

Banks execute trades on behalf of their clients—principally companies seeking foreign exchange to pay for goods or services, other banks, central banks, mutual funds, and hedge funds—but they also trade a large amount of currency on their own account, via "proprietary desks," in an attempt to profit from currency movements. This speculative activity, which accounts for the bulk of turnover in the forex market, involves buying currencies that are expected to appreciate in the hope of selling them at a future profit and selling currencies that are expect to depreciate in the expectation of buying them back at a cheaper price. Although sometimes controversial, many economists argue that speculators perform an important function by providing a market for hedgers and transferring risk. Banks also engage in arbitrage transactions which produce profits from temporary discrepancies between the exchange rates quoted by competing dealers.

There is virtually no forex trading based on inside information. Currency fluctuations are usually caused by actual monetary flows as well as by expectations of changes in these flows caused by macroeconomic factors such as changes in GDP growth, interest rates, inflation, and budget and trade deficits or surpluses. Major macroeconomic news is released publicly, usually on scheduled dates, so all dealers have access to this news at the same time. However, larger banks may have an advantage through knowledge of their customers' order flow, which may provide insights into likely market reaction to particular announcements.

See Also: Currency Exposure; Currency Speculators; Exchange Rate; Exchange Rate Risk (or Currency Exposure); Financial Hedge; Financial Markets.

Bibliography. Abe Cofnas, *The Forex Options Course: A Self-Study Guide to Trading Currency Options* (Wiley, 2009); Robert C. Miner, *High Probability Trading Strategies: Entry to Exit Tactics for the Forex, Futures, and Stock Markets* (Wiley, 2009); Jamie Saettele, *Sentiment in the Forex Market: Indicators and Strategies to Profit from Crowd Behavior and Market Extremes* (John Wiley & Sons, 2008); Michael J. Sager and Mark P. Taylor, "Under the Microscope: The Structure of the Foreign Exchange Market," *International Journal of Finance* (v.11/1, 2006); Yiuman Tse, Ju Xiang, and Joseph K. W. Fung, "Price Discovery in the Foreign Exchange Futures Market," *The Journal of Futures Markets* (v.26/11, 2006); Tim Weithers, *Foreign Exchange: A Practical Guide to the FX Markets* (John Wiley & Sons, 2006).

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Foreign Exchange Reserves

Foreign exchange reserves are the foreign currency denominated financial assets accumulated by the monetary authorities of a country. Foreign exchange reserves are held for various reasons. Most common uses are meeting foreign currency denominated payment obligations, management of exchange rate, control of money supply and interest rates, providing confidence to markets, and limiting external vulnerability. Because of these policy objectives, monetary authorities prefer to hold foreign exchange reserves in low-risk and liquid financial instruments; foreign exchange reserves in such instruments ensure that there is the capacity to intervene in markets at any moment.

While foreign exchange reserves provide economic benefits such as exchange rate management and reduced external vulnerability, they incur costs because foreign currencies in low-risk and liquid instruments yield less than various investment opportunities and debt and equity securities. Despite these costs, there is a secular trend—especially visible in emerging market economies—toward higher levels of foreign exchange reserves. This trend is particularly strong among East Asian economies.

A country accumulates foreign exchange reserves either because of a current account surplus or capital account surplus (in which case capital inflows exceed capital outflows). The surplus on the current account is, in general, caused by the excess of exports over imports, which leads to the receipt of payments in foreign currencies. Capital account surplus implies that a country is a net debtor, i.e., its receipt of foreign currency denominated assets surpasses the financial assets it sends to the rest of the world. In either case, monetary authorities (most often the central bank) accumulate foreign exchange through open market operations—they buy foreign exchange from private economic agents at the prevailing market prices.

Foreign currency payments oblige monetary authorities to hold foreign exchange reserves, but the magnitude of foreign currency obligations is generally small relative to the gross domestic product of a country. Especially in developing and emerging market economies, monetary authorities opt for holding foreign exchange reserves as a policy tool or for precautionary purposes rather than for meeting payment obligations. One policy example is the dirty float. Under the dirty float, the long-term level of the exchange rate is determined by markets, but monetary authorities intervene in cases where the movements deviate from fundamentals. An example of precautionary purposes is the holding of reserves in order to keep the capacity to intervene in financial markets to prevent or mitigate a currency crisis.

Foreign exchange reserves are part of a country's national wealth. Thus, like any other stock of capital, one would expect that foreign exchange reserves are put into projects or financial instruments that maximize revenue. However, this objective (maximization of revenue) is in conflict with holding foreign exchange reserves for policy or precautionary purposes. The commitment to a certain policy goal and to precautionary purposes necessitates that foreign exchange reserves are held in liquid instruments. The majority of foreign exchange reserves are held in fixed-income assets such as U.S. Treasury notes and bonds, which are considered to be safe and liquid investment instruments. However, safety and liquidity come with a price; low-risk fixed-income assets yield less compared to other financial instruments. Thus, foreign exchange reserves bear opportunity costs. While there is no consensus on the magnitude of the opportunity cost of holding large foreign exchange reserves, most scholars argue that the cost is significant.

Since the 1980s, the level of foreign exchange reserves (measured in relation to gross domestic product) remained relatively stable in advanced industrialized countries with stable financial markets and floating exchange rate regimes. In contrast, developing and emerging market economies began holding increasing levels of foreign exchange reserves by the early 1990s. This trend accelerated even further in recent years. Emerging economies in Asia—particularly China—are the leading figures in this significant reserve buildup. According to the *CIA World Factbook*, the combined value of the foreign exchange reserves in China, Japan, Russia, India, Taiwan, and South Korea stood at approximately $3.7 trillion at the end of 2007.

See Also: Capital Account Balance; Currency; Current Account; Dirty Float; Foreign Direct Investment, Horizontal and Vertical; International Capital Flows; Net Capital Outflow.

Bibliography. Claudio Borio, Gabriele Galati, and Alexandra Heath, *FX Reserve Management: Trends and Challenges* (Bank for International Settlements, 2008); Russell Green and Tom Torgeson, *Are High Foreign Exchange Reserves in Emerging Markets a Blessing or a Burden?* (U.S. Department of the Treasury, 2007); International Monetary Fund, *Guidelines for Foreign Exchange Management* (IMF Publication Services, 2004); Olivier Jeanne, "International Reserves in Emerging Market Countries: Too Much of a Good Thing?" *Brookings Papers on Economic Activity* (2007); Tim Young, *Foreign Exchange Reserves Management* (John Wiley, 2008).

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Foreign Portfolio Investment

Foreign portfolio investment involves transactions by residents of one country in equity and debt securities representing financial claims on and liabilities to residents of another country. The equity and debt securities include, among others, stocks, money market instruments, and private and public bonds and notes. In the case of equity securities, foreign portfolio investment is differentiated from foreign direct investment (FDI) on the basis of lasting interest and controlling position in the resident business entity by the nonresident investor.

While the dividing line between foreign portfolio investment and FDI is not always clear, in general foreign portfolio investment provides greater liquidity compared to FDI. As such, foreign portfolio investment increases the depth and liquidity of global capital markets. It enables investors to seek returns that might not be available in their home country. Furthermore, it allows entrepreneurs and businesses to tap into a greater pool of saving to finance their projects. However, foreign portfolio investment can be volatile, especially in the case where the recipient is a developing or emerging market country. Increasing amounts of foreign portfolio investment have been a defining feature of financial globalization.

Because there is a multiplicity of financial instruments bought and sold in international markets, foreign portfolio investment takes various forms. In the case of debt securities (financial instruments creating debt), foreign portfolio investment usually involves the trading of instruments such as sovereign bonds and bills, corporate bonds, commercial papers, and repos. In the case of equity securities (financial instruments representing ownership), the most common forms are stocks, shares, American depositary receipts (ADRs), and global depositary receipts (GDRs).

Foreign portfolio investment is conceptually different from foreign direct investment in the sense that the nonresident investor does not seek long-term relationship with and decision-making influence in the management of the resident business entity. In practice, foreign portfolio investment is distinguished from FDI by the 10 percent threshold rule. For example, if the nonresident investor obtains 10 percent ownership of a resident business entity, the transaction is considered to be direct rather than portfolio investment. This practice—with some variation in the threshold—is recommended by international financial institutions such as the International Monetary Fund (IMF) and Organisation for Economic Co-operation and Development (OECD) and followed by most countries in the world.

It should be noted that there are cases where the distinction between foreign portfolio investment and FDI is not clear. One example is the nonresident investor who holds more than 10 percent ownership in a resident business entity but who does not have an interest in its operations. Another example is the case where the nonresident investor acquires influence in the operation of a resident business by holding large amounts of debt securities issued by the business. The general consensus is that the cases where there is an overlap between foreign portfolio investment and FDI are of negligible magnitude.

Benefits and Risks

Foreign portfolio investment can provide significant benefits to investors and businesses across the world. For investors, the ability to invest in debt and equity securities in other countries can bring higher returns than investing in their home country. To give an example, the returns on financial instruments in developing and emerging market economies are significantly higher than what financial instruments in advanced industrialized economies yield. For businesses, foreign portfolio investment can reduce the cost of capital. The reduced cost of capital due to foreign portfolio investment is particularly important in countries where the domestic saving rate is low. Entrepreneurs and businesses in such countries can take advantage of borrowing from residents of other countries with high domestic saving rate.

Compared to other forms of cross-border investment, the advantage of foreign portfolio investment lies in reduced transaction costs. A comparison with FDI is illuminating. Acquiring a lasting and controlling interest in a business entity in another country is costly; it comprises transaction costs arising from legal procedures, bureaucratic details, and obtaining information. In contrast, debt and equity securities are traded in established markets with large numbers of buyers and sellers and with predetermined rules and procedures that incur smaller costs. As a result, foreign portfolio investment provides greater liquidity than FDI.

Reduced transaction costs and greater liquidity imply that foreign portfolio investor seeks maximum return across a spectrum of financial instruments in global markets. Because of this, foreign portfolio investment can be much more volatile than FDI, resulting in periods of systemic inflows and outflows of capital. If the size of foreign portfolio investment is large relative to gross domestic product, high volatility can have serious adverse effects. Large systemic inflows can lead to macroeconomic overheating, inflationary expansion, and exchange rate pressures; large systemic outflows of capital can cause liquidity crunch and financial depression. Foreign portfolio investment volatility increases with the frequency of various shocks to the economy, which might originate in domestic or global markets.

Foreign portfolio investment has been a central element of global financial integration. The growth of foreign portfolio investment started in the late 1970s and early 1980s, as advanced industrialized countries began deregulating their financial markets and liberalizing their capital accounts. The movement toward financial deregulation spread to developing and emerging market countries in the late 1980s and gained increasing momentum in the 1990s. As financial deregulation and capital account liberalization progressed, the opportunities for investment in international debt and equity securities expanded. The growth of foreign portfolio investment has accelerated in recent years with increasing global trade imbalances, which are reflected in current account surpluses in Asian economies and in the U.S. current account deficit. For example, the U.S. current account deficit is to a large extent financed by foreign portfolio investment (i.e., by foreign governments investing in U.S. fixed-income assets).

In general, foreign portfolio investment to developing and emerging market economies is more volatile than foreign portfolio investment to advanced industrialized economies. The volume of foreign portfolio investment to emerging market economies reached unprecedented levels in the 1990s; the combined volume of FDI and foreign portfolio investment flows has financed higher levels of domestic consumption and investment in these economies. However, high volatility of foreign portfolio investment has been a contributing factor in the financial meltdowns observed in developing and emerging market economies in the

1990s. Thus, despite its potential benefits, foreign portfolio investment induces a distinct set of risks for developing and emerging market economies.

See Also: Capital Account Balance; Capital Controls; Current Account; Foreign Direct Investment, Horizontal and Vertical; Foreign Exchange Reserves; International Capital Flows; Net Capital Outflows.

Bibliography. Kristin Forbes, *Why Do Foreigners Invest in the United States?* (National Bureau of Economic Research, 2008); Giancarlo Gandolfo, *International Finance and Open-Economy Macroeconomics* (Springer-Verlag, 2001); Itay Goldstein and Assaf Razin, "An Information-Based Trade Off between Foreign Direct Investment and Foreign Portfolio Investment", *Journal of International Economics* (v.70/1, 2006); Ilene Grabel, "Marketing the Third World: The Contradictions of Portfolio Investment in the Global Economy," *World Development* (v.24/11, 1996); Daniel S. Hamilton and Joseph P. Quinlan, *Globalization and Europe: Prospering in the New Whirled Order* (Johns Hopkins University, 2008); International Monetary Fund, *Balance of Payments Manual*, (1997); Philip R. Lane and Gian Maria Milesi-Ferretti, "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004," *Journal of International Economics* (v 73/2, 2007); Maurice Obstfeld and Alan M. Taylor, *Global Capital Markets: Integration, Crisis, and Growth* (Cambridge University Press, 2004); UNCTAD, *Comprehensive Study of the Interrelationship between Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI)* (United Nations, 1999).

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Foreign Sales Corporation

A foreign sales corporation (FiSC) is a part of the United States Internal Revenue System tax code that allows exporting companies to shield profits from taxation. The European Union (EU) and other U.S. trading partners viewed this scheme as a subsidy, and challenged it in the World Trade Organization (WTO). The WTO found the FiSC in violation of international trade rules, and in 2002 authorized the EU to impose trade sanctions totaling $4 billion on U.S. exports to the EU. In response to this pressure, the United States in 2006 revised the tax code related to FiSCs to comply with the WTO. The FiSC issue is the largest dispute that the WTO has ruled on to date, in terms of the amount of trade involved, and underscores the impact that globalization has on a country's domestic policies.

The FiSC is a by-product of differences in tax policies among countries. The United States taxes U.S. businesses, not just on their domestic income but also on their worldwide profits. This includes both exports from the United States as well as sales of items produced at subsidiaries abroad. The United States taxes foreign corporations only on their income that derives from business conducted in the United States. Other countries apply different tax policies. For example, European governments do not tax the export revenues of European companies, exempting them from value added taxes (VAT). From the perspective of the U.S. government, U.S. companies were disadvantaged in international business because the international sales of foreign companies sometimes faced a lighter tax burden, thereby allowing foreign companies to price their goods and services more cheaply than their U.S. counterparts. The FiSC, introduced in 1984, was intended to reduce this disadvantage. The legislation permitted companies to create off-shore subsidiaries (i.e., FiSCs) outside the United States (in places like the U.S. Virgin Islands or Guam), exempting at least 15 percent but no more than 30 percent of export income from taxes. Almost all major U.S. multinational corporations (MNCs) utilized FiSCs, as did many small and medium-sized companies. It is estimated that up to one-half of all U.S. exports were made through FiSCs.

The FiSC issue created little controversy until 1997, when the EU filed a complaint with the WTO. A WTO disputes panel ruled the FiSC to be an illegal subsidy and an appellate body agreed. Attempts by the U.S. government to replace the FiSC, including the 2000 Extraterritorial Income Exclusion Act (ETI), were unsuccessful, since the revised tax regimes also violated WTO rules. Since the WTO permits member countries to impose trade sanctions against other members not abiding by the organization's decisions, the EU drew up a list of products exported from the United States to Europe that would face increased tariff levels. The WTO estimated that U.S. companies received about $4 billion in tax benefits annually from the FiSC program. Thus, the EU was permitted to collect an equivalent amount in additional tariffs from U.S. exports to Europe, and did so between March 2004 and January 2005. Finally, in May 2006 the U.S. Congress passed tax legislation that included the repeal of the FiSC and ETI, thereby ending this international trade and tax dispute.

The issue of FiSCs is important to international business for three reasons. First, it illustrates how globalization makes it increasingly difficult to separate domestic policies from international policies. In the FiSC case, domestic tax policy became an international issue once it became clear that it was being devised to enhance the economic competitiveness of U.S. MNCs. Second, the resolution of the FiSC dispute highlights the growing importance of international organizations like the WTO and EU in shaping the international business environment. Although countries create organizations such as these to facilitate international business, they sometimes find themselves constrained by the rules and procedures they put in place. Third, the United States and the EU are each other's most important trade and investment partner. Yet, despite this close relationship, disputes over FiSCs, the safety of genetically modified organisms, subsidies to the aerospace industry, and other issues often overshadow the economic links and strain political relations.

See Also: European Union; Multinational Corporation; Taxes; United States; World Trade Organization.

Bibliography. Stacy L. Banks, "A Comprehensive History of Foreign Sales Corporation Legislation and Related World Trade Organization Rulings," *Multinational Business Review* (v.10/2, 2002); David L. Brumbaugh, *RS20571: The Foreign Sales Corporation (FSC) Tax Benefit for Exporting and the WTO* (CRS Report for Congress, 2000); European Union Delegation of the European Commission to the USA, www.eurunion.org (cited March 2009); Brian Hocking and Steven McGuire, "Government-Business Strategies in EU-US Economic Relations: The Lessons of the Foreign Sales Corporations Issue," *Journal of Common Market Studies* (v.40/3, 2002).

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Forensic Accounting

Forensic accounting can be defined as a thorough analysis, investigation, inquiry, or examination that is collected as a result of reviewing organizational records with the main focus being to expose organizational corruption and fraud. The field combines both litigation and investigative accounting practices. Litigation support is crucial to this field given the emphasis placed on the forensic accountants having the ability to effectively present evidence in a legal system. Forensic accountants are often required to resolve disputes and present evidence in legal disputes. One goal is to resolve the dispute prior to the case reaching the court system. However, there have been occasions where a dispute could not be resolved and the forensic accountant was expected to act as an expert witness in trials. Investigation is the act of determining whether criminal activity has occurred.

Some of the duties of a forensic accountant may include

- investigating and analyzing financial data,
- using technology in the interpretation and presentation of financial information,
- communicating findings through documented hard data, and
- testifying in court as an expert witness.

Forensic accountants are required to work with more than numbers. They have to paint the big picture after data has been collected. There are many situations that can affect the future of a business. These situations can be positive or negative. Situations with negative impact may be viewed as risks, whereas situations with a positive impact can be seen as opportunities. The overall objective of most businesses is to minimize risk and seize opportunities.

Forensic accountants may be called upon to evaluate an organization's exposure to risk. Enterprise risk management addresses the risks and opportunities facing an organization by classifying objectives into four categories:

- Strategic—"big picture" goals focused on supporting an organization's mission
- Operations—effective and efficient use of the organization's resources

- Reporting—reliability of reporting
- Compliance—compliance with laws and regulations

Some of the flags that will catch a forensic accountant's attention include the following:

- Lack of an employee handbook
- Disorganized company records
- Missing documents
- Unrecorded transactions
- No bank reconciliations
- Subsidiary ledgers out of balance
- No physical inventory counts
- Checks written to cash
- Large related party loans
- Excessive other revenue
- Negative operating cash flow
- Extensive fund transfers
- Unusual transactions (inconsistent)
- Deficient hiring policies and procedures
- Employees' lifestyles inconsistent with salaries
- Employees who do not take vacations
- Special purpose entities
- Excessive insider sales of stock
- Unexplained upper management resignations
- Excessive debt/equity ratio
- CPA switching
- Strange account titles

A forensic accountant is usually asked to investigate an organization by auditing its financial and business related records. Most forensic accountants are required to have a broad skill set in areas such as accounting, auditing, and investigation. These skills will assist the individual in preparing an extensive, objective financial report that can be explained in environments such as a court of law. Many in this field have a bachelor's degree in accounting and the CPA designation. Other popular designations include Certified Fraud Examiner (CFE) and Certified Forensic Accountants (Cr.FA). When a person in this field graduates from college, the individual may have a starting salary between $30,000 and $60,000. However, seasoned forensic accountants have been projected to earn six figures.

See Also: Accountability; Auditing Standards; Corporate Accounting; Corporate Social Responsibility; Corruption; Disclosure Requirements; Enron; Financial Reporting; Financial Statement Analysis.

Bibliography. Stephen V. Arbogast, *Resisting Corporate Corruption: Lessons in Practical Ethics from the Enron Wreckage* (Scrivener, 2008); D. Larry Crumbley; Lester E. Heitger, and G. Stevenson Smith, *Forensic and Investigative Accounting*, 3rd ed. (CCH Inc., 2007); International Federation of Accountants, *2008 Handbook of International Auditing, Assurance, and Ethics Pronouncements* (2008); John Kroger, *Convictions: A Prosecutor's Battles Against Mafia Killers, Drug Kingpins, and Enron Thieves* (Farrar, Straus, and Giroux, 2008).

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Fortis

Fortis describes itself as providing complete banking and insurance services for individuals, businesses, and institutions. Specifically, the bank provided retail, commercial, and merchant banking services. Insurance services included life insurance, health insurance, and property coverage. Formerly based in Belgium and the Netherlands, Fortis was, at the end of 2007, the world's 20th largest corporation. Its income was reported to be €120.5 billion with a net profit of €4.35 billion. At that time it had over 62,000 employees. It is, at the end of 2008, a worldwide company with offices in 50 countries and employing over 50,000 people. Further, while several parts of the company retain the name of Fortis, they are in fact, components of this company that have now been sold.

Fortis came into being in 1990 as the result of a merger of companies, some that had originated in the early 18th century. These companies were at first, AMEV, a Dutch insurer and a Dutch banking group, VSB. Later in the same year a Belgian insurer, AG, joined the new organization. It was the first cross-border financial services deal in Europe's history. The new name, Fortis, was selected in the following year and was chosen because of the Latin meaning of the word: "strong."

In the mid-1990s, Fortis embarked on a program of acquisitions. Fortis purchased MeesPierson NV, a portion of the Dutch bank, ABN AMRO, that specialized in investment banking. Later Fortis purchased a Belgian banking and insurance company, Algemene Spaar en Lijfrentekas, Caisse General d'Epargne et de Retraite. By 2007 Fortis had also acquired the Pacific Century Insurance Holdings and a Polish Bank, Dominet. Fortis had also partnered with the Irish Postal Service to provide financial services.

Fortis then embarked on its largest deal and the one that would eventually lead to the company's demise. Fortis joined with two other banks, Royal Bank of Scotland and Banco Santander, to execute what was the largest bank acquisition in history with the partners paying €98 billion. It was also the first cross-border hostile takeover of a bank. Together, the three banks purchased the Dutch Bank ABN AMRO, with the idea that once it was acquired, the three partners would dismember the organization, each taking the parts that fit its own core business best. For its investment of €24 billion, Fortis received ABN AMRO's Dutch consumer banking as well as asset management and private banking units. Because of the long history and reputation of ABN AMRO, the name would be kept.

The acquisition was announced in October 2007 and generated a great deal of interest; from the beginning there were some doubts about the wisdom of the deal. For one thing, the partners, according to some analysts, had paid up to three times the actual book value of ABN AMRO. Some of these analysts predicted that because of the amount of the purchase price, the companies had to show good results in a fairly short period of time, 18 to 24 months.

The results did show up in a very short time but not in the way that the partners had planned. Santandar made out the best as it was able to sell its acquisitions quickly. Royal Bank of Scotland did not do so well, but Fortis, with its capital depleted by the sale, ran into trouble almost immediately. In July 2008, the CEO of Fortis, Jean Votron, resigned to be replaced for a little over two months by a member of the board of directors. The value of the company at that time was estimated to be one third of what it had been before the acquisition.

By the end of September, when a new CEO was named, Fortis was partially nationalized by the Belgian, Luxembourg, and Dutch governments, which paid over €11 billion. The parts of ABN AMRO still under Fortis control would not be integrated into Fortis but would be sold. Parts of Fortis's Belgian operations would be sold to BNP Paribas and would keep that name (hence the company Web page and communications with the Fortis name).

See Also: ABN AMRO Holding; Acquisitions, Takeovers, and Mergers; Banco Santander General Hispano Group; BNP Paribas.

Bibliography. "'Flabbergasted' CEO at Fortis Is Replaced," *Wall Street Journal* (Eastern Edition) (September 27, 2008); Fortis, www.fortis.com (cited March 2009); "FORTIS: The Search for Global Fortune," *Marketing Week* (November 15, 2007); "Netherlands Takes Over Fortis's Dutch Operations," *New York Times* (National Edition) (October 4, 2008); "Triple Play; ABN AMRO," *Economist* (October 13, 2007); Thijs Westerbeek van Eerten, "Fortis: Pride Comes Before a Fall?" *Radio Netherlands*, www.radionetherlands.nl (cited March 2009).

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Forward Market

Not a formal market like the futures exchange, the "forward market" describes the informal over-the-counter trade of forward contracts. Forward contracts are similar to, and sometimes described as a type of, futures. Futures are different principally in their standardization and margining, giving them less of a credit risk; forwards, traded over-the-counter, are customized between parties.

A forward contract is an agreement to exchange an asset at a specific point in the future, with the payment exchanged in advance. That payment is called the forward price or forward rate; there are formulas that can be used to determine, based on the spot price of the asset, a forward price which entails no loss for either party. The lower limit of the price is the spot price modified by the risk-free rate of return over the period; the seller has no motive to delay selling if the price doesn't exceed what he could make by selling today and putting banking the payment. The seller, then, is at least guaranteed to be no worse off than if he or she were to sell today instead of on the forward market, and if the cost of the asset goes down or increases by less than the risk-free rate, then he or she is benefited further. The buyer takes the risk that the asset will increase in value at a rate equal to or greater than the risk-free rate.

These assets can vary considerably, and can include stocks, bonds, other securities, foreign currencies, and so on. They are principally used by speculators and hedge funds, and so are slightly more common in the foreign exchange market, especially with respect to "minor" currencies that are more subject to fluctuations—and therefore ripe for speculation—than stable, well-established currencies from major economies. Of course, because of the potential of reward beyond the risk-free rate, the forward market offers an opportunity for arbitrage.

See Also: Arbitrage; Financial Markets; Foreign Exchange Market, Futures Markets, Managed Float Regime, Pricing, Spot Market.

Bibliography. Fred D. Arditti, *Derivatives: A Comprehensive Resource for Options, Futures, Interest Rate Swaps, and Mortgage Securities* (Harvard Business School Press, 1996); Craig Burnside, Martin S. Eichenbaum and Sergio Rebelo, *Understanding the Forward Premium Puzzle: A Microstructure Approach* (National Bureau of Economic Research, 2007); Jeffrey A. Frankel and Jumana Poonawala, *The Forward Market in Emerging Currencies: Less Biased Than in Major Currencies* (National Bureau of Economic Research, 2006); Mary B. Holihan, *The Complete Guide to Investing in Commodity Trading and Futures: How to Earn High Rates of Returns Safely* (Atlantic Pub. Group, 2008); John C. Hull, *Options, Futures, and Other Derivatives* (Prentice Hall, 2006); Abraham Lioui and Patrice Poncet, *Dynamic Asset Allocation with Forwards and Futures* (Springer, 2005); Keith Redhead, *Financial Derivatives: An Introduction to Futures, Forwards, Options, and Swaps* (Prentice Hall, 1997); Dominick Salvatore, *International Economics,* 9th ed. (Wiley, 2007); Steven Valdez, *An Introduction to Global Financial Markets* (Macmillan Press, 2000).

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France

Traditionally one of the most powerful countries in Europe and one of the largest economies, France, and until the 1950s, the French Empire, was a dominant force in global business. France still remains important in the global economy in many sectors, and French companies or French products can be found in every country in the world. The Celts in France certainly traded with the Britons in modern-day southern England, and there is also evidence of products from France in parts of southern Europe in this same period. During Roman times, Gaul (as France was then known) was an important center of Samian ware, reddish pottery that was exported throughout the Roman Empire, as was wine from southern Gaul, and sandals and military supplies for the Roman army.

As an entity, France has been a relatively cohesive nation since the Middle Ages, and although parts of it were occupied by the English and other nations, and Burgundy was effectively independent for most of the period, the French language served as a common bond. During the Norman and Angevin empires, when England and much of France shared a single ruler, regular commerce across the English Channel increased, with some of the stones used on Norman castles in England being sourced in France and brought over as ballast in ships.

France was devastated during the Hundred Years War, but it also saw Paris emerge as the major city in the country, and the undoubted center of business, although northern France started to become wealthy through the wool trade and its links with Flanders. This saw the emergence of wealthy port cities such as Rouen and Dunkerque (Dunkirk), and elsewhere in France at the same time, Nantes, Bordeaux, Le Havre, and Marseilles. King Henry IV of France (reigned 1589–1610) managed to help establish a major silk industry, persuading the English Elizabethan clergyman Rev. William Lee to move to France to develop his knitting frame; but the design was never taken up seriously, with the Wars of Religion in France from 1562 until 1598 having done much damage to the French economy.

With Louis XIV (reigned 1643–1715), the country went through a great period of prosperity, which he lavished on the palace at Versailles. Unfortunately, it was also a period when inventions such as the first self-propelled mechanical vehicle designed by Nicolas Cugnot (1725–1804) were not taken up, and in 1685, the Revocation of the Edict of Nantes of 1598—the law guaranteeing toleration to the Protestants—

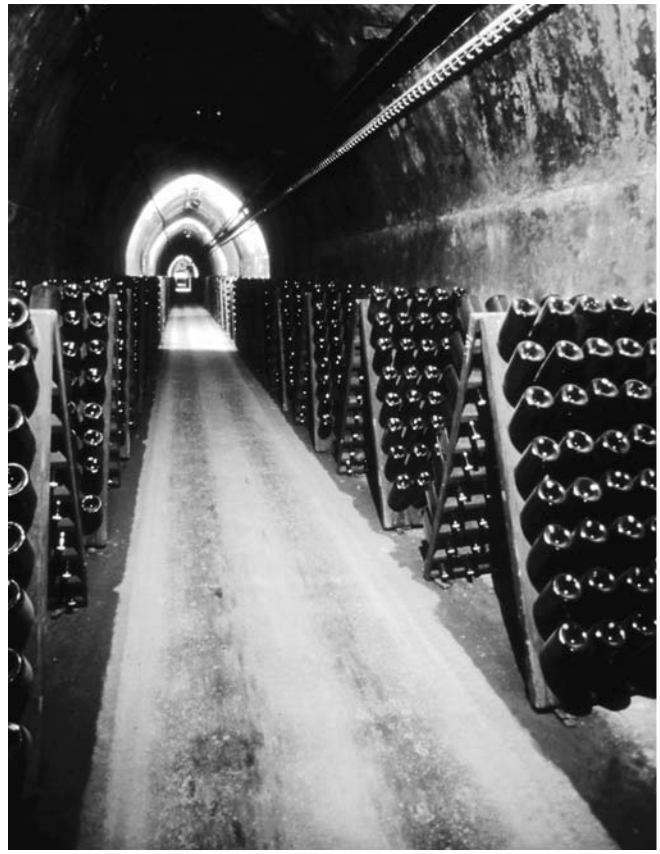
led to the flight of many Huguenots from the country. The country remained prosperous under Louis XV (reigned 1714–74) but ran into major problems under Louis XVI (reigned 1774–93), partly over the large budget deficit, the aristocratic reaction to paying higher taxes (or indeed, in some cases, any taxes), and the added cost of financing France's involvement in the American War of Independence.

The French Revolution

The French Revolution led to a transformation in French society. The system of tax farming ended and was replaced with a single and unitary state. Under Napoleon, many of the archaic systems of measurement—which had done much to hinder trade around France and with other countries—came to an end with the introduction of the metric system. Napoleon was also involved in plundering the wealth of many other countries and this in turn helped augment the finances of the French state. However, the constant wars were to drain the country, both financially and also through the loss of so many men in fighting. The French Revolution itself led to many French Royalists such as Marc Brunel (father of Isambard Kingdom Brunel) fleeing the country. Others like the chemist Antoine Lavoisier (1743–94) were executed by the revolutionaries, but some like the statistician Sébastien Bottin (1764–1853), flourished, introducing the business directory Didot-Bottin, which was heavily used in France and overseas, especially in countries in the former French Empire, until the 1960s.

The 19th Century

Napoleon tried to increase European trade, and his Continental System, which stopped trade with Britain, certainly increased the manufacturing base of some of Europe as there was no longer the danger of cheaper British imports. From the mid-19th century to the period just before World War I, France was the center of much of the creative talent in the region. Joseph Eugène Schneider (1805–75) designed the power hammer; Joseph Monier (1823–1906) invented reinforced concrete; the Michelin brothers, André-Jules Michelin (1853–1931) and Edouard Michelin (1859–1940) developed pneumatic tires; Alfred George de Glehn (1848–1936) contributed to the development of the steam locomotive; and Paul Cornu (1881–1944) devised a helicopter in 1907.



A vast wine cellar in France, where wine remains an important export, though agriculture accounts for only 3 percent of GDP.

Even though some of these designs never led to any manufacturing—such as Cornu's helicopter—it did show that France was at the forefront of design. Louis Bleriot's flying across the English Channel set the scene for French aviation. The work of Gustave Eiffel (1832–1923) and the Suez Canal of Ferdinand de Lesseps (1805–94) were examples of this on a much wider scale, although mention should be made of de Lesseps's plan for the Panama Canal, which collapsed amid major controversy in France and led to widespread criticism of the French government. The Paris Exposition of 1881 and later exhibitions showed off French produce to the world.

There was also a growth in French financial institutions that in turn led to some problems such as the Mexican Expedition, when the French intervened in Mexico where the government had tried to cancel large amounts of debts incurred by their predecessors. Alsace-Lorraine was the center of much of the industry of France, and for this reason, the area was captured by the Germans in 1870, only to be returned to France after World War I.

The creation of the French colonial empire transformed France, and French products were soon sold all around the world. The French economy expanded with the availability of cheap agricultural produce from Algeria, and later rubber from Vietnam, spices from East Asia, and nuts, palm oil, and other products from French Africa, as well as tobacco from a variety of sources. Many of the companies, now household names, originated during this period. For the automobile industry, Michelin (founded in 1888) and Renault (founded in 1899) are two examples.

The French as manufacturers were producing trains, trams, and aircraft. French foods such as chocolates, truffles, cheeses, and wines were exported to many other countries. Mineral water companies such as Perrier Water and Vichy Water became household names around the world. In banking, Crédit Foncier de France (founded 1852), Crédit Lyonnais (founded 1863), the Société Générale (founded 1864), the Banque de l'Indochine (founded 1875; now a part of the Crédit Agricole group), and other banking and insurance institutions, were institutions trusted by businesses and individuals around the world.

World Wars I and II

The fighting and the losses that France suffered in World War I had a traumatic effect on France. With the deaths of almost 1.4 million soldiers, sailors, and airmen in the war, as well as many more badly injured, it was a loss that the French population noticed greatly during the 1920s and 1930s. War production had dramatically altered the economy, but there were noticeable improvements. Prior to the war, the telephone system was antiquated. It was replaced by the Americans with a new one that served Paris and the nearby region. Factories were larger and more efficient, and women had entered the workforce in larger numbers than ever before. However, there were also many political problems with regular strikes and agitation by the newly powerful trade union movement. It was also a period when the communists, and later the socialists, started to flex their muscle.

During the 1920s and 1930s, the French colonial empire was maintained, although increasing numbers of non-French personnel had to be trained, providing opportunities for locals, some of whom were to lead the subsequent nationalist movements after World War II. During the 1920s, the United States came to epitomize mass production, but the French companies were seen as having "style." Nevertheless, owing to the jurisdictions of the various colonial empires, most goods produced in France were sold either to a home market or to parts of the French Empire. This allowed many of the French companies to expand into Africa, Indochina, and other parts of the world.

The German invasion of France in May 1940, and France's collapse less than six weeks later, led to four years of German occupation. After the war, some French wanted to return to the glory of the pre-1939 period, but colonial struggles in Indochina, and then in Algeria, ended this. Many of the French colonies in Africa became independent by the early 1960s, although most of them did retain close ties with France and continued buying goods from French companies.

Postcolonial Era

The loss of the French colonies caused a major rethink in French government policy, and combined with the absorption of many former residents of the colonies, especially from Algeria. France saw itself more and more as a leader in Europe, becoming a major force in the Common Market, which became the European Economic Community, and later still the European Union. This helped protect the agricultural sector in the country, much to the chagrin of the British, with regular disputes in the early 1980s between the British prime minister Margaret Thatcher and her French counterparts. In spite of this, agriculture accounts for only 4 percent of the French workforce and contributes 3 percent of the gross domestic product (GDP). The service sector accounts for 72 percent of the current workforce in France and makes up 76 percent of the GDP, with industry employing 24 percent of the workforce and generating 21 percent of the GDP.

During the late 1960s and from the early 1970s, France established itself as a major arms supplier in the world, and this has led to accusations about its involvement in many conflicts such as those in Africa and the Iran-Iraq War. France has continued exporting weapons and military supplies, with companies such as Aérospatiale (makers of the Exocet missile) and Dassault well known internationally. In terms of fashion, French designers such as Christian Dior (1905–57) and Yves St. Laurent (1936–2008) have led to the great interest in French style. French manufacturers of glass and plastics, and also French publishers such as Hachette, have also expanded their operations. Tourism has long drawn many people to France—some 76 million visited France in 2005, spending US$42 billion (the overall population of the country being 60.8 million)—and Air France, and through it and other companies, ownership of hotels and resorts around the world have kept most countries in the world in contact with France.

In 2005, France exported US$434.4 billion, with the major part being machinery and transportation equipment, aircraft, plastics, chemicals, pharmaceutical products, iron and steel, and beverages, especially wine. Imports included machinery and equipment, automobiles, crude oil, aircraft, plastics, and chemicals. Germany made up 15 percent of the export market, and 17 percent of the import market, with Spain and Britain being substantial recipients of French exports, and Italy and Spain being, after Germany, the main sources of imports into France.

See Also: Algeria; European Union; France Télécom; Morocco; Renault.

Bibliography. William James Adams and Christian Stoaffaes, eds., *French Industrial Policy* (Brookings Institution, 1986); Timothy Baycroft, *France: Inventing the Nation* (Hodder Education, 2008); *Contemporary France* (Palgrave Macmillan, 2009); Marion Fourcade, *Economists and Societies: Discipline and Profession in the United States, Great Britain, and France, 1890s to 1990s* (Princeton University Press, 2009); Claire Goldstein, *Vaux and Versailles: The Appropriations, Erasures, and Accidents That Made Modern France* (University of Pennsylvania Press, 2008); Sanche de Gramont, *The French: Portrait of a People* (Putnam, 1969); John H. McArthur and Bruce R. Scott, *Promotion and Control of Industry in Postwar France* (Harvard University Press, 1963); William Safran, *The French Polity* (Pearson Longman, 2009); Julain Savary, *French Multinationals* (St. Martin's Press, 1984); Monique Wagner, *From Gaul to De Gaulle: An Outline of French Civilization* (Peter Lang, 1989).

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France Télécom

The company France Télécom is the main telecommunications company in France and one of the largest in this field in the world. Until 1988 it was a part of the Ministry of Posts and Telecommunications, and was known as the Direction Générale des Télécommunications. The ministry traces its origins back to the 18th century when the French monarchs controlled the transportation system for the country. In 1794, five years after the French Revolution, the monopoly was broken and private companies were permitted to transport packages, but it was soon found that this removed a lucrative source of income from the government, and in 1804 Napoleon reintroduced the monopoly. The government also controlled the telegraph system when it was introduced but started to relax this in the 1850s.

In 1878 the first telephone was introduced to France, and three telephone networks were established; these were later merged to form the Société Générale de Téléphone (SGT), much to the joy of many people who objected to unsightly telephone lines along the streets. The Paris telephone exchange opened in 1881 and it was soon apparent that the SGT was interested in establishing a telephone network only in Paris and the major cities. It had its license renewed in 1884 for five years, but the system lagged that in many other countries, and in 1889 the French government took control of the SGT and started running the telephone service itself with the Ministry of Posts, Telegraphs and Telephones, and produced the first telephone directories in 1890.

Even under French government control, the system still lagged that in many other countries, and in 1900 there were only about 30,000 telephones in the country. By comparison, in 1909, the 100 largest hotels in New York boasted 27,000 lines. The congestion at the telephone exchange was also so bad that in 1905 it took two minutes for a connection. The government decided to improve the service and by 1912 there were 72,000 telephones in Paris, accounting for more than half of the telephones in the country.

In the years just before World War I, the French telephone service, worried about spies, removed anybody who had German ancestry or heritage. During World War I, the telephone network in northern

This France Télécom branded phone booth photographed in Wellington, New Zealand, in 2008 indicates the extent of the company's worldwide reach. It has also had a presence in such diverse locations as Kenya and El Salvador.

France was disrupted by the German invasion, but the French army tried desperately to maintain it. When the U.S. forces arrived, the American commanders were shocked by the telephone service in Paris and rebuilt the entire network.

During the 1920s and 1930s, about half of the subscribers in France were still living in Paris, and in addition to the regular telephone directory, the company Didot-Bottin produced a commercial directory listing businesses and also many private subscribers, not only in France but also overseas, especially in the French Empire. With the outbreak of World War II, the French telephone system was put under considerable strain by the military, but their commander General Maurice Gamelin was so distrustful of the telephone service that he refused to reply on telephones in his headquarters in Vincennes. German engineers were brought in to repair some of the telephone lines during the war, and the system was not that badly affected during the liberation of France in 1944.

After the end of World War II, the French telephone network in the countryside, especially in southern France, was dramatically expanded, although Paris continued to make up about a third of the subscribers in the country. The French telephone engineers were also responsible for constructing the telephone network in much of the French Empire, especially in Algeria and Morocco. In addition, French telephone engineers were employed on the telephone service in Egypt.

In 1988 the French government finally decided to sell the telephone service and it was privatized. It still continues to help with telephone networks around the world, and employs about 191,000 people, half of whom work outside France. It also has about 159 million customers around the world, and in the 12 months ending in September 2004, it had a revenue of US$60.1 billion; in 2007, its revenue was €52,959 billion. In 2005 France Télécom bought a 77 percent share in Amena, the Spanish mobile telephone company, and renamed it Orange Espana, and in November 2007 it was able to buy 51 percent of Telkom Kenya from the government of Kenya. Until 2003, it also had a large share in Telecom Argentina, selling it down to 1 percent, and also owned the telephone network in El Salvador.

See Also: Deregulation; Deutsche Telekom; France.

Bibliography. Pierre Aulas, *Les origines du téléphone en France* (Paillart, 1999); *France Telecom Laws and Regulations Handbook* (International Business Publications USA, 2008); Ben Hall and Andrew Parker, "France Telecom Turns Its Attention to Africa," *Financial Times* (September 16, 2008); Philippe Lorino, *Competence-Based Competence Management: A Pragmatic and Interpretive Approach; The Case of a Telecommunications Company* (ESSEC, 2007); Eli Noam, *Telecommunications in Europe* (Oxford University Press, 1992).

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Franchising

Franchising is the practice of licensing a philosophy of business—and its associated brand names—by a franchisor to a franchisee, in exchange for a share in sales and a franchise royalty fee. Chain stores and chain restaurants are the franchises best known to the public, and McDonald's is the most successful franchise network in the world. In the United States, the rise of franchises paralleled the growth of the interstate highway system and the sense of America as a nationwide culture rather than a conglomeration of regional cultures. Though not uniquely American, franchising is a distinctly American practice, at once appealing to the small business owner and representing the success of the national or international corporation.

United States

In the United States, franchising is governed by both state and federal laws. The Federal Trade Commission requires that franchisors provide a Franchise Disclosure Document (FDD) to potential franchisees, at least 14 days before the franchisee signs a contract. The FDD replaces the Uniform Franchise Offering Circular, a similar document that was required until the FTC revised its franchising-related regulations; the new regulations went into effect in July of 2008. The FDD consists of 20 items, in addition to the franchisor's financial statements, the franchise contract, and a receipt; no government agency audits a franchisor's FDD to ensure its accuracy, and a potential franchisee is expected to perform due diligence in doing so, but a franchisor misrepresenting itself is certainly liable to fraud charges.

The 20 items of the FDD are as follows:

1. The franchisor and any parents, predecessors, or affiliates.
2. Business experience. In this section, the directors, trustees, general partners, and officers of the franchisor are listed, along with any previous employment in the past five years.
3. Litigation. This section discloses any pending litigation against the parties in (1), any litigation from the previous fiscal year, and any convictions, nolo contendere pleas, or civil suit liabilities from the previous ten years.
4. Bankruptcy. Discloses whether the franchisor has filed for bankruptcy in the previous 10 years.
5. Initial fees.
6. Other fees.
7. Estimated initial investment. This includes not simply the fees paid to the franchisor, but the expenses the franchisor anticipates the franchisee will need to make, such as purchasing or leasing real estate and equipment, training employees, and purchasing inventory. One of the benefits of becoming a franchisee is that you are pursuing a business model that has been successfully pursued before, and can learn from your fellow franchisees' experience; the information disclosed in item (7) ideally reflects that collective wisdom.
8. Restrictions on sources of products and services. Some franchises require that the franchisee purchase some or all of its inventory from the franchisor, which provides the franchisor with additional revenue streams; in some cases this is true even when the inventory provided by the franchisor is not distinctly different from that which

the franchisee could purchase elsewhere (such as Heinz ketchup for a fast food franchise).

9. Franchisee's obligations. Types of obligation can include site selection and acquisition, pre-opening purchases, site development, employee training, opening, fees, standards/policies compliance, trademarks and proprietary information, product restrictions, warranties and customer service, territorial development, ongoing purchases, maintenance, insurance, advertising, indemnification, management and staffing, records and reports, inspections, transfer, renewal, post-termination obligations, non-competition convenants, and dispute resolution. The combination of post-termination and non-competition obligations are especially important to a potential franchisee, because a franchise contract is typically long term—five and 10 year contracts are common—with a penalty for early termination. A franchisee unhappy with his franchise may find that his only alternative is not simply a new business but a new industry.
10. Financing.
11. Franchisor's assistance, advertising, computer systems, and training. The complement to item (9), this section discloses the extent of the franchisor's participation.
12. Territory. Franchisees don't generally want to compete directly with fellow franchisees of the same franchise. This section discloses whether the franchise agreement grants exclusive territory, and other items related to the issue of territory.
13. Trademarks.
14. Patents, copyrights, and any proprietary information.
15. Obligation to participate in the actual operation of the franchise business. Some franchisor's require that if the franchisee is an individual, he must be on-premises for the operation of the franchise business; others let him hire a supervisor to run the business, as is common in franchises in which franchisees may own multiple locations. When supervisors are an option, there may be optional or mandatory training programs offered by the franchisor. The supervisor may also be bound by restrictions similar to those of the franchisee—such as non-competition or maintaining the integrity of trade secrets.
16. Restrictions on what the franchisee may sell. Franchisors generally want to preserve their brand identity, which may lead them to preclude a franchisee from selling anything not on a specific list of options. Or there may be some binding agreement with a third party, such as a fast food franchise's contract with Coca-Cola or PepsiCo to provide only the soft drinks from that company and not from its competitor.
17. Renewal, termination, transfer, and dispute resolution. This section lays out the franchise relationship—not only the length of the term of contract, but provisions for termination by the franchisee or franchisor, provisions for transfer of the franchise to another franchisee, provisions for death or disability, and an agreement pertaining to methods of dispute resolution should the need arise.
18. Public figures. Discloses any information about public figures' involvement with the franchise.
19. Financial performance representations.
20. Outlets and franchisee information.

The FDD offers as complete a picture as possible of the franchising experience, much like the prospectus given to potential investors in a new business. Although the FTC requires the FDD, there are no federal filing requirements; often, state laws will require franchisors to file or register at the state level, and in the 21st century there is an increasing likelihood of municipalities passing ordinances restricting franchise businesses, out of the fear that Big Business will arrive to displace mom-and-pop shops.

Several notable Supreme Court cases have dealt with conflicts between franchisees and franchisors. *Burger King v. Rudzewicz*, 471 U.S. 462 (1985) was brought before the court when Burger King (based in Florida) sued John Rudzewicz and Brian MacShara of Michigan for failing to make their monthly payments to the franchise, because of an economic downturn and lack of cash flow. The reason the case came to the Supreme Court's attention was because of the matter of jurisdiction; though the United States District Court ruled that Florida's jurisdiction extended to anyone who breached a contract in that state, the Eleventh Circuit Court of Appeals overturned that finding on the belief that the exercise of such jurisdiction violated the Fourteenth Amendment's prescription of due process. The Supreme Court upheld the District Court's decision, finding in favor of Burger King (and establishing precedent important to franchisors who might otherwise have reason to be reluctant to do business with franchisees in other states).

Franchise Validation

There are many factors to consider in entering into a franchise contract, particularly now that so many markets are filled with competing franchises, some of which seem to offer nearly identical experiences. The FDD includes a list of current franchisees, and potential franchisees typically use the list during a process called "franchise validation." During validation, potential franchisees arrange to interview current franchisees about their experience. Questions cover financial details, the relationship with the franchisor, the way marketing and promotion (typically funded by a pool into which all franchisees pay) are handled, and the availability of support and information from the franchisor after opening. Franchisees don't have to answer questions, of course, but will often be open about their experiences, and those who are unhappy with their franchisor but are stuck by the terms of their contract have no reason not to air their complaints.

But franchise validation is a time-consuming process, and potential franchisees don't always know the right questions to ask, or the right way to follow up on the answers. Franchise consulting has become a niche industry, a professional service that consults with potential franchisees and identifies a good fit for their needs, amidst the many franchise opportunities available. Franchise consulting is an industry subject to little regulation, and many franchise brokers refer to themselves as franchise consultants, which can muddy the view of the industry. Properly speaking, a franchise consultant works for a fee, paid by the franchisee. A franchise broker will advertise his services as free, but works much like a realtor does, taking a fee from the "seller" (the franchisor) in exchange for finding a "buyer" (the franchisee). Not every franchisor is willing to pay the brokerage fee, and so the options available to a franchisee working with a broker are fewer than those working with a franchise consultant. Franchise consultants, some of whom may also be franchise lawyers with a working knowledge of contract law, can also help potential franchisees understand the language of the lengthy FDD, which can be cumbersome and oblique through no fault of the franchisor. (Attorneys cannot work as franchise brokers, because state laws would find their fee from the franchisor a conflict of interest.)

History

Franchising began with the Industrial Revolution. Historian Robert Wiebe identifies the late 19th century through World War I—what is sometimes called the Progressive Era, overlapping with the Gilded Age of the post-Reconstruction years—as an organizational period in American history, when the emphasis began to shift from regional identity to national identity. This wasn't reflected simply in how people talked about themselves, or in the shift from "the United States are" to "the United States is." It was a practical change, as national professional organizations like the American Medical Association and the American Bar Organization were formed; national labor unions formed around the nuclei of local unions; magazines and newspapers began producing content that was distributed nationally; and more and more commercial products were produced not just for local consumers but for consumers across the nation. Radio, when it arrived at the tail end of this period, adopted a national mindset almost immediately, with broadcast corporations distributing their programming nationwide—a precursor to the model the television networks would follow.

Coca-Cola is one of the first early examples of franchising success; after Asa Candler bought the rights to the name and formula of the soft drink developed by Atlanta pharmacist John Pemberton, he licensed the syrup both to bottlers and to drugstore soda fountains. Rather than simply selling the syrup and allowing the retailer to do as they liked with it, Candler attached conditions to the sale and presentation of Coca-Cola; it had to be sold under that name, for instance, and he fought hard against the use of the nickname "Coke" out of fears that it would jeopardize the product's trademark. (Copycat products with names like Koke were cropping up everywhere.) He discouraged adulteration, including the addition of other flavors like cherry, lime, or coffee, despite their widespread popularity—first and foremost in his mind was the protection of the brand identity, and with a strong enough brand identity the product would outsell all in its class. It was a unique approach for the time, and must have been instrumental in the success of the company and the brand; certainly Candler's approach was aped by the soft drink companies that followed.

Coca-Cola, though, was the franchise of a single product, much simpler than the modern franchise system. It was drug store owner Louis Liggett of Boston who popularized the franchise store in 1902. He talked 40 of his fellow drug store owners into pooling money together to form a collective, which would pay for advertising and marketing, bargain with wholesalers for cheaper prices, and benefit from a unified brand name—Rexall. After World War I, the company began granting franchise rights to new stores, and it later sponsored the *Amos 'n' Andy* radio show.

The first restaurant franchise followed in 1932 with Howard Johnson's, which expanded quickly despite the ongoing Great Depression. Much of Howard Johnson's success came from bidding on the exclusive rights to build restaurants at the gas station turnoffs on major northeastern and mid-Atlantic turnpikes. The growth of the highway system would provide many opportunities for franchises throughout the next few decades, into the 1970s, as companies like McDonald's, Kentucky Fried Chicken, and Taco Bell depended on the strength of nationwide advertising and the lure of familiarity to build chains of restaurants attended by family and business travelers. As it became more common for Americans to move to different parts of the country for work or school, the existence of nationwide franchises had a somewhat homogenizing effect, providing familiarity to strangers. You may not know the local mechanic, but your past experiences provide positive associations for the Meineke brand name.

Types of Franchises

There are four broad types of franchises. Product franchises are similar to Asa Candler's handling of Coca-Cola. With a product franchise, a manufacturer enters into an agreement with a retailer to distribute his products, one that is more complicated than a simple sales transaction. The agreement may call for a minimum number of purchases per quarter or fiscal year, or may require a certain type of display; it may require that the manufacturer's competitors not be available at the same outlet.

Manufacturing franchises are like those granted to soft drink bottlers. The franchise grants the license to produce and sell a product under a particular trademark. This may also involve purchasing the equipment or materials to make the product from the owner.

Business opportunity franchises generally involve the distribution of another company's products in a particular franchised fashion—for instance, vending machine distribution is often franchised.

The most common type of franchise is the business format franchise, which includes McDonald's and other fast food restaurants, Meineke and many other auto repair business chains, Gold's Gym and Curves, and so on. The FDD is constructed with the business format franchise in mind, because this is the franchise relationship with the most potential complication.

See Also: Branding; Company Profiles: North America; Consumer Behavior; Corporate Diplomacy.

Bibliography. Roger D. Blair and Francine LaFontaine, *The Economics of Franchising* (Cambridge University Press, 2005); Federal Trade Commission, "Franchise and Business Opportunity Rules," www.ftc.gov (cited March 2009).

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Freddie Mac

Federal Home Loan Mortgage Corporation, or Freddie Mac, is a U.S. government–sponsored but privately owned corporation created for the purpose of increasing the supply of funds for home mortgages. The origin of Freddie Mac goes back to the Depression era when the U.S. government wanted to make it easier for potential homeowners to build and own their houses. In order to ease availability of funds to these individuals, the government created an organization that came to be known as Fannie Mae. In 1970 the U.S. Congress continued with the privatization of the mortgage market and legislated the creation of Freddie Mac.

Freddie Mac, along with other government-sponsored organizations like Fannie Mae and Ginnie Mae, increases the volume of funds available for mortgages while simultaneously lowering their cost by providing a secondary market for mortgages. In what is called the primary market, a financial institution approves a home-builder's request for a mortgage, funds the mortgage through deposits it attracts and its equity. Without a secondary market, the total volume of mortgages would be limited to the share of their total deposits that the financial institutions would be willing to commit to mortgages.

A secondary market for mortgages is created when the financial institution sells the mortgage to an institution like Freddie Mac. Freddie Mac bundles a number of these mortgages together and creates one collective asset whose cash flows are derived from the collection of mortgage payments—interest as well as the principle repayments. This collection of mortgages is called a mortgage backed security or MBS. Freddie Mac sells all or parts of this MBS to investors. Since Freddie Mac can bundle mortgages from different types of borrowers and from different regions, the MBS portfolio becomes diversified across various risk categories and has higher return and lower risk than a portfolio of mortgages held by a particular financial institution. The improved risk-return profile makes these securities attractive for individual investors. Creation of this secondary market increases the volume of funds available for mortgages and competition between various providers of funds to this market lowers the cost at which home-builders can obtain mortgages.

Freddie Mac and Fannie Mae provide similar services but compete with each other. Ginnie Mae, on the other hand, provides guarantees on loans issued by government agencies and deals with smaller sized mortgages. In contrast to Ginnie Mae, Freddie Mac deals with mortgages that are not federally insured and can be of different sizes and different interest rates. Freddie Mac mortgages tend to be of larger sizes. Together these institutions are knows as Government Sponsored Enterprises, or GSEs, because government places looser restrictions on them relative to fully private companies. Although these enterprises are not fully backed by the government, they can raise funds in the market at advantageous rates because of the common perception that the government will not allow these institutions to default. The government sponsorship became very important in the summer of 2008 when problems with the housing market exploded into a full-blown financial crisis.

Freddie Mac became a central part of the mortgage credit crisis of 2008 after a $300 billion government bailout package.

At the end of 2007, Freddie Mac held $710 billion worth of mortgage backed securities in its portfolio. The mortgage backed securities market has grown from about $200 billion in 1989 to more than $2 trillion in 2006. Till about 2001, Freddie Mac and other GSEs dominated this market, together maintaining a market share of about 80 percent. Private issuers held the remainder of the market. Since 2002, however, private issuers began offering what became known as subprime mortgages. The share of these subprime mortgages increased from about 20 percent in 2002 to about 55 percent in 2006. Private issuers resort to securitization—they hand over the administration of the mortgage contracts to suppliers of funds instead of holding the mortgages to maturity.

Crisis

Beginning in 2007, rates of defaults in the subprime sector of the mortgage market began to increase partly due to declines in house prices and partly due to the nature of the subprime borrowers. Financial institutions that had held the mortgage-backed securities based on subprime mortgages faced heavy losses resulting in bankruptcy or re-organizations of large investment banks like Lehman Brothers and Bear Stearns.

In July 2008 Freddie Mac along with Fannie Mae felt the full brunt of the emerging financial crisis. These two institutions either held or guaranteed about $5.2 billion worth of mortgages in the country—about half of the total U.S. market. Their portfolio included some mortgage-backed securities issued by other institutions ($267 billion at the end of 2007 with Freddie Mac). With their capital of $83.2 at the end of 2007, their leverage ratio of 65:1 was much higher than any other financial institution could support. Freddie Mac had lost $3.5 billion in 2007. With losses accumulating in 2008, share prices of Freddie Mac (as well as Fannie Mae) dropped from 65 in mid-2007 to less than 10 in July 2008.

The drop in share prices implied that these institutions would find it very difficult to raise new capital in the financial markets to continue supporting the housing mortgage market, which had become more important in mid-2008 due to withdrawal of private financial institutions. Their status as GSEs as well as their sizes required that the U.S. Treasury and Congress intervene to protect these institutions.

By the end of July 2008, the U.S. Senate and Congress approved a $300 billion package that would be used to guarantee mortgages issued by the two institutions—Freddie Mac and Fannie Mae. The implicit guarantee of the government thus became explicit. In turn, the government acquired preferred shares in the two organizations as well as rights to acquire some outstanding common shares, and placed a host of other minor restrictions on the activities of these two organizations. The two institutions were placed in *conservatorship*—a less offensive term than *nationalization*.

The era of unprecedented growth of these giants in the mortgage as well as the U.S. financial markets may have ended with the financial crisis that began in full earnest in 2008.

See Also: Credit Ratings; Financial Markets; Mortgage Credit Crisis of 2008.

Bibliography. David H. Carpenter and M. Maureen Murphy, *Financial Institution Insolvency Federal Authority Over Fannie Mae, Freddie Mac, and Depository Institutions. CRS report for Congress, RL34657* (Congressional Research Service, Library of Congress, 2008); Freddie Mac, www.freddiemac.com (cited March 2009); Daniel J. McDonald and Daniel L. Thronton, "A Primer on the Mortgage Market and Mortgage Finance," *Federal Reserve Bank of St. Louis Review* (January–February 2008).

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Free Markets

Free markets are economic exchanges where producers and sellers voluntarily exchange economic goods and services with no outside interference or coercion. In a free market both parties to the transaction exchange goods and services, because they expect a gain from the exchange; if there is no expectation of gain, there is no exchange. The gain from the exchange arises from the difference between the value each party gives to the goods or services received and the cost of obtaining them.

To increase efficiency in a free market, money and a market price emerge. First, money, or a standardized means of payment, is used to reduce the negotiation over the value of two different goods that are bartered by the individuals and to reduce the need to have individuals interested in the goods bartered in each transaction. Second, a market price emerges with the repetition of the exchanges to simplify the negotiation of each transaction; the market price reflects the consensus at which the particular good or service is exchanged between suppliers and buyers. Temporary changes in the price provide incentives to parties in the transaction to change their behavior. Price increases induce an increase of supply and reduction of demand, while price reductions induce a reduction in supply and increase in demand. These forces bring the market price back in line with the long-run norm. Thus, free markets and the accompanying price system are viewed as an efficient system in allocating goods and services in a cost-effective manner.

Market Imperfection and Market Failures

However, free markets are not always efficient means of exchange because of the existence of market imperfections and market failures; these prompt governments to intervene in free markets. First, market imperfection refers to a situation in which there is a deviation from the conditions of perfect competition, i.e., where there are multiple buyers, perfect information, free entry in the industry, and multiple producers with no significant market share generating a homogeneous product with the same production technology. In a perfectly competitive market, goods are exchanged at the market price, firms are price takers, and in the long run do not earn profits above the norm. However, the conditions that support perfect competition are not met in many instances. Barriers to entry in the industry, differences in production technology, or information asymmetries give rise to imperfect competition. This can take the extreme form of monopolies, i.e., when one firm controls most of the market and sets prices and quantities exchanged, or oligopolies, i.e., when a reduced number of firms dominate the market and can potentially collude to maintain a price increase. Governments are likely to intervene in the market to reduce the negative impact of such imperfection on consumers. They do so by regulating the industry, mandating specified levels of production or prices, setting limits on the power that the monopolist or oligopolists have over buyers or against new entrants, or even substituting private producers with state-owned enterprises to increase competition or to reduce prices.

Second, market failures exist when the free market is unable to provide goods and services to buyers. Market failures emerge when goods and services are subject to nonexcludability and nonrival consumption. Nonexcludability refers to the situation when an individual who does not pay for the product cannot be prevented from using or benefiting from it. In this case the free market does not work, because individuals will not pay for a product that they can obtain for free; as a result, the producer has limited incentives to generate the product. Nonrival consumption refers to the situation when the consumption of a product by an individual does not reduce the ability of others to consume the product. In this case the free market results in an undersupply of the product, because charging a price will prevent some people from benefiting from a product that could be provided at no cost. A mixed situation of part rival and part nonrival consumption gives rise to externalities, when one person does not receive the full benefits (positive externality) or does not pay the full cost (negative externality) of the impact of their action on other people.

Governments are likely to intervene in situations of market failures. They do so by subsidizing producers to serve consumers who are excluded, by imposing costs or providing incentives to producers of negative and positive externalities (respectively), or by undertaking the activities that are non-excludable and have nonrival consumption and paying for them with taxes.

Although the intellectual roots of the concept of free markets have been part of economic discussion for centuries, they tend to be associated with the work of Adam Smith. He postulates that the self-interest of individuals and their specialization resulted in a free market where the interaction of demand and supply would result in efficiency. Government intervention in free markets would only result in distortions. Competition, the so-called invisible hand, would force producers and buyers toward efficient terms of exchange and support economic growth.

Later, writers of the Austrian school of economics, like Ludwig Von Mises or Friedrich von Hayek, and the Chicago school of economics, like Milton Friedman, provided additional depth to the concept that free markets are better than governments at facilitating growth. Additionally, the authors argue that free markets would eventually lead to a free society.

Models of Development

Despite this long intellectual lineage, during most of the 20th century free markets were subject to government controls throughout the world. The controls resulted in three alternative models of development. In capitalist developed countries, which were then known as the First World, governments followed the ideas of John Maynard Keynes and established high levels of regulation and controls over the capitalist system, i.e., private ownership of means of production and a price system to allocate resources. In communist countries, which were known as the Second World, governments implemented the ideas of Karl Marx and established a communist economic system, i.e., central planning of prices and quantities and state ownership of means of production. In developing countries, which became known as the Third World, governments followed a middle road, maintaining a capitalist system, but with high levels of government regulation, state ownership, and price controls designed to promote industrialization.

Moreover, in some of these countries governments, influenced by dependency theory (which argues that developing countries were kept underdeveloped by their dependency on industrialized countries for manufactures, machinery, and technology), followed an import substitution model. Under this model governments additionally limited imports and the operations of foreign firms to protect domestic firms from international competition and enable these firms to develop.

However, the economic crisis that started with the oil embargo of 1973, which led to stagflation, i.e., inflation and economic stagnation, questioned the viability of models of high government control over free markets. As a result, governments started to relinquish control over the economy and allow free markets to operate. In 1976 Chile became one of the first countries to embark on the economic reform needed to restore free markets, resulting in its growth. However, since the economic liberalization was done by a military dictatorship, an association between an authoritarian regime and free markets was established. As a result, other developing countries did not implement economic reform until much later.

Reduced Government Control

In the early 1980s, the idea of free markets started to gain acceptance in industrialized countries when the United Kingdom, under Prime Minister Margaret Thatcher, and the United States, under President Ronald Reagan, started a process of economic liberalization, prompting imitation by other developed countries. In developing countries free markets did not gain acceptance until Bolivia, which was suffering from hyperinflation after the Latin American debt crisis of 1982, established a program of economic reform in the mid-1980s. This program of reinstating free markets and reducing government control over the economy stopped hyperinflation and brought economic growth. Since the program was implemented in a democracy, it became an example for other developing countries that a dictatorship was not needed for free markets to be implemented and deliver economic growth. Communist countries also undertook economic reforms to replace their planned economies with a capitalist system and create free markets. China started the transition to free markets in the early 1980s, while countries in Eastern Europe and the former Soviet Union started in the late 1980s.

As a result of these transformations, the idea of free markets as the more effective and efficient path toward development has taken hold in most countries in the world. The reason is not only that free markets have shown their ability to generate efficiency and growth, but also that governments, not only markets, have been shown to suffer from imperfections, particularly in planning an economic system and facilitating growth. Some of the consequences of misguided and/or misplaced government intervention are the distortion of incentives as individuals change their behavior according to what the regulations reward, the emergence of rent seeking as individuals and firms focus on extracting concessions from the government rather than achieving efficiency, or the appearance of black or informal markets as individuals and firms circumvent constraints on prices or quantities that can be sold. As a result, from a free market point of view, it tends to be accepted that it is better to leave economic relationships to markets. This does not mean that governments do not have a role to play in the economy. On the contrary, governments have an important role in providing the infrastructure that supports market transactions. This includes macroeconomic stability, the establishment of the rule of law and protection of property rights, the provision of public goods, and the protection of the weak.

Criticism

Nevertheless, although most countries have reinstated free markets as the mechanism to govern economic relationships, criticism emerged in the late 1990s and 2000s as part of the antiglobalization movement. This movement emerged in opposition to the spread of free market ideas and the consequent changes in the integration of the world and globalization of markets. The debate regarding the best way to organize economic relationships has become one of free markets versus so-called fair markets. Free markets are perceived as too focused on efficiency and wealth accumulation and not caring about the distribution of wealth. To replace this, the concept of fair markets was introduced to represent economic exchanges in which minimum levels of payment for labor and equitable distribution of wealth are included as objectives to achieve.

In some cases this has resulted in a market in its own right, such as for so-called fair trade products—products traded where producers, usually of commodities or handicrafts in developing countries, receive a higher wage or price than the prevailing market one. In other cases, the concept of fair market has been used to reassert control of the market by the government. In the extreme this has resulted in the nationalization of firms, as seen in Bolivia or Venezuela in the mid-2000s. Thus, the debate concerning which model to use to govern economic relationships is still alive.

The empirical literature analyzing the impact of free markets on countries tends to find that free markets do in fact help countries achieve economic growth and development. Recent developments in the literature argue that for free markets to operate most efficiently, complementary institutions, such as those that protect property rights and the rule of law, need to be present. The literature also finds that the benefits of free markets do take time to materialize and that some government intervention does achieve positive results.

See Also: Black Market; Capitalism; Communism; Competition; Dependency Theory; Deregulation; Fair Trade; Free Trade; Import Substitution; Regulation.

Bibliography. Jagdish Bhagwati, *In Defense of Globalization* (Oxford University Press, 2004); Stephen F. Copp, *The Legal Foundations of Free Markets* (Institute of Economic Affairs, 2008); Richard Allen Epstein and Geoffrey Wood, *Free Markets Under Siege: Cartels, Politics, and Social Welfare* (Hoover Institution Press, 2008); Milton Friedman, *Capitalism and Freedom* (University of Chicago Press, 1962); James K. Galbraith, *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too* (Free Press, 2008); Friedrich August von Hayek, *The Road to Serfdom* (Chicago University Press, 1944); Susan P. Joekes and Phil Evans, *Competition and Development: The Power of Competitive Markets* (International Development Research Centre, 2008); Dani Rodrik, "Goodbye Washington Consensus, Hello Washington Confusion? A Review of the World Bank's Economic Growth in the 1990s: Learning from a Decade of Reform," *Journal of Economic Literature* (v.44/4, 2006); Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations* (Oxford University Press, [1776] 1998); Daniel Yergin and Joseph Stanislaw, *The Commanding Heights: The Battle for the World Economy* (Touchstone, 2002).

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Free Trade

Free trade is a market model in which trade in goods and services between or within countries flows freely without any restriction, such as tariffs, quotas, non-tariff barriers, or taxes. Utilizing the argument that the free market is the best "governor" to ensure increase in wealth, free trade demands that government intervention with the "free" market be eliminated and all restrictions be removed. In history, the merit of free trade was extensively discussed by Adam Smith in 1776 in his book *The Wealth of Nations,* examining the gains of free trade in the context of specialization and division of labor (absolute advantage theory).

The idea of free trade was also later formulated by David Ricardo by using one factor of production with constant productivity of labor in two goods, but with relative productivity between the goods different across countries (comparative advantage theory). David Ricardo claimed that gains from free trade will be great once a policy of free trade is adopted in an institutional setting. For Jagdish Bhagwati, the classical and neoclassical schools of economic theory constantly emphasized the advantages of free trade policies for the improvement of popular living standards and the promotion of overall rates of economic growth, and the disadvantages of protectionism. The basic conclusion of classical and contemporary neoclassical economic theory is that the advantages of free international trade represent basically only a special case of the advantages of the free market system in general.

Nevertheless, in the 20th century, "New Trade Theory" manifested itself as the economic critique of international free trade from the perspective of increasing returns to scale and the network effect. Some economists asked whether it might be effective for a nation to shield infant industries until they grow to sufficient size to compete internationally. According to this theory, the optimum-tariff and infant-industry arguments constituted some grounds for protection and protectionist policies by some countries, and more importantly were seen as a departure from free trade within the framework of the traditional theory. However, the general trend in international trade is in line with the reduction of tariffs and other trade restrictions through international negotiations.

Theories

Absolute advantage in trade theory was introduced to the literature by Adam Smith, whose view of the economic system was that nations' wealth is equal to their production capacity. In his positive-sum economy it is perfectly possible to make everybody better off and real incomes per head are able to rise indefinitely as a policy of laissez-faire promotes economic growth. In his view, as self-interest is combined with competition, which also serves public interest, division of labor increases productivity. He fortified the idea of free trade with only one production factor, which was labor. His labor theory of value states that the value of a good is determined by the amount of labor required to produce it. Nevertheless he did not consider how to deal with capital, land, and profits.

Comparative advantage was offered by David Ricardo in order to fill gaps in Adam Smith's approach on absolute advantage of nations in trade. Ricardo, like Adam Smith, was opposed to tariff and other restrictions on international trade. The Ricardian model focuses on comparative advantage of nations. It is considered perhaps the most important approach in international free trade theory today. In a Ricardian model, countries specialize in producing what they produce best, and comparative advantage is the ability to produce a good at a lower cost, relative to other goods, compared to another country. In *Principles of Economics*, Ricardo states comparative advantage is a specialization technique used to create more efficient production and describes opportunity cost between producers.

Ricardo's idea of comparative advantage suggests that unrestricted free trade brings about increased world production; that is, that trade is a positive-sum game, and also suggests that opening a country to free trade stimulates economic growth, which creates dynamic gains from trade. However, it has its own limitations as well. The most important limitations are that nations strive only to maximize production and consumption; only two countries produce and consume just two goods; no transportation costs of trading goods; labor is the only resource used to produce goods; and ignore efficiency and improvements gains from producing just one good.

The Heckscher-Ohlin factor productivity theorem was introduced by Eli Heckscher and his student Bertil Ohlin in the 1920s as an alternative to the Ricardian basic comparative advantage theory. This theorem builds its own assumptions on David Ricardo's theory of comparative advantage by predicting patterns of trade. For this theorem, relative endowments of the factors of production (labor and capital) determine a country's comparative advantage. It also suggests that the pattern of international trade is determined by differences in factor endowments. In addition, this theorem has variable factor proportions between countries, e.g., highly developed countries have a comparatively high ratio of capital to labor in relation to developing countries. This makes the developed country capital-abundant relative to the developing country and the developing nation labor-abundant in relation to the developed country. Similarly, this theorem has also its own limitations. Even so, this approach does not answer certain question. Why does a country with cost advantage not capture the whole export market? What would happen if countries have similar relative factor endowments? What would happen in the case of intra-industry trade? What would happen in the case of trade liberalization?

Arguments in Favor of Free Trade

According Anne Krueger, one of central themes of economics for the last two centuries has been the proposition that free trade between nations will be beneficial, and any nation that adopts a policy of free trade will benefit highly from free trade opportunities. Nevertheless, the protection to infant industries and pressure for it found enough support to create circumstances that support protectionism in trade. There are mainly two different opposite arguments in international free trade literature. These are arguments in favor of free trade and against of free trade.

Arguments for free trade mostly concentrate on its enhancing power of national welfare. To be able to explain the welfare impacts, these arguments focus on three aspects. These are (1) the efficiency gains from free trade; (2) the additional gains from economies of scale; and (3) the political argument.

Efficiency arguments: Although moving toward free trade may represent very real financial losses for the small minority of companies with the political influence to get themselves protected from foreign competition, these losses are normally much lower than the gains to the great majority of the population. The neoclassical school underlines the case for free trade with propositions on efficiency and aggregate welfare. For Arye Hillman, the neoclassical school defends the idea that, given sufficient information, compensating lump-sum transfers can ensure that a policy of free trade is in the self-interest of every individual of an economy. Paul Krugman and Maurice Obstfeld stated that the first case for free trade is the argument that producers and consumers allocate resources most efficiently when governments do not distort market prices through trade policy. With restricted or protected trade, consumers pay higher prices and distorted prices cause overproduction either by existing firms producing more or by more firms entering the industry.

The efficiency argument for free trade is based on the result that in the case of a small country, free trade is the best policy for the national welfare. According to this argument, a tariff causes a net loss to the economy and a move from tariff equilibrium to free trade eliminates the efficiency loss and increases national welfare.

There are two basic arguments in defense of free trade in the presence of domestic distortions: (1) domestic distortions should be corrected with domestic (as opposed to international trade) policies; for example: a domestic production subsidy is superior to a tariff in dealing with a production-related market failure; and (2) market failures are hard to diagnose and measure; for example: a tariff to protect urban industrial sectors will generate social benefits, but it will also encourage migration to these sectors that will result in higher unemployment.

Additional gains from economies of scale: Protected markets in small countries do not allow firms to exploit scale economies. For example, in the auto industry, an efficient scale assembly should make a minimum of 80,000 cars per year. In Argentina, 13 firms produced a total of 166,000 cars per year. Therefore, the presence of scale economies favors free trade that generates more varieties and results in lower prices, and free trade provides a wider range of opportunities and thus a wider scope for innovation.

Political argument for free trade: A political commitment to free trade is considered as the best strategy. Any policy that deviates from free trade would be quickly manipulated by special interests, leading to decreased national welfare. Free trade requires security and consistency in politics; therefore, it can be used as a kind of pressure on countries to sustain their political balances.

Arguments Against Free Trade

There are three theoretical arguments against the policy of free trade. Arguments against free trade focus on (1) market failure argument, (2) benefits of tariffs, and (3) infant industries argument.

The terms of trade argument for a tariff: An optimum tariff based on the application of a country's market power in the international market improves its terms of trade. For a large country (that is, a country that can affect the world price through trading), a tariff lowers the price of imports and generates a terms of trade benefit. This benefit must be compared to the costs of the tariff (production and consumption distortions). It is possible that the terms of trade benefits of a tariff outweigh its costs. Therefore, free trade might not be the best policy for a large country.

The domestic market failure argument: According to Arye Hillman, in the absence of compensatory transfers or other income adjustments, there will be no consensus how to select a trade policy that will benefit everybody in the society. Producer and consumer surplus do not properly measure social costs and benefits. Consumer and producer surplus ignore domestic market failures such as (1) unemployment or underemployment of labor, (2) technological spillovers from industries that are new or particularly innovative, and (3) environmental externalities.

A tariff may raise welfare if there is a marginal social benefit to production of a good that is not captured by producer surplus measures. The domestic market failure argument against free trade is a particular case of the theory of the second best. The theory of the second best states that a hands-off policy is desirable in any one market only if all other markets are working properly. If one market fails to work properly, a government intervention may actually increase welfare.

Infant industries argument: The infant industries argument states that developing countries have potential comparative advantages in manufacturing and they can initialize this potential through an initial period of protection. The best policy to protect domestic industries is to use tariffs or import quotas as temporary measures to get industrialization started. One of the most important reasons for this strategy is that capital markets are imperfect in most developing countries in their initial development stage. If a developing country does not have a set of financial institutions that would allow savings from traditional sectors (such as agriculture) to be used to finance investment in new sectors (such as manufacturing), then growth of new industries will be restricted. Furthermore, firms in a new industry generate social benefits for which they are not compensated (e.g., start-up costs of adapting technology). In practice, infant industries argument was supported by the import substituting industrialization policy in many developing countries during the 1960s and the 1970s, and many less developed countries pursued this strategy.

International Negotiations

International integration increased from the mid-1930s until about 1980 because advanced countries gradually removed tariffs and non-tariff barriers to trade, and the removal of tariffs became politically possible through international trade negotiations.

It is easier to lower tariffs as part of a mutual agreement as a unilateral policy because it helps mobilize exporters to support freer trade, and it can help governments avoid getting caught in destructive trade wars. Since World War II, the multilateral tariff reductions have taken place under the General Agreement on Tariffs and Trade (GATT), which was established in 1947 as a provisional international agreement, and then in 1995, it was replaced by a more formal international institution called the World Trade Organization (WTO). The GATT-WTO system is a legal organization that embodies a set of rules of conduct for international trade policy. The GATT-WTO system prohibits the imposition of (1) export subsidies (except for agricultural products), (2) import quotas (except when imports threaten "market disruption"), or (3) tariffs (any new tariff or increase in a tariff must be offset by reductions in other tariffs to compensate the affected exporting countries).

Their negotiations address trade restrictions in at least three ways: (1) reduction of tariff rates through multilateral negotiations, (2) binding: a tariff is "bound" by having the imposing country agree not to raise it in the future, and (3) prevention of non-tariff barriers: quotas and export subsidies are changed to tariffs because the costs of tariff protection are more apparent.

Preferential trading agreements are trade agreements between countries in which they lower tariffs for each other but not for the rest of the world. There are three types of preferential trading agreements in which tariff rates are set at or near zero: (1) a free trade area: an agreement that allows free trade among members, but each member can have its own trade policy towards nonmember countries: an example is the North America Free Trade Agreement (NAFTA); (2) a common market is a customs union with free factor movements (especially labor) among members; and (3) a customs union: an agreement that allows free trade among members and requires a common external trade policy towards nonmember countries: an example is the European Union.

Free trade–related negotiations can also be linked with regional integration, which is believed strengthens structural reforms, provides economic transformation, attracts foreign direct investment, emphasizes the importance of geopolitics, and helps corporations to function. Key regional blocs that pursue free trade agreements are EU (European Union), NAFTA (North American Free Trade Agreement), Mercosur/Mercosul (Southern Cone Common Market), ASEAN (Association of South-East Asian Nations), CACM (Central American Community), and FTAA (Free Trade Area of the Americas).

Compared to previous decades, the proliferation of regional trade agreements (RTAs) during the last 10 years took place at an unprecedented rate and eventually became a very prominent feature of the multilateral trading system (MTS). Some 380 RTAs have been notified to the GATT/WTO up to July 2007. Of these, 300 RTAs were notified under Article XXIV of the GATT 1947 or GATT 1994; 22 under the Enabling Clause; and 58 under Article V of the GATT. At that same date, 205 agreements were in force. If we take into account RTAs that are in force but have not been notified, those signed but not yet in force, those currently being negotiated, and those in the proposal stage, we arrive at a figure of close to 400 RTAs that are scheduled to be implemented by 2010.

Of these RTAs, free trade agreements (FTAs) and partial scope agreements account for over 90 percent, while customs unions account for less than 10 percent. While the greatest concentration of RTAs is in Europe, more than 100 RTAs are in force. The main focus of RTA activity has shifted away from Europe in the last two years toward Asia Pacific. The Asia Pacific Economic Cooperation (APEC) members, in particular, have been among the most active participants in RTAs.

In fact, RTAs are a fundamental departure from the principle of nondiscrimination of the WTO. Two broad questions raised by the formation of RTAs are (1) welfare effects: How does the creation, expansion or merger of RTAs affect the welfare of member and nonmember countries? and (2) stability: When is a trade arrangement stable? Are RTAs "stepping stones" or "stumbling blocks" toward global free trade. Welfare effects of RTAs are in particular very important because of static allocation effects (trade creation/diversion, terms of trade effects, pro-competitive, and product variety effects); accumulation effects (medium and long run growth effects), and location effects (spatial allocation of resources as economic geography studies the location of production in space). RTAs can also have growth effects. Economic integration may raise the incentive to innovate, and therefore may improve the economic growth performance of members through research and development and technological spillovers.

See Also: Common Market; Customs Union; Economic Integration; Fair Trade; Free Trade Agreements; Globalization; Infant Industry Argument.

Bibliography. Bela Balassa, *The Structure of Protection in Developing Countries* (Johns Hopkins Press, 1971); Jagdis Bhagwati, *Free Trade Today* (Princeton University Press, 2002); Ha-Joon Chang, *Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism* (Bloomsbury Press, 2008); Natalie Goldstein, *Globalization and Free Trade* (Facts On File, 2007); Arye Hillman, *The Political Economy of Protection* (Taylor & Francis, 1989); Kathiann M. Kowalski, *Free Trade* (Marshall Cavendish Benchmark, 2008); Anne Krueger, *Political Economy of Trade Protection* (University of Chicago Press; 1996); Paul Krugman and Maurice Obstfeld, *International Economics: Theory and Policy*, 6th ed. (Addison-Wesley, 2003); Razeen Sally, *Trade Policy, New Century: The WTO, FTAs and Asia Rising* (Institute of Economic Affairs, 2008); World Bank, *The World Development Report* (1987).

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Free Trade Area of the Americas

The Free Trade Area of the Americas (FTAA) was an attempt to create a multilateral institution with the objective of reducing and eliminating the many trade barriers that existed between all American countries. It was also an attempt to emulate the North American Free Trade Agreement (NAFTA) that had proven quite successful for the countries that signed it. This was supposed to be the first step to creating a common market, similar to the one achieved by the European Union during the second half of the last century. It would try to harmonize all the commercial policies of each of the countries of the continent.

Initially 34 countries signed the agreement; nonetheless, controversial aspects of trade, such as intellectual property rights and agricultural subsidies, made impossible the conciliation between all parties. In fact, some countries, like Venezuela and Cuba, decided to criticize it and oppose it, trying to create their own alternatives as counterpoise. The initial talks began in 1994, with the Summit of the Americas in Miami supported by the United States, but it was in 2001 in Quebec, in the Summit of the Americas, when the discussion of the agreement became broader and the resistance of antiglobalization activists caught the attention of the public. Despite the relative advance in negotiations and the release of a draft in Buenos Aires in the same year, there were no further agreements because some member countries felt themselves at serious disadvantage, as they were producers of commodities, especially agricultural goods.

The FTAA was not the first initiative for economic integration of the American states. Since the 1960s, there were already in place many economic agreements such as the Andean Community of Nations (CAN), the Common Market of the South (Mercosur), the Caribbean Community (CARICOM), and NAFTA itself, as the main examples of the process of creating agreements of economic cooperation. One of the objectives of FTAA was to merge these agreements in one single system of trade, with the suspension of barriers, tariffs, and taxes and the homogenization of all markets, using the European Union (EU) as an conceptual model. Additionally, the Doha Development Round of the World Trade Organization (WTO) revealed many aspects that were not included in previous negotiations, with particular attention to social issues.

The United States decided not to negotiate into the FTAA these controversial topics, along with the problem of internal aid and subsidies policies in the agricultural sector, in a process called Single Undertaking, in defense of its national interests. This generated discontent in many countries, who rejected this deterioration of rights and duties. Moreover, the United States demanded strict laws in the regulation of intellectual property and copyright. With the exception of Brazil, the rest of the states were at a disadvantage if anyone decided to negotiate separately and directly an agreement with the United States, which would jeopardize the future of an FTAA.

This consequence was more evident in the Quito Ministerial Summit of 2002. Despite the release of a second draft, the differences between the United States and the rest of the countries made it inappropriate to continue with negotiations. Mercosur, with the leadership of Brazil and Argentina, decided to postpone their entrance into the FTAA. They would accept an agreement only if the United States abolished its agricultural subsidies and guaranteed free access to all of its market, with consideration of the needs, capabilities, and sensibilities of possible members; finally, there were attempts to find a solution to these controversial issues in the WTO resolutions of the Doha Round.

According to the original schedule, the approbation and launching of FTAA was supposed to be in 2005, but delays and the indisposition of the United States to change its agricultural policies and its position on intellectual property—jointly with the emergence of opposition against U.S. free trade policies of countries turned socialist, like Venezuela and Bolivia—led to the failure of the Mar del Plata Summit in Argentina in 2005, and the agreement on FTAA was far from becoming a reality. Of the total states present at the summit, 26 nations scheduled a new meeting in 2006 to resume negotiations and release the final agreement, but that meeting never took place.

In 2004 Venezuelan president Hugo Chavez along with Evo Morales from Bolivia and Fidel Castro from Cuba launched the Bolivarian Alternative for the Americas (or ALBA) as an offset of FTAA. Its main objective was the creation of energy and infrastructure agreements and the inclusion of other aspects like military and political integration. Due to the impossibility of signing the FTAA without discarding its agricultural policies, the United States decided to create bilateral trade promotion agreements (TPAs), making one with Central American countries and signing one with Peru in 2007, and negotiating similar agreements with Panama and Colombia.

See Also: Bilateral Free Trade Agreement; Caribbean Community; Doha Round; Mercosur/Mercosul; North American Free Trade Agreement.

Bibliography. J. M. Álvarez, *FTAA & FTA with United States* (Universidad Externado de Colombia, 2004); S. Clavijo, "Growth, International Trade and Institutions: Reflections about FTA-FTAA Negotiations," *Borradores de Economía* (Banco de la República, 2004); R. Devlin and L. J. Garay, *From Miami to Cartagena: Nine Lessons and Nine Challenges of FTAA* (IADB, 1996); C. Maya Ochoa and J. M. Restrepo, "Will FTAA Bring Income Convergence?" *Ecos de Economía* (EAFIT, 2003); Fernando Pioli, Tomás Castagnino and Martín Cicowiez, *Estrategias de integración comercial en el hemisferio: el ALCA y la ALADI como opciones de política para la Argentina* [Strategies of Commercial Integration in the Hemisphere: the ALCA and the ALADI as Political Options for Argentina] (Centro de Economía Internacional, 2007); Razeen Sally, *Trade Policy, New Century: The WTO, FTAs and Asia Rising* (Institute of Economic Affairs, 2008).

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Free Trade Zone

A free trade zone (FTZ), also known as an export processing zone (EPZ), is a product of globalization. An FTZ is a specially designated area for export-oriented foreign direct investment. As a result, most tariff and non-tariff barriers are eliminated through agreements of states and investments are incentivized. These incentives usually include the waiver of customs and tariffs, the suspension or curtailment of laws in areas such as environmental protection and labor rights, and the facilitation of licensing procedures for foreign companies to set up local operations. Additionally, host countries often develop infrastructural support in areas such as transportation and telecommunications to support FTZs.

FTZs can be set up solely to support a single industry if there are only certain natural resources available. An example would be the Onne Oil and Gas Free Zone in Nigeria. Furthermore, there can be other benefits to a specific free trade zone, because industry-specific and sector-specific skills are tailored to the zone. Similar to an FTZ, actual agreements between trading partners such as the North American Free Trade Agreement would be the next step to completely removing tariff and non-tariff barriers between states.

Generally, an FTZ describes foreign exporting zones in less industrialized nations, such as Bangladesh, that seek to attract multinational corporations and investment into their respective zones. In one way, FTZs demonstrate the benefits of free trade. These zones provide corporations with favorable investment conditions, while at the same time providing developing nations with vital capital, the ability to export, jobs that would otherwise not exist or would exist somewhere else, and, in some cases, the transfer of technology from multinationals to local industries in the host country. Developing nations can have somewhat of a comparative advantage that they would not normally have through the use of free trade zones.

However, there are some criticisms of FTZs. Some say that multinationals unfairly exploit the developing nations that offer the most incentives and have an unfair advantage over them. Also, these corporations exploit local communities through adverse trading relationships, unfair labor practices, environmental degradation, lack of transfer of technology, and lack of long-term commitment in the host country. Furthermore, the outsourcing that FTZs encourage has led to a drain of manufacturing capabilities in already industrialized nations such as the United States.

The strongest criticism of FTZs comes from the globalized organized response to the ill effects of exported capitalism to the rest of the world. FTZs have mobilized people across borders who are opposed to the human and environmental costs of international free trade policies. Anti–World Trade Organization (WTO) protests, socialist movements, and global social justice networks and organizations such as the "Make Trade Fair" campaign have highlighted the high price humans in developing countries have paid in these zones, as well as the long-term economic costs associated with creating, maintaining, and improving such zones.

FTZs can range from clothing assembly to electronics assembly. Traditionally, FTZs attract businesses that are labor intensive or physically intensive instead of technology based, partly because of fear of competition. However, Taiwan, Korea, and Ireland have all managed to create FTZs where high-tech companies have flocked to, and high salaries and the transfer of that high technology have followed.

FTZs are not governed by a particular body. Instead, each state provides a different package of incentives and regulations. However, multinationals continue to push host countries to increase their incentives and to deregulate. In the pursuit of offering the most attractive package, host countries will try to make their package the most attractive, thereby creating a standard among them. In turn, the working conditions of the workers in "sweatshops" become worse, and so nongovernmental organizations (NGOs) such as the International Labour Organization and others eventually push for minimum global standards for labor practices.

FTZs are complex, since they are each dynamic in their own way. They provide the benefits of globalization to both developed nations (companies that are headquartered there) and developing nations, but provide more benefits to developed nations at the expense of the developing ones.

See Also: Economic Development; Free Trade; Globalization; Maquiladora.

Bibliography. T. Cavusgil, G. Knight, and J. Riesenberger, *International Business: Strategy, Management and the New Realities* (Prentice Hall, 2008); Cathal J. Nolan, *The Greenwood Encyclopedia of International Relations* (Greenwood Publishing, 2002); Paul Susman and Geoffrey Schneider, "Institutional Challenges in the Development of the World's First Worker-Owned Free Trade Zone," *Journal of Economic Issues* (v.42/2, 2008); Richard S. Thoman, *Free Ports and Foreign Trade Zones* (Cornell Maritime Press, 1956); Slama Chaudhuri Zohir, *Role of Dhaka Export Processing Zone: Employment and Empowerment* (Bangladesh Institute for Development Studies, 2008).

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Freight Forwarder

A freight forwarder may be defined as a consolidator that collects small shipments from shippers, consolidates them into large loads, and uses a basic mode to transport them to a consignee destination. At destination, it breaks the load down into individual shipments and delivers them to the correct consignee. Freight forwarders have been compared to wholesalers in the marketing channel or to high street travel agents, except that they arrange transportation for freight, not people.

Before describing the activity of a freight forwarder, it is important to clarify what are shippers and carriers. The shipper is the party that requires the movement of the product within the supply chain. The carrier is the organization that moves or transports the product. For example, haulers or trucking companies carry freight on trucks.

Freight forwarders can be classified as domestic or international (foreign), depending on whether they specialize in shipments within a country or externally to other countries. They purchase transport services from any of the five basic transportation modes—motor, rail, air, water, or pipeline. For instance, the domestic surface freight forwarder presents the consolidated shipments to railroads or haulers for intercity movement. Foreign freight forwarders, now designated in the United States as ocean transportation intermediaries under the U.S. Shipping Act of 1998, deal with the forwarding of an export shipment.

Advantages

Due to advances in information technology and relaxation of customs barriers (mainly in EU and NAFTA spaces), companies are outsourcing their noncore functions and freight forwarders have become a viable shipping alternative for many firms. Freight forwarders consolidate a large number of small shipments, from a number of customers or shippers, into large shipments in order to fill entire truck trailers or railcars that transport items at truckload or carload prices. Due to consolidation efficiencies, freight forwarders are able to offer shippers lower rates than the rates they could obtain directly from the carrier, because small shipments generally cost more per pound to transport than large shipments. Freight forwarders provide, for that reason, valuable services to both the shipper (lower prices and faster and more complete service) and the carrier (consolidation). The freight forwarder makes its revenue from the difference between the higher less-than-volume rate the shipper pays and the lower volume rate it obtains from the carrier. Freight forwarders procure transport services from a range of carriers, although today they may own the vehicles themselves.

International freight forwarders may have a central role in the export strategies of many firms and most companies can benefit from utilizing their services. This is mainly true for companies new to the international trade field, with small or irregular export activities, and for those located far away from the main exit or entry ports of their country. Freight forwarders have a strong knowledge of transport alternatives, can prepare and provide the required international documentation, are able to offer a lower transit time for small shipments, special freight handling, and customs clearance, and, because they are regulated carriers, are liable for cargo damage. Even global companies, with their own export department, may use the services of an international freight forwarder, which helps coordinate shipments at the port of exit and activities at the final destination.

Firms use freight forwarders for a number of reasons: to handle the movement of goods from the site of production to the customer's location, through the setting of transportation and carrier routings; to reduce transportation costs through consolidation; to speed the movement of goods and customs clearance for freight that moves internationally, as they normally receive advanced shipping notices; to provide full service logistics, including warehouse inventory, product storage, sorting, packaging, labelling and bar coding operations; to provide logistics information systems and improve customer service; to reduce staff time, as freight forwarders can obtain freight rates and make space reservation at no cost to the shipper; and to acquire outside expertise and avoid capital expenditure.

Sometimes freight forwarders and NVOCC (non-vessel operating common carriers) are considered to be the same. However, although both operate as consolidators, they differ in a number of features. A freight forwarder usually acts as an agent of the shipper and not as a carrier. It offers a groupage service using a nominated shipping line or an NVOCC. Some of its principal activities include arranging and completing export and bank documentation and negotiating freight rates on the shipper's behalf. NVOCC allows shipping companies to concentrate on ship management and the freight forwarder to utilize its expertise in marketing and consolidating cargo. Freight forwarders are often NVOCC's biggest customers.

See Also: A P Møller Mærsk Group; Customs Broker; International Trade Logistics; Transportation; Value Chain.

Bibliography. Gerald Albaum, Edwin Duerr, and Jesper Strandskov, *International Marketing and Export Management* (Prentice Hall, 2008); Paul Cousins, *Strategic Supply Management: Principles, Theories and Practice* (Prentice Hall, 2008); James R. Stock and Douglas M. Lambert, *Strategic Logistics Management* (McGraw-Hill, 2001).

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FT Index

The FTSE (pronounced "footsie"), or the Financial Times Stock Exchange Index, is a share index of the 100 most highly capitalized companies on the London Stock Exchange, and is maintained by the FTSE Group, an independent group that originated as a joint venture between the LSE and the *Financial Times*, a United Kingdom–based newspaper. The FTSE replaces the FT 30, which measured the daily movement of 30 major stocks on the LSE, as the most used index of the British stock market.

The FT 30 (also known as the FT Ordinary or the FT Index) is now largely obsolete, more than 70 years after its establishment in 1935 in the wake of financial reorganization that followed the worldwide depression. Imperial Tobacco and Rolls Royce are the only original FT 30 companies now listed on the FTSE.

The *Financial Times* predates the FT 30, naturally, by almost 50 years. Established in 1888, when Britain's economy was still the dominant economy in the world, it declared itself "The Friend of the Honest Financier and the Respectable Broker," and was originally distributed only in the financial community of London. In contrast with the older *Financial News*, the *Times* was intended to be reliable, conservative, even printing on pink paper, which was cheaper than white. The two papers merged in 1945, keeping the FT name while the *News*'s editorial staff was cherry-picked to create a stronger paper. Beginning in the 1970s, it expanded internationally, publishing three international editions from 23 locations. It was the first British paper to sell more copies internationally than domestically. FT.com was launched in 1995, and the FT indices are updated online hourly.

The first FTSE, the FTSE All-Share Index, was created in 1962, tracking at least 98 percent of the full capital value of all qualified stocks (those that are listed on the London Stock Exchange and meet various inclusive eligibility requirements). The FTSE 100 was introduced in 1982, and in 1995, the FTSE Group became an independent company, opening several overseas offices. It also maintains the FTSE 250 and 350 (the 250 largest and 350 largest stocks on the exchange, respectively), the FTSE SmallCap (tracking the companies outside the FTSE 350), and the FTSE AIM All-Share, 100, and UK 50, which track companies in the LSE's Alternative Investment Market.

The 100 companies on the FTSE 100 are subject to change every quarter. As of summer 2008, the list is 3i, Admiral Group, Alliance Trust, AMEC, Anglo American, Antofagasta, Associated British Foods, AstraZeneca, Aviva, BAE Systems, BG Group, BHP Billiton, BP, BT Group, Barclays Bank, British Airways, British American Tobacco, British Energy Group, British Land Company, British Sky Broadcasting Group, Bunzl, Cable & Wireless, Cadbury plc, Cairn Energy, Capita Group, Carnival, Carphone Warehouse, Centrica, Cobham, Compass Group, Diageo, Drax Group, Enterprise Inns, Eurasian Natural Resources Corporation, Experian, Ferrexpo, FirstGroup, Friends Provident, G4S, GlaxoSmithKline, HBOS, HSBC, Hammerson, ICAP, ITV, Imperial Tobacco, InterContinental Hotels Group, International Power, Invensys, Johnson Matthey, Kazakhmys, Kingfisher, Land Securities Group, Legal & General, Liberty International, Lloyds TSB, London Stock Exchange Group, Lonmin, Man Group, Marks & Spencer, Wm Morrison Supermarkets, National Grid, Next, Old Mutual, Pearson, Petrofac, Prudential, RSA Insurance Group, Reckitt Benckiser, Reed Elsevier, Rexam, Rio Tinto Group, Rolls-Royce Group, Royal Bank of Scotland Group, Royal Dutch Shell, SABMiller, Sage Group, J Sainsbury, Schroders, Scottish and Southern Energy, Severn Trent, Shire Pharmaceuticals Group, Smith & Nephew, Smiths Group, Standard Chartered Bank, Standard Life, Tesco, Thomas Cook Group, Thomson Reuters, TUI Travel, Tullow Oil, Unilever, United Utilities, Vedanta Resources, Vodafone, WPP Group, Whitbread, Wolseley, Wood Group, Xstrata.

See Also: City, The; Common Market; Company Profiles: Western Europe; Dow Jones Index; European Union; FTSE; Markets; United Kingdom.

Bibliography. Kevin Boakes, *Reading and Understanding the Financial Times* (Financial Times Prentice Hall, 2008); FTSE, www.ftse.com (cited March 2009); "The New FTSE 250 Club," *Accountancy* (v.141/1375, 2008).

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FTSE

The FTSE Group is a company that specializes in the creation and management of asset class indices. The company was created in 1982 and is jointly owned by the London Stock Exchange (LSE) and the *Financial Times* (FT). The most well-known index is the FTSE 100, which is an index of shares for 100 companies listed at the LSE with the highest market capitalization.

Market indices track the performance of the assets that are included in the index, producing a statistic that should reflect the components' aggregated performance. Indices are constructed in order to replicate a group of assets that share at least one common characteristic, which is not always based on firms' value. So, for example, the FTSE4Good Index series is designed to track companies that meet corporate responsibility standards, including also climate change criteria. In addition, each country has its own index that tracks groups of shares with common characteristics. When FTSE was first created, the letters were an abbreviation of the two owners of the company, FT for *Financial Times* and SE for Stock Exchange. However, since this firm is now an independent group, this abbreviation does not apply any more. The group has partners and clients in 77 countries worldwide, and maintains and publishes more than 100,000 equity, bond, and hedge fund indices.

The firm offers tailor-made indices to its clients, however, it is mostly known for its series of structured indices. FTSE currently classifies indices in seven broad categories. First, the Global Equity Index Series covers over 8,000 assets in 48 countries, which accounts for 98 percent of the world's market value in publicly listed companies. Apart from the Global Indices that are included in this series (e.g., FTSE All-World Index Series and FTSE Global Equity Index), the series is also divided into developed and emerging (advanced and secondary) markets' indices. These are further subdivided in regional, national, and sector-specific indices. Recently, FTSE introduced the FTSE Shariah Global Equity Index Series that tracks the performance of assets that meet the Islamic finance requirements.

The second group of FTSE Index Series is the Regional & Partner Index series that includes indices calculated at a regional or country level across the continent. The series divides the investment world in three broad regions: Asia Pacific; Europe, Middle East, and Africa; and the United States. The flagship of FTSE indices is the FTSE 100 Index that includes the top 100 companies (measured by market value) currently trading in the LSE. The FTSE/JSE Africa Index Series and the LATIBEX Index Series reflect FTSE's innovative character, replicating the performance of African firms and Latin American firms respectively.

The Fixed Income Index Series is designed to track the performance of fixed income assets. It is further divided into the FTSE Global Bond Index Series, which covers the fixed income markets globally, the FTSE MTIRS Index Series that replicates the performance of interest rate swaps, and the FTSE UK Gilts Index Series that specifically tracks the performance of all British government securities. Fourth, the real Estate Index Series is designed to provide benchmark prices either for global or local/regional real estate investments. The Alternative Investment Index Series is further divided into the FTSE Hedge Index Series, which tracks the performance of hedge funds, the FTSE Private Banking Index Series, which is specially designed for the private banking industry, and a series of indices that track the performance of publicly listed companies that are active in the infrastructure development industry.

The FTSE Responsible Investment Index Series comprises indices that include firms that meet the corporate and/or the environmental responsibilities' requirements. The socially responsible investment index series has two objectives: to stimulate investments in firms that apply the corporate governance tools and to facilitate investors who are looking to invest in firms that demonstrate environmental awareness. The FTSE Investment Strategy Index Series includes a series of indices that incorporates a different methodology in calculating each company's wealth and therefore its weight in the index. So, for example, the FTSE GWA UK Index is similar to the FTSE All-Share Index in all but the firms' individual weight in the index.

See Also: Financial Markets; FT Index; Market Share; Stock Exchanges.

Bibliography. L. Harris, *Trading and Exchanges: Market Microstructure for Practitioners* (Oxford University Press, 2003); P. Krugman, R. Wells, and K. Graddy, *Economics: European Edition* (Worth, 2008); K. Pilbeam, *Finance and Financial Markets* (Palgrave, 2005); J. Rutterford, *An Introduction to the Stock Exchange Investment* (Palgrave, 2007); S. Valdez, *An Introduction to Global Financial Markets* (Palgrave, 2007).

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Fujitsu

Fujitsu is a publicly owned company, headquartered in Tokyo, employing approximately 160,000 employees. Calling itself "a leading provider of IT-based business solutions for the global marketplace," it is the world's third-largest provider of information technology (IT) services and products, and serves customers in 70 countries. Its main competitors are IBM, Toshiba, and NEC. Annual revenues as of March 2008 were $53 billion with profits of $868 million.

Fujitsu is currently organized into three main components: Technology Solutions, Ubiquitous Product Solutions, and Device Solutions. Technology Solutions includes system platforms (system and network products) and services including solutions and systems integration and infrastructure services). Ubiquitous Product Solutions develops and manufactures personal computers, mobile phones, hard disks, and other equipment. Device Solutions provides large-scale integrated (LSI) devices and various electronic components.

Established in 1935, Fujitsu was first known as Fuji Tsushinki Manufacturing Corporation. It began operations as a 700-employee manufacturer of telephone equipment. After World War II, Fujitsu returned to this industry. By 1950 it was making 5,000 telephones a month. The following year, the company began manufacturing calculating machines, followed by designing and manufacturing electronic communications equipment. In 1954 Fujitsu developed Japan's first computer, the FACOM-100. Additionally, the company expanded its products to include equipment for radio communications.

The number of computers and the range of the Fujitsu product line grew. Fujitsu began exporting computers in the mid-1960s. International business grew to the extent that in 1967 Fujitsu Limited, as it was now known, opened its first international branch in New York City. It established a U.S. subsidiary the following year. The company grew in the 1970s, with new subsidiaries developed or otherwise acquired, and spin-offs created. Growth also took the form of partnering agreements with companies such as Hitachi and Siemens and Amdahl.

Fujitsu was known up to this time for its large computers, including its mainframe models. It now launched another effort that would have great signifi-

FUJITSU

Fujitsu, which began by manufacturing telephones in pre–World War II Japan, is now a world leader in supercomputers.

cance: the personal computer that it first introduced in 1981. On the other end of the scale, the company announced the development of its first supercomputer the following year. In 1984 Fujitsu introduced Japan's first artificial intelligence processor. Throughout the 1980s, new computer models (mainframes, supercomputers, personal computers) were introduced at the same time that the company was developing other equipment such as digital telephone handsets that entered the inventory in the mid-1980s.

In the 1990s, Fujitsu partnered with or acquired several companies. Among the acquisitions were British International Computers Limited and Amdahl. Partnerships were established with General Magic (United States), Sun Micro Systems, Sharp, Sony, Hitachi, Toshiba, Dialog Corporation, Siemens, and Sakura Bank (to establish an online bank in 1999).

The deal with Siemens, established in 1999, created Fujitsu Siemens Computers. The new organization became one Europe's largest computer hardware suppliers and one of the world's top five providers of servers, according to Fujitsu. In August 2008, Siemens announced that it wished to end the partnership largely because of lower prices and shrinking profit margins. While Fujitsu has the first right of refusal to buy Siemens's 50 percent of the partnership, there was some doubt as to whether this would happen. Fujitsu's objectives seem to be moving away from the manufacture of computers while increasing emphasis on cell phone development and manufacture.

Fujitsu has become well known for its manufacture of consumer goods such as air conditioners and plasma televisions (Fujitsu introduced the first 21-inch full color display in 1992). Through the 1990s Fujitsu also continued its development and sales of supercomputers, sometimes on a very aggressive basis. Along with NEC, Fujitsu was named in a preliminary finding by the U.S. Commerce Department to be guilty of attempting to dump supercomputers on the U.S. market. It had bid to supply a supercomputer to the U.S. National Center for Atmospheric Research and a suit was filed by the American computer manufacturer, Cray.

At the beginning of the 21st century, Fujitsu continues the development of supercomputers and continues its alliances, most recently with Microsoft, Oki Electric, and Lucent. In 2007 it bought Infinity Solutions Ltd., a New Zealand IT hardware, services, and consultancy company. In the same year, however, Fujitsu announced that one of its subsidiaries, Fujitsu Kansai Systems Ltd., had booked nonexistent sales, an incident similar to one that occurred at NEC as well as several other Japanese companies.

Fujitsu's expansion now includes inroads in India where it is investing money with the intent of providing support for its Fujitsu Consulting India with more than 100 percent growth by 2009.

See Also: Dumping; Hitachi; International Business Machines; Japan; NEC; Siemens.

Bibliography. Fumitaka Abe and Masao Kondo, "Research and Development at Fujitsu Laboratories," *Fujitsu Scientific & Technical Journal* (v.43/4, 2007); Claude E. Barfield, *High-Tech Protectionism: The Irrationality of Antidumping Laws* (AEI Press, 2003); Martin Fransman, V*isions of Innovation: The Firm and Japan* (Oxford University Press, 1999); Masahiro Sakai, Akihiko Nagakura, and Naoko Goto, "Fujitsu's Activities for Quality Assurance," *Fujitsu Scientific & Technical Journal* (v.44/2, 2008); Yuichi Sakai and Akihiko Miyazawa, "Fujitsu's Innovation in Manufacturing and Engineering," *Fujitsu Scientific & Technical Journal* (v.43/1, 2007); Toshihiko Sugano and Tomohiko Maeda, "Innovative Manufacturing Activities in Fujitsu Group Plants," *Fujitsu Scientific & Technical Journal* (v.43/1, 2007).

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Futures Markets

One hallmark of a free market system is risk. Most producers (as well as consumers) face the risk that prices of goods (or commodities) they produce will change between the time they invest their resources to produce the goods and the time they are ready to sell their output. While in some cases long-term supply contracts at prearranged prices can be made, most prices, especially those of financial assets, commodities, and raw materials, are subject to almost constant fluctuations. Futures markets reduce the uncertainty and risk associated with these fluctuations by allowing market participants to enter into contracts, called futures contracts, which fix the price of a specified asset at a future date. Futures contracts help the real-market participants by facilitating hedging and help investors by making speculation easier.

A futures contract is an agreement between two traders to exchange an asset at a predetermined future date (called the delivery date) at the "futures price." In the case of futures markets, the "asset" has been standardized as to the quantity, quality, the delivery point, and the date of delivery. The trade may take place at a "futures exchange" or "over-the-counter" (OTC)—a service provided by many financial institutions. OTC market allows large transactions to take place at lower cost and without the risk of moving the market price. Almost all transactions now take place over the phone or electronically, replacing the close physical contact that used to characterize trading on exchanges.

A futures contract differs from a "spot" contract mainly in terms of the date of execution of the contract: A spot contract is executed immediately after the contract is made whereas a futures contract is executed at a prearranged future date. A futures contract differs from a "forward" contract in that the futures contract is for a standardized asset whereas the asset in a forward contract can be tailor-made.

The oldest futures exchange in the United States, the Chicago Board of Trade was established in 1848. Futures contracts in tulips, however, were traded in Holland in the 17th century. Commodities, raw materials, and financial assets including interest rates and currencies form the bulk of the assets traded on the futures markets. There are, however, futures contracts for many exotic assets like weather. The Chicago Mercantile Exchange offers futures contracts on snowfall, "cooling" or "heating" degree days in the United States, Canada, Europe, or Asia-Pacific, and even a future contracts on hurricanes.

Futures markets facilitate the process of "price discovery" by providing information on current and possible future prices as assessed by market participants based on available information. This process is facilitated because futures markets provide improved liquidity and reduce counterparty risk for buyers and sellers of contracts over alternative arenas where comparable contracts could be traded. Improved liquidity comes from standardization of contracts, which makes trading easier for speculators. Since all the characteristics of an asset have been standardized, a speculator can focus on the single element of the assets that is of interest to him/her—the price. Futures markets reduce the risk for traders by a practice called mark-to-market.

Futures exchanges reduce the counterparty risk for a buyer or a seller in two steps. First, the buyer (or seller) of a futures contract enters into a contract to buy (or sell) a futures contract with the futures exchange, not with the trader who may enter into the opposite side of the transaction—in this case, the entity who may sell (or buy) the futures contract. This reduces the nonperformance risk, or the counterparty risk, from that of an unknown (and sometimes a higher-risk) seller to that of an exchange. As long as the buyer believes that the futures exchange will not become illiquid, there is no counterparty risk. Second, the exchange reduces the nonperformance risk for itself by taking two related steps. First, every buyer (as well as every seller) deposits a "margin" usually equal to 10 percent of the value of the contract with the exchange when the futures contract is bought (or sold). Second, every contract is "marked-to-market" every day. At the end of every trading day, the exchange calculates the current value of the contract. If the price movement during the day has resulted in a loss of the value of the contract, the loss is deducted from the margin and the buyer is sent a "margin call." This margin call requires the buyer to add funds to the margin so that it once again equals 10 percent of the value of the contract.

Similarly, the exchange pays the day's profits to the buyer of the contract should the price movement have been in favor of the buyer. Should the buyer not respond to the margin call, the exchange can liquidate the contract on the following trading day and prevent any further losses on the contract. With this practice of marking every contract to market every day, the exchange faces no performance risk unless the price movement during the day exceeds 10 percent against the buyer and the buyer decides to default.

Regulation

Futures markets are regulated by Commodity Futures Trading Commission in the United States. The objective of the regulation is to protect public and market users from fraud, manipulation, and abusive practices. Futures markets contribute to the economic welfare of a society by increasing efficiency through centralization of services to all users of an asset. They help users of assets in reducing risks by being able to hedge future transactions. They also help the economy by allowing "synthetic securities" to be created, which allow better management of risk, especially of financial risks associated with changes in prices and interest rates. Futures markets, however, are subject to manipulation by large traders. A humorous example of such potential manipulation was illustrated in the Hollywood movie *Trading Places*, which was released in 1983.

See Also: Chicago Mercantile Exchange; Currency Speculators; Financial Hedge; Hedging; Mark-to-Market Valuation; Spot Market.

Bibliography. Jason H. Burns, *The Commodity Futures Trading Commission* (Nova Science Publishers, 2008); Colin Andre Carter, *Futures and Options Markets: An Introduction* (Waveland Press, 2007); CME Group, www.cmegroup.com (cited March 2009); Barry Goss, *Debt, Risk and Liquidity in Futures Markets* (Routledge, 2008); John Hull, *Fundamentals of Futures and Options Markets* (Pearson Prentice Hall, 2008); John Hull, *Options, Futures, and Other Derivatives*, 6th ed. (Prentice Hall, 2005); Robert C. Miner, *High Probability Trading Strategies: Entry to Exit Tactics for the Forex, Futures, and Stock Markets* (Wiley, 2009); Sunil K. Parameswaran and Shantaram Hegde, *Futures Markets: 200 Questions & Answers* (Wiley, 2007); John L. Person, *Candlestick and Pivot Point Trading Triggers: Setups for Stock, Forex, and Futures Markets* (Wiley, 2007); M. Hashem Pesaran, Christoph Schleicher, and Paolo Zaffaroni, *Model Averaging in Risk Management with an Application to Futures Markets* (University of Cambridge, Faculty of Economics, 2008).

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Gannon's Cultural Metaphors

Within the field of cross-cultural organization and management studies, Martin J. Gannon uses cultural metaphors to describe, compare, and analyze national cultures worldwide. In order to explore in-depth the unique cultural characteristics of a nation, Gannon adopts an emic approach, focusing on the qualitative examination of cultural symbols, practices, and institutions within their local context.

In an increasingly globalizing world, sensitivity toward, insight into and knowledge of cultural differences has to engage the attention of business, academics and everyone interested in working and living in another culture. Notably, Gannon's work about cultural metaphors makes a significant contribution to the fields of international business and international management because not only are the target audiences, i.e., the consumers, not similar across cultures, but business managers around the world are shaped by their own individual cultures as well. Thus Gannon's metaphorical study provides an in-depth analysis of "what makes us different and unique."

Martin J. Gannon's study of cultural metaphors is about identifying, describing, and comparing cultural metaphors in their respective contextual relevance. Gannon describes cultural metaphors as "common activities, phenomena or institutions with which people of [a given nation] … cognitively or emotionally identify." He suggests that cultural metaphors can be used to describe the national culture. Furthermore, his applying of cultural dimensions to local traditions and practices enables him to scrutinize and extract some of these cultural-specific metaphors of a nation.

Dimensions or variables can include concepts of religion, educational systems, and perceptions of and attitudes toward time and space. As such, Gannon's analysis of cultural metaphors synthesizes Hofstede's dimension (e.g., power distance, uncertainty avoidance) to profile national cultures and cultural differences. His analysis of cultural dimensions of a nation encompasses both cultural-specific (emic) and cultural-general (etic) dimensions. However, Gannon's cultural metaphor approach intends in the main to explore in-depth emic dimensions; that is, the somewhat "unique" dimensions of a culture. So, while some of these dimensions can be similar or even identical across nations, other dimensions may occur or become relevant as cultural metaphor to one nation alone.

In a metaphorical journey through 17 countries (in a later edition he expands this number to

28), Gannon makes "culture" an accessible concept by identifying a number of "typical" and "unique" national metaphors. For example, he looks at cultural metaphors such as the Dance of Shiva within the dimension of cyclical Hindu philosophy, or American football, referring to the dimensions of individualism and competitive specialization. Other cultural metaphors analyzed by Gannon include the Italian opera; focus is on the voice and the implication is that messages, irrespective of whether they are private or business, should be communicated in a beautiful manner. It also implies that thoughts and ideas cannot be kept hidden: They have to be discussed with family and others.

Gannon selected French wine as the symbol for French culture, the British house to symbolize British culture, and the Chinese family altar as a unique metaphor for Chinese culture. Given the high number of overseas Chinese, certain cultural metaphors, for example emphasis on family relationships and ancestry, are transcending borders and being disseminated transnationally. While this highlights the important distinction between nation and culture, that is, that culture is not confined to one nation alone, it also points to the fact that specific cultural metaphors are not necessarily relevant to each individual in one nation.

In the second edition of *Understanding Global Cultures*, Gannon categorizes selected nations according to "authority ranking cultures" (e.g., Thai Kingdom, Japanese Garden, India Dance of Shiva, Polish Village Church), "equality matching cultures" (German symphony, Swedish *stuga*, Irish conversations), "market pricing cultures" (American football, traditional British house), "cleft national cultures" (e.g., Nigerian marketplace, Italian opera, Belgian lace) and "torn national cultures" (Mexican fiesta, Russian ballet). In another book section, Gannon looks at "same metaphor, different meanings" nations (Spanish bullfight, Portuguese bullfight). He provides further an example of a "beyond national borders" nation (the Chinese family altar).

Relevance

While globalization often pretends that cultures are becoming more homogenous, it is now more important than ever to scrutinize and analyze such statements and perceptions as they may irrevocably result in imprecise and untrue market predictions and business decisions. With the increasing globalization of business, the academic and business world has become more and more interested in analyzing the relevance of culture in organizational and management contexts. In addition to the previous research into cultural differences, Gannon's cultural analysis attempts to adopt a content-rich approach to his inquiry into the emic characteristics of national cultures. Gannon advocates the non-use of an etic questionnaire, that is, one standard set of questions for all cultures; rather, by employing the concept of cultural metaphors, i.e., culturally unique metaphors, the iniquity of cultural stereotyping can be eluded and a more culturally rich interpretation provided.

Other studies in cross-cultural management include Geert Hofstede's 1980 study, the GLOBE study, and the World Values Survey. Hofstede's landmark examination of cultural differences across nations resulted in the identification of a number of cultural dimensions such as individualism, power distance, and uncertainty avoidance. The *Global Leadership and Organizational Behavior Effectiveness* (GLOBE) cross-cultural research study examines worldwide business leadership. The World Values Survey, first conducted in 1981, investigates the nature of changing public values, especially in regard to the relevance of—and attitudes toward—democracy. However, one of the earliest studies to empirically test the validity of cultural metaphor is that of Clifford Geertz (1973), who studied Balinese cockfights as symbols of Balinese culture.

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See Also: Cross-Cultural Research; Culture-Specific Values; Hofstede's Five Dimensions of Culture; Stereotyping.

Bibliography. Martin J. Gannon, *Cultural Metaphors: Readings, Research Translations, and Commentary* (Sage, 2000); Martin J. Gannon, *Paradoxes of Culture and Globalization* (Sage, 2007); Martin J. Gannon, *Understanding Global Cultures: Metaphorical Journeys Through 28 Nations, Clusters*

of Nations, and Continents, 3rd ed. (Sage, 2003); Martin J. Gannon, *Working Across Cultures: Applications and Exercises* (Sage, 2001); Martin J. Gannon et al., "Cultural Metaphors as Frames of Reference for Nations. A Six-Country Study," *International Studies of Management and Organization* (35/4, 2005–6); Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations,* 2nd ed. (Sage, 2003); Robert J. House et al., *Culture, Leadership, and Organizations. The GLOBE Study of 62 Societies* (Sage, 2004); Ronald F. Inglehart et al., *Human Beliefs and Values: A Cross-Cultural Sourcebook Based on the 1999–2002 Value Surveys* (Siglo XXI Editores, 2004); Christine S. Nielsen and Martin J. Gannon, "Preface. Cultural Metaphors, Paradoxes, and Cross-Cultural Dimensions," *International Studies of Management and Organization* (35/4, 2005–6).

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Gaz de France

Gaz de France began in 1946 as a government-owned corporation that produced and delivered natural gas, founded at the same time as Électricité de France (EDF). GDF's customers were primarily consumers in France where its base, by 2000, was 11.1 million customers. It was also an international company, transporting and selling gas world wide, in Belgium, Britain, Germany, and eastern Europe with a customer base of 2.8 million outside the country. Although the main business of GDF was natural gas, its business areas included nuclear power and other forms of electricity generation.

GDF's status as a government-owned company began to change in 2005 when a limited amount of stock (20 percent) was sold on the Paris Stock Exchange for a price of approximately €2.5 billion. In the following year it was announced that GDF would merge with Suez, another French energy company. The merger was difficult to accomplish because of difficulties in several areas. Shortly after the announcement of the plan to merge, two major labor unions in France threatened to strike in protest. Italy complained to the European Union (EU) about the merger as one of its own utility companies, Enel, had been planning to acquire Suez. Finally, the European Union antitrust organization was examining the deal very closely because Suez owned Belgium's main power company and GDF owned a 25 percent share of Belgium's second-largest power company.

French national laws had to be changed because the French government was still a majority owner of GDF stock and had pledged that it would always own at least 70 percent of the company's stock. The merger would reduce the French government's holdings to around 35 percent of the new entity. There would be a new set of problems in effecting the merger when the government of Villepin was replaced by the government of Nicolas Sarkozy. Sarkozy had expressed strong opposition to the deal, although he eventually changed his mind. In September 2007 the boards of directors of both corporations and the terms of the merger were publicly disclosed. The merger, which was completed in July 2008, after two-and-a-half years of effort, resulted in a corporation with €91 billion in assets and holding the number two position among European utilities.

The interest in GDF Suez on the part of the EU has continued. In mid-May 2008 as part of a series of raids on energy companies in Belgium, Italy, Austria, and Hungary, GDF was investigated by the European Commission. The basis for the investigation was that several companies were abusing their dominant position in their own countries. One goal of the EU had been to begin to eliminate the advantages national providers of energy had exercised in their own countries, undercutting the efforts of the EU to create a single market across the EU. Less than a month later, on June 13, GDF and E.ON were accused of colluding to raise prices. The Commission charged GDF and E.ON had agreed not to sell energy to each other's countries. In addition, as both countries jointly owned and operated a gas pipeline that transported natural gas from Russia to Europe, that management of that pipeline was coming under investigation. Both companies denied the accusations which, if proven, could result in fines equal to up to 10 percent of their revenue. GDF noted that their arrangements had predated the European Commission and the EU. Both companies have in recent years been under increasing EU pressure to sell their supply grids in order to encourage competition across Europe's borders.

Finally, as 2008 came to a close, the European Commission was also investigating to determine if GDF has been purposely limiting investments in its own infrastructure in order to block competition from other companies that have access to GDF's transport infrastructure.

From the perspective of successful operations, however, the GDF Suez merger has thus far been successful. The company reported that some projects that had been started before the merger were continuing. These included acquisition of electricity generation companies in the United States and Thailand and a gas distributor in Turkey. Further increased sales of electricity in Brazil contributed to the company's success.

See Also: Électricité de France; Enel; E.ON; European Union; France; Suez.

Bibliography. GDF Suez, www.gdfsuez.com (cited March 2009); James Kanter, "Europe Accuses 2 Utilities of Price Fixing" *New York Times* (June 13, 2008); James Kanter, "France Calls Urgent Meeting on Utilities Merger," *International Herald Tribune* (June 19, 2006); Paul Meller, "European Antitrust Officials Raid Gas Company Offices," *New York Times* (May 18, 2006); Mergent Online, www.mergentonline.com (cited March 2009).

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Gazprom

Gazprom (a contraction of the Russian for "gas industry") is a self-styled global energy company and a flagship of the Russian economy. It is the third-largest company in the world by market capitalization (after PetroChina and ExxonMobil). With 440,000 employees Gazprom's core business is energy, and especially gas. It supplies over 85 percent of Russia's domestic gas and 20 percent of global gas, controlling 16–17 percent of global gas reserves. It also controls the largest gas transmission system in the world, inside and outside Russia. But Gazprom has diversified to control part of the Russian oil industry; into finance; and has significant media holdings in Russia through GazpromMedia.

The central role of Gazprom in the Russian economy is reflected in the way that it produces just under 10 percent of Russian gross domestic product (GDP) and provides some 20 percent of state revenue through taxes. The Russian state has a 50.01 percent holding in Gazprom and its chairman is Dmitri Medvedev, the current Russian president. The vice chairman and CEO is Alexi Miller.

Gazprom controls as much as 17 percent of world reserves of gas, making some European countries dependent on its supply.

The origins of Gazprom go back to the creation of a Soviet-era main directorate for gas and synthetic fuels in 1943. In 1965 the Ministry of the Gas Industry was created from which the modern Gazprom would eventually emerge. Over time, energy and energy exports became increasingly important to the Soviet economy. With the development of perestroika and the collapse of the Soviet Union, the question arose of how these gas resources might be privatized. Those in control of the Soviet ministry managed in 1993–94 to obtain what was effectively the insider privatization of a unified and vertically integrated company, albeit with the state retaining a significant minority share.

The output of the Russian gas industry is based mainly on Soviet-era "super giant" fields controlled by Gazprom, and located in the north of the Tyumen Province in western Siberia. But further development will also depend on exploitation of the "super giant" Shtokman field in the Barents Sea. When this will come onstream is, however, debated as the obstacles to be overcome are formidable.

In the 1990s Gazprom supplied subsidized gas to domestic consumers—a policy that helped mitigate the impoverishment created by the economic transition. Its management was weak and resources were corruptly plundered and the company's assets run down. Even today the poor quality of the gas infrastructure and fixed assets is a major problem.

With the Putin presidency a degree of reconsolidation of the Russian state took place, buoyed by rising energy prices. Gazprom was central to this. The state increased its holdings, including acquisitions (notably Sibneft, an oil producer) to acquire its majority stake. Pressure was put on some foreign companies to relinquish positions obtained in the sell-offs of the 1990s. The regime also used Gazprom to help tame some so-called oligarchs—individuals who had acquired huge wealth and political power in the transition. Politically, pressure was also used to help the company clean up its management structure and reduce corruption. How much still needs to be done is hotly contested. By law, Gazprom now has its own semi-private security force that has additional powers, becoming something of a state within a state. Some critics argue that it is also destabilizing externally through its lack of transparency in global capital markets and its potential use by the Russian state as a political instrument.

Gazprom exports to 32 countries and is following state policy in "aggressively" seeking new export markets. The European Union gets a quarter of its gas from Gazprom, but many countries in central and eastern Europe depend on it for a much higher share. The growth of gas exports is necessitating a major extension of the pipeline networks—Nordstream along the floor of the Baltic to Germany; Blue Stream across the Black Sea to Turkey; and a projected South Stream to Italy.

Gazprom argues that it cannot supply gas at a loss to its external customers and especially the former Soviet republics. This has led to disputes with Belarus and the Ukraine. Unsympathetic observers have seen these as examples of the use of energy power for political ends. More sympathetic observers saw in them a straightforward expression of the logic of the market. These disputes, however, raised fears in central and western Europe that Gazprom (and, through it, the Russian state) might seek to deploy its energy power there.

Gazprom has responded by insisting that its mission is to safely implement contracted gas exports as well as to serve the interests of its Russian customers. In its presentation of itself to global and domestic markets, the company concentrates on claims of improved corporate governance, its reliability, and its positive environmental record. Cynics argue, however, that Gazprom will manage to play by the rules because its market power is becoming such that it will help to make those rules.

See Also: Communism; ExxonMobil; Russia.

Bibliography. R. Ahrend and W. Thompson, "Unnatural Monopoly: The Endless Wait for Gas Sector Reform in Russia," *Europe-Asia Studies* (September 2005); Gazprom, www.gazprom.com (cited March 2009); Marshall I. Goldman, *Petrostate: Putin, Power and the New Russia* (Oxford University Press, 2008); V. Kryukov and A. Moe, *The New Russian Corporatism? A Case Study of Gazprom* (Royal Institute of International Affairs, 1996); Ulric R. Nichol, *Focus on Politics and Economics of Russia and Eastern Europe* (Nova Science Publishers, 2007); Niklas Norling, *Gazprom's Monopoly and Nabucco's Potentials: Strategic Decisions for Europe,* Silk Road Paper (Central Asia–Caucasus Institute and Silk Road Studies Program SAIS, 2007); Jonathan P. Stern, *The Future of Russian Gas and Gazprom* (Oxford Institute for Energy Studies, 2005); Peter Rutland, "The Future of Russian Gas and Gazprom," *Russian Review* (v.66/3, 2007).

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General Agreement on Tariffs and Trade

The General Agreement on Tariffs and Trade (GATT) is the second of three regimes governing international trade in the modern era. It has been succeeded by the World Trade Organization (WTO), and coexisted with the abortive International Trade Organization (ITO).

The International Trade Organization was intended to be a counterpart to the International Monetary Fund and the World Bank, institutions negotiated at the Bretton Woods Conference in 1944. Named for Bretton Woods, New Hampshire, site of the Mount Washington Hotel where negotiations took place, the conference—formally called the United Nations Monetary and Financial Conference, but rarely recognized by that name anymore—was attended by 730 delegates of the 44 Allied nations, already planning for the shape the world would take when World War II ended. The foundational idea of Bretton Woods was the encouraging of open markets and the lowering of barriers to trade, among member nations.

In 1946 the United Nations Economic and Social Committee called for a conference to charter the International Trade Organization. Though agreed upon fairly quickly, ITO never got off the ground; every attempt to have the United States Congress approve it failed, on the grounds that the ITO would be given too much jurisdiction over internal American matters. At the end of 1950, President Truman announced that he would stop seeking ratification of the ITO charter, and without American involvement, the organization withered on the vine.

GATT, in the meantime, had successfully been implemented but had been intended to supplement, rather than replace, the ITO. While the ITO, and the WTO that now reigns, was an organization, GATT was only a treaty, with no infrastructure, staff, or institutional existence. Negotiations over the GATT began in parallel and in cooperation with the ITO negotiations, and were originally intended to be a short-term treaty binding countries to some easily agreed-upon terms until the ITO began operations.

Twenty-three countries signed the original treaty, which in the United States was considered a congressional-executive agreement, an exercise of the president's power to negotiate trade agreements when granted such authority by Congress. In essence, it granted "most favored nation" status upon all nations signing the treaty.

A staggering total of 45,000 tariff concessions were made by the first signing of GATT, affecting half of the world's trade—an enormous initiative, despite the failure of the ITO three years later. More "rounds" of GATT followed, each addressing slightly different issues, participated in by slightly different assortments of countries:

- The Annecy Round in Annecy, France, in 1949, further reduced tariffs among 13 countries.
- The Torquay Round, 1951, England, another 8700 tariff concessions.
- The Geneva Round, 1956, further tariff concessions as well as the first participation of postwar Japan.
- The Dillon Round, 1962, Geneva, named for Secretary of the Treasury Douglas Dillon, tariff concessions and early talks about the European Economic Community.
- The Kennedy Round, 1967, Geneva, named for the late President Kennedy, involving 66 countries, the most to date.
- The Tokyo Round, 1979, 102 countries, and the first discussion of limiting non-tariff barriers and voluntary export restrictions.
- The 1993 Uruguay Round, begun in 1986, was the most ambitious. It took seven years to negotiate, involved 123 countries, and was the first to involve agricultural goods. This was the final round of GATT, as one of the reasons for negotiations lasting so long was the decision to finally create an organizational body: the WTO, which replaced GATT in 1995.

See Also: Bretton Woods Accord; Bretton Woods Institutions; Most Favored Nation Status; North American Free Trade Agreement; Uruguay Round; World Trade Organization.

Bibliography. John H. Barton, Judith L. Goldstein, Timothy E. Josling, and Richard H. Steinberg, *The Evolution of the Trade Regime: Politics, Law, and Economics of the GATT and the WTO* (Princeton University Press, 2008); John D. Emens, *WTO Panel Dynamics: From Power-Based GATT Renderings to WTO Rule-Base Adjudication* (VDM Verlag Dr. Müller, 2007); Douglas A. Irwin, Petros C. Mavroidis, and Alan O. Sykes, *The Genesis of the GATT* (Cambridge University Press, 2008); John H. Jackson, *The Jurisprudence of GATT and the WTO: Insights on Treaty Law and Economic Relations* (Cambridge University Press, 2007); Orin Kirshner and Edward M. Bernstein, eds., *The Bretton Woods-GATT System: Retrospect and Prospect After Fifty Years* (M.E. Sharpe, 1995).

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General Electric

General Electric Company, often referred to as GE, is a publicly traded, United States–based multinational corporation that designs, produces, and markets an enormous range of products and services across six divisions. Despite having recently decided to shed its venerable home appliances unit, the company boasts an extensive list of business divisions, each with its own pervasive list of business units: GE Commercial Finance offers products and services, including loans and insurance, to manufacturers and distributors; GE Money offers credit cards, loans and mortgages, and deposit and savings products to consumers and retailers; GE Healthcare designs and manufactures medical imaging equipment and information technologies, medical diagnostics, and patient monitoring and life-support systems; GE Infrastructure manufactures aircraft engines of all sizes, turbines and generators, drilling equipment, oil and gas technology, electric-diesel locomotives, and water process systems; NBC Universal develops, produces, and markets media and entertainment—such as film, television, news, sports, and special events—to a worldwide audience; GE Industrial offers lighting, factory automation systems, electrical power distribution and control systems, and security technologies. But this relatively short list of business units conceals the origins of a company that was founded in an era of transformative innovation.

GE traces part of its beginnings to the inventor Thomas Alva Edison, who established the Edison Electric Light Company in 1878. A few years before, Edison had established a laboratory in Menlo Park, New Jersey, at which he could explore work on electrical devices. From his laboratory, Edison promised to develop and sell one minor invention every 10 days and one major invention every six months. The first of many of the latter breakthroughs was the stock ticker. But it is his invention of the first commercially viable incandescent electric lamp, in 1879, that encouraged J. P. Morgan and the Vanderbilt family to partner with the inventor to take Edison Electric Light public. By 1890 Edison established the Edison General Electric Company by merging his three electric light manufacturing businesses.

But by 1892, with having to compete with other early electrical industry companies for patents and technologies, the Edison General Electric Company merged with Thomson-Houston Electric Company to create General Electric Company.

Going into the new century, Edison's varied business offerings—which had grown to include at least lighting, transportation, communication, power systems, home appliances, and medical equipment—were now folded into the new company. At the same time, Charles A. Coffin had come from the Thomson-Houston side and was building the GE strategy as its first CEO.

GE is the only original Dow Jones Industrial Index company that still holds a position on the list today.

Relatively early on, he accepted the pleas of chief consulting engineer Charles Proteus Steinmetz that the company should construct a research laboratory so as to maintain its lead in lighting and electricity and also to innovate and develop new products for its growing market. This laboratory, based in Schenectady, New York, was the first industrial laboratory in the United States.

In the following years, beyond improving its already-successful product lines and developing new ones, the company also became one of the first to consider customer values and market appeal during the product design stage. And with the exception of some ethical and legal lapses in the mid-20th century, GE built on its strengths and continued to perform as one of the leading companies in business and industry. This held true during the Great Depression, as the company's penchant for diversification tempered the difficult economic times. Later on, GE was also one of the first companies to utilize a decentralized organizational hierarchy that placed top management responsibility in an Executive Office and provided employees with considerable autonomy in their work.

Another feature of the organization is its dedication to employee development, the best evidence of which is the consistent promotion of people who have made long-standing and productive commitments to GE. This includes the list of people who have assumed the top position in the company, from the early days of Charles A. Coffin, E. W. Rice, Gerard Swope, and Owen D. Young to the eras of Charles E. Wilson, Philip D. Reed, Ralph J. Cordiner, Gerald L. Phillippe, and Fred J. Borch to the later 20th-century leadership of Reginald H. Jones and John F. (Jack) Welch.

Among this list of notable individuals, Jack Welch has achieved iconic status for having driven GE from a market value of approximately $14 billion, when he assumed leadership responsibilities in 1981, to something on the order of several hundred billion dollars when he left 20 years later. During that time, Welch also transformed GE from the United States's 10th largest company by market capitalization to the world's largest by market capitalization. Welch was succeeded by another long-term GE employee, Jeffrey R. Immelt. At present, GE is one of the world's largest companies—and the only original Dow Jones Industrial Index company to remain on the list to this day. In 2008, GE's revenue was $183 billion and earnings were $18.1 billion.

See Also: Dow Jones Index; Research and Development; United States.

Bibliography. W. B. Carlson, *Innovation as a Social Process: Elihu Thomson and the Rise of General Electric, 1870–1900* (Cambridge University Press, 1992); G. Eckes, *General Electric's Six Sigma Revolution: How General Electric and Others Turned Process Into Profits* (Wiley, 2000); J. Jonnes, *Empires of Light: Edison, Tesla, Westinghouse, and the Race to Electrify the World* (Random House, 2004); Bill Lane, *Jacked Up: The Inside Story of How Jack Welch Talked GE Into Becoming the World's Greatest Company* (McGraw-Hill Professional, 2008); William E. Rothschild, *The Secret to GE's Success* (McGraw-Hill, 2007); R. E. Stross, *The Wizard of Menlo Park: How Thomas Alva Edison Invented the Modern World* (Crown, 2007); J. Welch and J. A. Byrne, *Jack: Straight from the Gut* (Warner Books, 2001).

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Generalized System of Preferences

In 1968, industrialized countries agreed to provide preferences for the exports of developing countries at the United Nations Conference on Trade and Development (UNCTAD conference) in New Delhi, India. Under this scheme, known as the Generalized System of Preferences (GSP), preference-giving countries would allow exports of selected products from selected less developed countries at preferential tariff rates as compared to the Most Favored Nation (MFN) rate.

Preferential treatments for some countries required special negotiations because the MFN clause of the global trading rules under the General Agreement on Tariffs and Trade (GATT) required that all members of GATT automatically became entitled to the lowest tariff rate on a product that an importing country charged any other member of GATT. Each member of GATT was entitled to be treated as a most favored nation. Without the GSP scheme an importing country that tried to give preference to a specific developing country had to offer the same low rate to all other members of GATT. This would have negated the intention of the preferential treatment, which was to give the developing country a price advantage over more experienced exporters. The GSP scheme allowed an exception to the MFN clause to be negotiated and allowed industrialized countries to give preferential treatment to developing countries' exports without having to give the same treatment to the exports coming from other industrialized countries.

The purpose of the GSP scheme was to encourage developing countries to rely upon exports rather than aid to speed up their industrialization process. The GSP scheme applied primarily to manufactured products and it was hoped that a preferential treatment for manufactures would help the poorer countries reduce their dependence on exports of primary industries like agricultural products and minerals.

Developing countries also argued that preferential treatment for their exports actually creates a fairer situation and equality of trading opportunities between them and the industrialized countries. Their argument was that the MFN treatment—which was the hallmark of GATT—results in an unfair advantage for industrialized countries due to their large size and their lead and experience in producing manufactured products.

Since the needs of each industrialized country (the country providing the preferential treatment) and those of each developing country (the country that needed preferential treatment) were very different, it became difficult to negotiate one global GSP agreement. Instead, 13 industrialized countries, including the United States, European Union, Japan, Canada, and Australia had national GSP schemes by 2008 (UNCTAD estimate). These countries granted temporary, generalized, nonreciprocal, and non-discriminatory preferential treatments to specific developing countries (of their choice) and excluded certain products from such treatment. The GSP list of the United States included 109 countries in 2008. Each preference-giving country determines the preferential rate that it will give, and the tariff structure tends to become quite complex. Only one country, Australia, has developed a very simple rule for preferences: All Australian tariffs above 5 percent will be reduced by 5 percent and those below 5 percent will be eliminated.

GSP is estimated to have had only a minor effect on the imports of the preference-granting countries. U.S. Congressional studies show that only a minor fraction of U.S. imports enter the country under the GSP scheme. Moreover, most of the goods entering under this scheme are noncritical items with little or no domestic production. U.S. importers gain due to the lower cost imports. UNCTAD studies indicate that developing countries use the GSP system to gain entry into the industrialized countries and tend to benefit from GSP schemes that offer protection at stable rates and for extended periods of time.

See Also: Effective Rate of Protection; Most Favored Nation Status; Multi-Fiber Agreement; Tariff; Terms of Trade; World Trade Organization.

Bibliography. Vivian Jones, "Generalized System of Preferences: Background and Renewal Debate," *CRS Report for Congress*, Order Code RL33663 (2006); *The Generalized System of Preferences (GSP) Investment and Business Guide* (International Business Publications, 2007); UNCTAD, "Trade Preferences For LDCs: An Early Assessment of Benefits and Possible Improvements," UNCTAD/ITCD/TSB/2003/8 (2004); United States International Trade Commission, *Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences, 2007 Review of Additions and Removals: Investigation No. 332-493.* USITC Publication 3982 (U.S. International Trade Commission, 2008).

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General Motors

One of the oldest automobile manufacturers, General Motors is also the world's second-largest, and employees over 266,000 workers, with global headquarters in Detroit and European headquarters in Zurich. Its subsidiaries are some of the best-known vehicle brands: Buick, Cadillac, Chevrolet, GM Daewoo, GMC, Holden, Hummer, Opel, Pontiac, Saab, Saturn, Vauxhall, and Wuling.

General Motors was founded in 1908 in Flint, Michigan, as a holding company for the Buick Motor Company, which had been founded five years earlier by auto designer David Dunbar Buick and had been struggling financially since. The first Buicks had rolled out in 1904–37 Model Bs, the basic design of which was not changed until 1909. William Durant was brought in to manage Buick Motors, with Buick himself selling off his stock in the company. Durant turned the company around gradually and founded GM with the intent of acquiring other small manufacturers and governing them from under a common umbrella. Between 1908 and 1910, Durant acquired Cadillac, Cartercar, Elmore, Ewing, Oakland (which became Pontiac), Rainier, Rapid, Reliance, and Welch. The acquisitions were so large and rapid that the company built up too much debt, and bankers temporarily took over the company while Durant co-founded the Chevrolet Motor Company with Louis and Gaston Chevrolet, gradually buying back enough GM stock to resume control of the company in 1916, folding Chevrolet into it in the following year. In yet another twist, industrialist Pierre Du Pont, who had backed Durant's stock purchases, demoted Durant in 1920, and for the next 30 years the company was controlled by Du Pont's companies in one form or another.

In the meantime, though, GM was a success. The Buick subsidiary introduced the first closed-body car in 1911, four years before Ford, and GM beat Ford in sales at the end of the 1920s, in part because of the management of Alfred Sloan and his willingness to finance automobile purchases, which Ford did not implement for its entire consumer product line for a full 40 years after GM introduced the General Motors Acceptance Corporation in 1919. GM was also involved in bus manufacture, buying up streetcar companies around the country and replacing them with bus services, while participating in the launch of the Greyhound bus line. From 1930 to 1948, it had various interests in aircraft design, but never seriously pursued an involvement in the industry after spinning its North American Aviation division off as a public company. By then, the automobile industry had evolved: two-car families were not long off, and the teenage and Hollywood romanticization of hot rods was only a few years away. Style and class had always been GM hallmarks more than Ford's, thanks in part to the Buick, Cadillac, and Chevrolet brands.

Since World War II, GM has (with Ford and Chrysler) been one of the Big Three, the three major automobile manufacturers that account for most American-made automobiles. In the early 1950s, after a WWII boom thanks to defense contracts (company president Charles Wilson was named as Secretary of Defense in 1953), General Motors was the largest employer in the world outside of the Soviet Union, and the largest corporation in terms of revenue. It was inevitable that success of this size would lead to some highly visible failures and vocal criticism. GM was the target of scorn, used as an example of wrongdoing to illustrate widespread cultural wrong, first for Ralph Nader (arguing for safety reforms in the auto industry in the 1960s) and later for Michael Moore (criticizing the growing tendency in the 1980s and 1990s of American corporations closing domestic plants and opening foreign ones with cheaper labor and less restrictive regulations), who saw their respective careers launched by playing David to the company's Goliath.

SUVs, which have become one symbol of the company's recent missteps, on a GM dealer's lot.

Recent Economic Crisis

The recent economic crisis severely and negatively impacted General Motors, as it also threatened the vitality of the American automobile industry as a whole. SUVs, GM's most profitable vehicle class, lost almost a third of sales in 2008 as a result of erratic gas prices, cutbacks in consumer spending, and other factors. Sales of larger trucks fell as well, and sales across the board fell by nearly half. The situation was worsened by the fact that the reduction in sales disproportionately affected the company's more profitable models. The Big Three sought a controversial bailout from the federal government at the end of 2008, supported by President Bush and President-elect Obama but opposed by the Senate. GM and Chrysler were given $13.4 billion combined directly from the executive branch, drawing from the Troubled Assets Relief Program. The final resolution to the auto industry's troubles has not yet been reached, nor are the ramifications yet clear of the effect on auto-related industries.

See Also: BMW; Ford Motor; Mitsubishi.

Bibliography. Bruce Berghoff, George Ferris, and Donald Herbert Bratt, *General Motors Parade of Progress & A Futurliner Returns* (Futurliner Restoration Team, 2007); *GM 100 Years: How General Motors Changed the World* (Automotive News, 2008); Ben Hamper, *Rivethead: Tales from the Assembly Line* (Grand Central Publishing, 1992); Richard M. Langworth, *GM: 100 Years* (Publications International, 2008); Roger Lowenstein, *While America Aged: How Pension Debts Ruined General Motors, Stopped the NYC Subways, Bankrupted San Diego, and Loom as the Next Financial Crisis* (Penguin Press, 2008); William Pelfrey, *Billy, Alfred, and General Motors: The Story of Two Unique Men, a Legendary Company, and a Remarkable*

Time in American History (AMACOM, 2006); Alfred Sloan, *My Years With General Motors* (Broadway Books, 1990).

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Geocentric

An exponentially increasing number of firms strive to engage themselves in international activities, that is, to expand their business operations internationally. This international scope of business activity helps firms target larger consumer audiences, achieve increased sales, reap benefits from economies of scale through global production, and keep pace with internationalizing competitors. However, this internationalizing outlook has also brought organizational, planning, and marketing challenges to firms, which must manage their international growth effectively.

In order to address such challenges, Howard Perlmutter has suggested the EPRG schema, which identifies four orientations/attitudes toward international activities: the ethnocentric (home country orientation), polycentric (host country orientation), regiocentric (regional orientation), and geocentric orientation (a world orientation). Each attitude is associated with successive stages in the evolution of international operations and reflects the philosophy of the corporation with regard to business strategies and managerial procedures on an international scale. Perlmutter's observations pinpoint that firms start with an ethnocentric orientation of international operations, then they gradually acquire a polycentric view, but eventually they strive to achieve a significant level of geocentrism.

A geocentric orientation reflects a globally integrated strategy where the mother firm assumes a supervising role with the purpose of reaping opportunities on a global scale through global coordination of local activities. Subsidiaries of the multinational enterprise are not distinct entities but rather cooperate with each other in order to exploit market opportunities across the world. For example, the Italian subsidiary of an American packaged food firm may act as a supplier of cheaper raw materials to a sister subsidiary in the United Kingdom whereas the latter may transfer production know-how to other subsidiaries in Asia. Thus, all subsidiaries jointly work toward a common goal: the maximization of business objectives for the global firm.

For firms that follow the geocentric orientation, national distinctiveness of markets, consumers, or employees is not relevant since the entire world is a potential market. This means that such a firm aims at the servicing of identical, inter-countries market segments through a standardized marketing offering that cuts across national boundaries. Thus, parochial considerations and, consequently, locally adapted practices are ignored in favor of a coordinated set of globally integrated activities. Additional functional implications of this orientation refer to production (e.g., centralization of global production in just one country with low labor cost) or manpower (e.g., the recruitment of the best executives wherever necessary, irrespective of their national background).

With regard to managerial and organizational procedures, geocentric multinationals usually adopt open communication channels across business units of the international firm; they empower people, and they let knowledge freely flow from one subsidiary to another. Any managerial or marketing know-how that is locally generated should serve the purpose of exploitation on a global scale and thus benefit the global structure of the firm. Such knowledge transfer processes of a collaborative, intra-firm nature are facilitated by a strong corporate culture, which surpasses the national culture of employees in terms of importance and effect.

Advantages and Disadvantages

The positive outcomes of a geocentric orientation are sources of sustainable competitive advantage, and that is why many international firms opt for achieving a globally integrated status for their operations. The pros include both cost- and sales-types of advantages. For example, large production and operational costs may be skipped through exploitation of economies of scale and scope that derive from centralized production, common sourcing policies, distributional synergies, and integrated transportation systems of raw materials and final goods. Such cost-effective solutions have desirable sales implications, too. For example, geocentric firms are able to manufacture standardized brands that are sold at convenient prices and project a consistent corporate and brand image across the world.

However, the intuitive and widespread appeal of a geocentric orientation hides the fact that it also entails several disadvantages for firms. Collecting information on a worldwide basis and disseminating such information across subsidiaries requires a sophisticated information exchange mechanism whose design and implementation are costly. Moreover, a great effort to build a cost-effective, geocentric organization may force the firm to ignore environmental conditions or local market changes that would otherwise require local responsiveness at the marketing or managerial level. Additionally, several unavoidable realities, such as the consumer idiosyncrasy of national groups or national legal imperatives, jeopardize the effectiveness of "the world as a market" perspective. Such nation-specific constraints pose a great barrier to profitable local servicing by geocentric firms that have invested a lot of money and effort in building a globally standardized and integrated organizational format.

Summarizing, we see that geocentrism seems to offer advantages at the production, research and development (R&D), and/or human resources level, but given the significant national heterogeneity that is still prevalent in world markets, it could be a risky strategy marketing-wise. As a result, there seems to be no right or wrong international orientation by firms but rather real life indicates that there is a mixture of function-specific attitudes. For example, the R&D and technical support functions may follow a geocentric approach and the advertising strategy may project a heavily ethnocentric attitude, whereas the after-sales service function may necessitate a polycentric orientation. The mixture that promises higher turnover is, in turn, dependent upon several intra- and extra-firm factors, which concurrently work toward each end. For example, the large size of the firm assists a geocentric orientation, whereas the national distinctiveness of potential foreign markets discourages firms from employing such an approach. Additional factors include the international experience of the corporations' business executives, the financial and production capabilities of the firm, the culture-bound nature of the product, and competitive pressures. Therefore, firms that ignore the holistic nature of business reality and focus only on internal organizational considerations or only on external market variables may adopt an orientation that will prove to be detrimental.

See Also: Ethnocentrism; Local Adaptation; Multinational Corporation; Polycentric; Standardization.

Bibliography. H. V. Perlmutter, "The Tortuous Evolution of the Multinational Corporation," *Columbia Journal of World Business* (v.4/1, 1969); Jill E. Rudd and Diana R. Lawson, *Communicating in Global Business Negotiations: A Geocentric Approach* (Sage, 2007).

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Geocentric Human Resource Policy

The geocentric approach to multinational operations reflects the attitude that the circumstances dictate the best policies and the most appropriate individuals to staff the operations. The geocentric approach could be placed somewhere in between the ethnocentric and the polycentric approaches, as it considers that the best elements of each culture should be adopted in the design of human resource systems and the most qualified individuals, irrespective of nationality, should be employed in the key positions of a multinational enterprise. The geocentric approach is allegedly the most advanced of the approaches to human resource policy, and the one that is directed by the constantly accelerating globalization that blurs borders and cultural barriers. On the other hand, it requires substantial investment and knowledge of cultural factors on the part of the multinational corporation.

The geocentric approach is more likely to characterize corporations that are found in advanced stages of internationalization. In the staffing of operations it is manifested by the utilization of home-country, host-country, and third-country nationals in key positions, both in the headquarters and in the host countries of the multinational corporation. What matters most is credentials and fit into the role rather than the country of origin. The country of origin may be taken into account when this is considered as a factor that may affect success on the job. For example, U.S. companies tended to prefer British nationals for managerial positions in their operations in former British colonies because the British were presumed to be most familiar with the culture and institutions of the host countries and also with U.S. culture (and language).

In general, third-country nationals can bring the following qualities: (1) understanding of the operation from the perspective of a foreigner, who is not biased by the cultural perspective either of the home country or of the host country; hence, these individuals can bring more unbiased and potentially novel ideas and perspectives; (2) increased likelihood of acceptance by both home country and host country employees; and (3) demonstration of the global image of the multinational corporation.

An increasing number of corporations around the globe resort to appointing third-country nationals in key positions; a major reason for this is, as already seen, the need for the most competent individual to take over important roles, and the fact that as organizations become global they gradually become dissociated with particular countries. Even Japanese corporations, which traditionally have adhered to an ethnocentric approach in staffing, are gradually abandoning this policy. This is because they have increasing proportions of their interests in countries outside Japan, and they realize that there is a need for taking into account the perspectives of these countries in their strategic planning; hence, the need to include nationals of these countries in key positions, including the boards of directors. An example of a third-country national appointment in a key position of a multinational is Jose Lopez (Ignacio Lopez de Arriortua), a Spaniard who in the 1980s and 1990s held executive positions in both General Motors (a U.S. multinational corporation) and in Volkswagen (a German multinational corporation).

The ultimate manifestation of the geocentric human resource policy is the appointment of host-country nationals in key positions in the headquarters, that is, in the home country. These individuals are labelled *inpatriates*. A prime inpatriate case has been the appointment in 2005 of Howard Stringer (British, with a corporate career in the United States) as chief executive officer of SONY, allegedly the first foreign-born CEO of a major Japanese corporation.

See Also: Ethnocentric Human Resource Policy; Expatriate; Multinational Corporation; Parent Country National; Polycentric Human Resource Policy; Regiocentric Human Resource Policy; Third Country National.

Bibliography. Paul Evans and Vladimir Pucik, *The Global Challenge International Human Resource Management* (McGraw-Hill, 2009); Charles W. L. Hill, *Global Business Today* (McGraw-Hill Irwin, 2009); Erwin S. Janush, "Global Staffing Strategy: Solving the Puzzle," *Benefits and Compensation International* (v.37/9, 2008); Paul R. Sparrow, "Globalization of HR at Function Level: Four UK-Based Case Studies of the International Recruitment and Selection Process," *International Journal of Human Resource Management* (v.18/5, 2007); Ibraiz Tarique and Randall Schuler, "Emerging Issues and Challenges in Global Staffing: A North American Perspective," *International Journal of Human Resource Management* (v.19/8, 2008).

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Geopolitics

Geopolitics concerns questions in relation to the strategic importance of geographic locations, their relationships with each other, and the changing pattern of such relationships over time. For example, the European colonial legacies and geopolitical incidents such as the two world wars, cold war, the fall of the Berlin Wall, and the 9/11 terrorist attacks have contributed to the shaping of the existing global business environment. The acts of various national and international institutions, the strategic location of a country and its relationships with other nation-states, and the military and economic powers of countries have also been identified as factors possibly affecting a country's economic and political relationships. Additionally, the demographic characteristics of the population of a specific geographic area and its cultural/historical relationship with the rest of the world are commonly thought to be other influencing factors.

Despite an ongoing and obvious link between geopolitics and international business, the study of geopolitics appears to be a relatively new addition to the international business literature. Nonetheless, examining the concept of geopolitics in the global business context is particularly critical at this time, as we are living in a world with a rapidly changing and intrinsically intricate geopolitical order.

It is widely recognized that there is no universally accepted definition of *geopolitics*, which results in the term being abused by many without fully understanding its meaning. *Geopolitics*, in general, denotes international relationships from an evolutionary, historical perspective emphasizing the role of national power and national interests in shaping the global political order. Etymologically, the word denotes location-specific factors that affect political disposition. However, since its first use by the Swedish geographer Rudolf Kjellen in 1900, the study of geopolitics has been viewed, evaluated, and contributed to from different perspectives. In 1917 Kjellen used the term to describe the geopolitical basis of national power. Karl Haushopher, a German political scientist, further expanded this idea as a relationship between political phenomena and geography. He considered geographic variables to have a direct bearing on national power.

During the inter-war period, the concept of geopolitics was used by Haushopher, Carl Schmitt, and other German geopoliticians to develop "geostrategy" as a military science. At that time, the importance of geographic location and size and their impact on the political power of a nation were at the core of the German geostrategy. This was reflected in the subsequent policy of expansionism by Nazi Germany. Later, Harold and Margaret Sprout advanced the theory of geopolitics. According to the Sprouts, geography affects all human and nonhuman, tangible and intangible phenomena. They believed that every political community had a geographic base that might affect most of the transactions among nations. They raised the issue of "transactions" as a vital ingredient of the geopolitical domain, making it easier to relate to the business and politics literature.

Geoeconomics

Geographic proximity or physical distance has always been considered as an external environmental factor affecting the political relationships among nations. Accordingly, there is a likelihood of greater communication with neighboring nations than with physically distant ones. Following the oil crisis of 1973, the emergence of a new set of geopolitical and geostrategic relationships was recognized in the international relations literature. Of special importance are the increasing scarcity of key resources globally and enhanced risk of their movements—especially of the supplies of oil and vital raw materials from producers to consumer nations. Hence, the control of resources and the resource-import relationship have added a vital dimension to the study of geopolitics.

In order to boost national business interests, countries capable of using military and/or economic power often attempt to influence other countries and regions with aims to access necessary resources, ensure market entry, and avail major public procurement contracts for their business enterprises. The Gulf War in 1990 and the Iraq invasion of 2003 provide a case of an interesting albeit obvious relationship between geopolitics and international business. Direct influence could be seen from the United States and its allies on the distribution of reconstruction projects in post-invasion Iraq. Influence of global political powers could also be witnessed in strategically important areas such as oil supplies, governance structures, and political stability in geographic regions across all continents. Such a trend emphasizes the importance of understanding the concept of "geoeconomics" from a geopolitical perspective. In this context, the relationship between geopolitics and national power needs to be further clarified.

Power plays an important role in shaping the global geopolitical landscape. As the global power base is constantly shifting from one country/region to another, it becomes difficult to ascertain the nature and strength of power exerted by any specific country or region. Both military and economic aspects of power should be taken into account when defining national power. Economic power could be defined broadly as the capacity of a country to influence other countries through the use of various economic tools that may include a country's resource base, technology, infrastructure, and gross domestic product. Military power of a country is reflected in its capacity and readiness to use military and tactical force to influence other states. Military capacity could be dependent on the country's armaments, size of the army, and the access to superior military training and technologies.

A country may use either military or economic power or both to achieve certain goals.

Hans J. Morgenthau, one of the leading political theorists, considers power as a means to an end. He considers political realism as "the concept of interest defined in terms of power." Coercive power, in this regard, has long been used to subjugate countries in order to achieve economic and political gains. These days, however, power is mostly used by countries in different and subtle ways, making the impact of such uses difficult to assess. Also known as "soft power," such an approach, compared with coercive technique, is considered more effective and relevant in the contemporary geopolitical context. As a consequence, the use of political as well as professional lobbyists has become commonplace in influencing the policies and actions of foreign governments and international institutions.

Ideological Expansion

Ideological expansion is another important element of geopolitics. It was a major concern during the Cold War period. *The Communist Manifesto* in 1848 clearly stated this concern: "a spectre is haunting Europe, the spectre of communism." The specter of communism literally haunted the Western world until the fall of the Berlin Wall. Nonetheless, an ideology-based political system is different from a liberal democratic system imposing ideological control on the country's political as well as economic activities and its relationships with other countries.

Theocracies such as the Vatican, Saudi Arabia, and Iran maintain their respective political systems primarily based on religious ideologies. The religious fanaticism demonstrated by the 9/11 terrorist attack has caused a major geopolitical concern affecting global harmony and peace. For global firms, it also has created additional costs of doing business, as they need to take extra precautions to safeguard their business operations globally.

See Also: Capitalism; Communism; Globalization; Lobbying; Risk; Regional Integration; Terrorism.

Bibliography. Dibyesh Anand, *Tibet: A Victim of Geopolitics* (Routledge, 2009); Vicken Cheterian, *War and Peace in the Caucasus: Ethnic Conflict and the New Geopolitics* (Columbia University, 2009); Saul Bernard Cohen, *Geopolitics: The Geography of International Relations* (Rowman & Littlefield, 2009); Paul Dibb, *The Future Balance of Power in East Asia: What Are the Geopolitical Risks?* (Strategic and Defence Studies Centre, ANU, 2008); François Debrix and Mark J. Lacy, *The Geopolitics of American Insecurity: Terror, Power, and Foreign Policy* (Routledge, 2009); James Graham, "Military Power Versus Economic Power," www.historyorb.com (cited March 2009); Colin S. Gray, "The Continued Primacy of Geography—A Debate on Geopolitics," *ORBIS* (v.40/2, 1996); Rudolph Kjellen, *Der Staat als Lebensform*, trans. by Margarethe Langfelt (S. Hirzel Verlag, 1917); Matthew K. Lange, "British Colonial Legacies and Political Development," *World Development* (v.32/6, 2004); Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 5th ed. (Alfred A. Knopf, 1978); Joseph S. Nye, Jr., *Soft Power: The Means to Success in World Politics* (Public Affairs, 2004); William H. Overholt, *Asia, America, and the Transformation of Geopolitics* (Cambridge University Press, 2008); Harold Sprout and Margaret Sprout, *An Ecological Paradigm for the Study of International Politics* (Center for International Studies, 1968); Derwent Whittlesey, "Haushofer: The Geopolitician," in E. M. Earle, ed., *Makers of Modern Strategy: Military Thought from Machiavelli to Hitler* (Princeton University Press, 1943).

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Germany

The Federal Republic of Germany, located in the heartland of Europe, adjoins Denmark, Poland, Czech Republic, Austria, Switzerland, France, Luxembourg, Belgium, and the Netherlands, covering an area of approximately 357,000 sq. km. As Europe's largest economy and the world's 14th most populous country (2009), Germany has for centuries significantly affected this region's political, social, and economical history. This country, which saw the birth of Wolfgang von Goethe and Ludwig van Beethoven, is also the world's largest exporter.

Economic History

The political success of the reunification of Germany was not without high costs. Following the dissolution of the German Democratic Republic (1990), East Germany, which came under Soviet domination after World War II, experienced huge job losses and a rapid increase in the costs of living. Many young people left to live in the West, seeking new jobs, better education, and a new and better way of life. Unified Germany (1990) has had to provide considerable financial support to boost the flagging economy that has undermined economic growth in the eastern part of Germany.

The German Deutsche Mark was replaced in January 1999 when the European Union (EU) introduced a common European exchange currency that became known as the euro. As a result of the strict requirements imposed by the European Monetary Union, Germany's economy faltered, resulting in substantial ramifications for the nation's industrial economy. Unemployment reached a new postwar high.

While in more recent decades the economic growth rates had stagnated, in 2007 the economy showed considerable improvement with a growth rate of 2.6 percent. At approximately the same time, the long-term problem of high unemployment was steadily reduced. For a three year period beginning in 2005, unemployment rates slowly decreased. However, concomitant with layoffs, the shifting of manufacturing facilities to low-cost markets abroad and cost-cutting between 2002 to 2005, costs escalated. Notwithstanding, despite the euro trading at its highest level against the dollar, and the numerous interest rate increases perpetrated by the European Central Bank, the Germany economy recovered once more and job creation increased.

As one of the founding nations of the European Economic Community (EEC), precursor to the European Union, soon after the war Germany began to co-determine Europe's economy. In the interests of economic cooperation, Franco-German cooperation became a central factor of subsequent mutual political, cultural, and economical relationships. Since the "Economic Miracle" of the 1960s, Germany has emerged as a highly efficient and vibrant economy—not only in Europe but worldwide.

By the end of World War II, Germany's economy was in ruins. Many production facilities were either destroyed or dismantled as reparation payments. The country's successful economic recovery is often attributed to two factors of Ludwig Erhard's free market reforms: currency reforms and elimination of price controls. German industry was effectively stimulated by production investments funds from the Marshall Plan, the European Recovery Program, and the low wage scale in Germany at the time.

Germany is one of the most attractive and competitive business locations worldwide, a country in which foreign investors have increasing confidence as a destination for foreign investment. In 2006 Germany ranked third (after Great Britain and France) among the most popular European foreign investment destinations, having successfully leaped from the sixth place it occupied in 2005. The top three foreign investors were the United States, the Netherlands, and Switzerland (2006). The most popular industries that attract foreign investors are information and communication technologies, industrial machines, and the automotive industry. Today, for the first time, foreign investors own a majority of Germany's 30 largest publicly traded companies (2007).

Germany's strong economic performance is very much linked with its high number of successful companies that regularly top or are ranked high in international rankings in categories such as innovation and sophistication of the production process. "Made in Germany" signals good quality, innovative technology, reliability, and strong brands. Together with Germany's numerous multinational companies, small and medium-sized enterprises (SMEs) play an important role in the country's economy. Approximately 70 percent of all employees work in SMEs, key sectors of which include automobile manufacturing, electrical and precision engineering, chemicals, environmental technology, optics, medical technology, and logistics.

Germany is still the world's largest exporter. In 2007 it outranked China and the United States, showcasing both its influential role in the global economy and its potential as global player. Germany's major exports are motor vehicles, machinery, chemical products, and computer equipment. Export markets include France, the United States, the United Kingdom (UK), Italy, and the Netherlands. Altogether, 65 percent of exported goods went to member states of the European Union. The second largest export market was China with 11 percent, closely followed by the United States with 10 percent. According to the Federal Statistical Office, German exports increased for the fifth consecutive year.

Despite its marked export orientation, Germany lacks natural resources and is largely dependent on imports such as energy products. In 2007 imports increased by 5 percent over the previous year. The majority of imports come from Europe (predominantly France and the Netherlands), followed by Asia (China) and the United States. In 2007 Germany's exports amounted to €969 billion and imports to €772.5 billion. The record foreign trade balance of €196.5 billion is the highest ever.

With Europe having Germany's leading markets and suppliers, almost two-thirds of Germany's imports and exports either originate in or are sent to European Union member states.

Political History

In 2005 Angela Merkel became Germany's first female chancellor. An East German, Merkel succeeded Gerhard Schroeder, who was openly critical of the U.S.-led invasion of Iraq in his reelection campaign in 2002. The new government joined a coalition of the Christian Democratic Union (CDU), Christian Social Union (CSU), and the Social Democratic Party (SPD). Merkel took over as party leader of the CDU in 2000 after Helmut Kohl, the "chancellor of the unification," was caught in the middle of a party funding scandal. In 2007 *Forbes* magazine for the second time nominated Angela Merkel as the most powerful woman in the world.

Germany was involved in two world wars in the first half of the 20th century. At the end of World War II (in 1945) the Allies (United States, UK, France, and the Soviet Union) divided the country among themselves, resulting in the separation of (what would come to be known as) East Germany from West Germany and the subsequent formation of the eastern German Democratic Republic (GDR) and the western Federal Republic of Germany (FRG) in 1949. This separation was reified when the Soviet Union erected the Berlin Wall in 1961. Bonn became the provisional capital of West Germany.

The new German government was led by Chancellor Konrad Adenauer, who, by committing the country to assist Western defense systems and allowing the stationing of U.S. troops in the country, secured Germany's sovereignty in 1955. In May of the same year Germany joined the North Atlantic Treaty Organization (NATO).

During the Cold War, the communist GDR became a member of the Soviet-dominated Warsaw Pact: the FRG, being a liberal parliamentary democracy, became a member of the precursor of the European Union, the Western European Union (WEU), the European Coal and Steel Community (ECSC), and the European Economic Community (EEC). With the end of the Cold War and the political and economical weakening of the Soviet Union, the way became open for German unification. After being separated for more than 40 years, October 3, 1990, finally marked the end of divided Germany.

December 2, 1990, saw the first elections to be held in unified Germany since 1933. The CDU coalition won and Helmut Kohl became the first chancellor of the new German state: In 1991, the Bundestag voted in favor of Berlin being its capital.

Germany had been founded on January 18, 1871, concomitant with the unification of the German Empire. Prussia, one of the numerous states within the German confederation created at the Congress of Vienna (1814–15), challenged Austria, the dominating political and economic force of the time. After winning the Franco-Prussian War (1871) that resulted in the removal of the French emperor Napoleon III, on January 18, 1871, Wilhelm of Prussia was crowned emperor of Germany at the Palace of Versailles. Otto von Bismarck was appointed the first Reichskanzler. These events saw the birth of the Second German Reich, which lasted until the abdication of Wilhelm II in 1919, after Germany was defeated in World War I. (The first Reich was the Holy Roman Empire of the German Nation [800–1806].)

Before unification, Germany consisted of a collection of small states that were linked from the "Revolution of 1848" onward in their common goal of liberal reforms. In 1848, German liberals and peasants erected barricades in Berlin and other German countries, voicing their demands to be granted more rights from the German princes and aristocrats. The outcome of the revolution was the establishment of a National Assembly in Frankfurt. The German flag (a horizontal tricolor with black, red, and gold stripes), the symbol of German nationalism, has its origins here. The colors represent the colors worn by Germany's soldiers during the Napoleonic Wars, a time that marked an early upsurge of German nationalism. The flag was used until 1871, and again from 1919 to 1933, when Germany became a republic. After the war, from 1949 on, the flag represented

West Germany; after unification in 1990, it became the flag of united Germany.

Along with massive political changes that occurred in the early and mid-19th century, the Industrial Revolution generated enormous economic development in Germany. After 1850 the country underwent rapid industrialization: New factories and railway networks were built and the production and export of textiles and iron increased. The population exploded, urbanization commenced, and Germany started on the road to becoming a modern prosperous economy. With time it became Europe's dominating economic power.

Germany provides cutting-edge environmental technology. And in spite of increasing its economic output, environmental pollution has decreased in Germany over the past few years. Notwithstanding, air pollution emissions and the consumption of water and raw materials could still be sustainably reduced. Not least because of the increasing political decision making since the 1980s, German firms are among the most innovative in Europe when it comes to knowledge-intensive environmental research and environmental technologies. This is also demonstrated by the high number of environmental protection patents lodged at the European Patent Office. Germany is a world-leading exporter of potential environmental protection goods such as technologies and products designed to improve air quality, noise, and recycling, which account for 19 percent of world trade.

German Management Style

Harking back to the medieval guild and merchant traditions, German management styles have "specificness." Often cited as another crucial factor in the economic miracle of the postwar years, distinctive German management characteristics include entrepreneurism and production orientation. Furthermore, the owner attitude manifested in the German "Herr im Haus" leadership has for long characterized many traditional German enterprises. In general—and due in part to the often more technical background of German managers—management in Germany is more closely connected with the production process than in many Anglo-Saxon countries. Rather than expecting a supervisor to motivate their subordinates, it is more common to expect the superior to assign a task while the subordinate is responsible for the execution of any technical problem. Other German management traits are planning, punctuality, discipline, accuracy, and orderliness.

Education and Science

The land of ideas invests in education. In 2004 Germany spent €7,000 per student from primary to tertiary level, more than any OECD country. Most students go to public schools: Germany rates below the OECD country mean vis-à-vis students studying at private institutions. The country's unique two-track vocational training (2–3.5 years) program offers practical in-company training and specialist theoretical instruction in a vocational school. The companies pay the trainees/apprentices wages while the government finances the cost of attending vocational schools.

The high value placed on education and the applied sciences is demonstrated by the 78 German Nobel Prize winners—67 of whom received the award for their achievements in the natural sciences or medicine (e.g., Wilhelm Conrad Röntgen, Robert Koch, Max Planck, Albert Einstein, Werner Heisenberg, and Otto Hahn).

Immigration

Concomitant with the "Economic Miracle" of the postwar years, the number of immigrants to Germany has risen. From 1955 to 1973, so-called guest workers have been recruited to fill the needs of the country's fast-growing economy. These early foreign workers came primarily from Italy, Spain, Greece, Turkey, and Yugoslavia. The immigration wave in the years from 1973 to 1985 consisted mainly of family members of foreigners already living in Germany. At the end of the 1980s, there were two different forms of immigration: asylum seekers and ethnic German repatriates mainly from eastern Europe and the Soviet Union.

On January 1, 2005, a new immigration act came into force. After several years of parliamentary discussion, a single legislative framework now manages Germany's immigration policy. It constitutes a comprehensive reform of labor migration, humanitarian regulations, and integration and security aspects.

Geography

Reunified Germany is divided into 16 states: Baden-Wuerttemberg, Bayern (Bavaria), Berlin, Brandenburg, Bremen, Hamburg, Hessen, Mecklenburg-Vorpommern (Mecklenburg–Western Pomerania), Niedersachsen (Lower Saxony), Nordrhein-Westfalen (North Rhine–Westphalia), Rheinland-Pfalz (Rhineland-Palatinate), Saarland, Sachsen (Saxony), Sachsen-Anhalt (Saxony-Anhalt), Schleswig-Holstein, and Thüringen (Thuringia).

Significant mineral resources can be found in the Rhenish-Westphalian industrial area (hard coal deposits), the Rhenish Basin, the Leipzig Basin, and Lower Lusatia (large lignite fields), Rhenish Slate Mountains, east of the Franconian Alp and the northern periphery of the Harz (iron ore deposits), in Northwest Germany (oil reserves), as well as in Lower Saxony (rock salt deposits).

Germany's agriculture plays a notable role in the European Union's agricultural sector. Within the European Union, Germany is the largest producer of milk and pork and the second-largest producer of cereals, potatoes, sugar beets, and beef.

Germany is Europe's most densely populated country: Population density grew in particular along both sides of the Rhine valley, that is, in the Upper Rhine region, in the Rhine-Neckar and Rhine-Main regions, around Cologne and in the periphery of the Rhenish-Westphalian industrial area.

Germany consists of 16 federal states (*Länder*), which have the responsibility for central administrative areas such as education, law enforcements, culture, and environmental protection. The federation is mainly responsible for legislation, the Länder implement federal laws on behalf of the federation or under their own jurisdiction. The federal government is solely responsible for defense and foreign affairs. The Länder also direct regional governmental planning in a bid to ensure equal living conditions for all; that is, all citizens may avail themselves of schools, doctors, and pharmacies, for example. This is also a prerequisite for attracting business and industry. The federal states also determine environmental conservation planning, i.e., the protection of natural landscapes and economic use of natural resources.

See Also: European Union; DaimlerChrysler; Siemens; Volkswagen.

Bibliography. David P. Conradt, *The German Polity* (Houghton Mifflin Harcourt, 2009); Francesco D'Amuri, Gianmarco I. P. Ottaviano, and Giovanni Peri, *The Labor Market Impact of Immigration in Western Germany in the 1990s* (National Bureau of Economic Research, 2008); German Federal Foreign Office, "Facts About Germany," www.tatsachen-ueber-deutschland.de/en (cited March 2009); German Federal Office of Administration, www.bund.de (cited March 2009); German Federal Statistical Office, www.destatis.de (cited March 2009); Georg Meck, "Green Champions," www.magazine-deutschland.de (cited March 2009); Wolfgang Streeck, *Re-Forming Capitalism: Institutional Change in the German Political Economy* (Oxford University Press, 2009); Dennis Sweeney, *Work, Race, and the Emergence of Radical Right Corporatism in Imperial Germany* (University of Michigan, 2009).

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Ghana

The country of Ghana is located on the Gulf of Guinea in western Africa and is bordered by Côte d'Ivoire on the west, Burkina Faso on the north, and Togo on the east. Ghana was established in 1957 with the passage of an independence constitution uniting the British colony of the Gold Coast and the British-controlled UN Togoland trust territory. Plagued by over two decades of coups, the country remained destabilized until former air force lieutenant Jerry Rawlings secured lasting power through a military coup in 1981.

Under the Rawlings administration, Ghana gradually implemented a constitutional democracy that has attracted and maintained international investments primarily into their gold, cocoa, and agricultural sectors. Today, Ghana enjoys a stable and growing economy, with its 2007 gross domestic product (purchasing power parity) estimated to be $31.33 billion, growing at an annual rate of 6.45 percent.

Ghana's present-day inhabitants are not believed to be the original inhabitants of the territory that now comprises Ghana, but to have descended from migrant groups that arrived via the Volta River around the 13th century. The arrival of European traders in the late 15th century brought the onset of several hundreds of years of competition (both economically and physically) between the Portuguese, French, Dutch, and English in the territory in and around Ghana. Initially these conflicts concerned trading rights to gold, ivory, and pepper and later shifted heavily to slave trading concurrent with the expansion of European plantations in the New World.

By the end of the 19th century, the British empire consolidated sole power over the entire region, quelled several uprisings by the Asante ethnic group of southern Ghana, and officially annexed the region as a protectorate under the exclusive control of the British empire.

Over the next century, the British ruled the region indirectly by administering investments and mediating intertribal disputes, while delegating most local decisions to village chiefs and elders. This period of colonial rule saw the majority of wealth exported from the country accumulated by the Europeans but also endowed the region with significant developments in transportation, sanitation, agricultural, and educational infrastructure.

By the conclusion of World War II, Africans were heavily embedded in the central government that controlled the territory of Ghana. After several failed attempts toward full self-governance, the country petitioned and successfully gained full independence from the British Commonwealth and the country of Ghana was established through the independence constitution of 1957. Ghana's first president, Kwame Nkrumah, set about to implement sweeping socialistic measures and to unify the African continent into a self-sufficient entity, breaking the pattern of neocolonialism present in much of the rest of the developing world.

Political Coups

These ambitious policies resulted in heavy financial burdens and ultimately resulted in a series of political coups, beginning in 1966 and ending with the 1981 coup led by Rawlings. After many decades of stifled political opposition and curtailed civil liberties, the Rawlings administration redrafted the country's constitution in 1992, implementing term limits and reinstating multiparty elections.

Today, Ghana's population (est. around 23.4 million) enjoys a relatively stable and growing emerging market economy, centered primarily on subsistence agriculture (56 percent of the labor force by occupation, 2005 est.). The 2006 Millennium Challenge Compact agreement between Ghana and the United States focuses an estimated half-billion dollars of investment into Ghana's agricultural sector, seeking to both grow the economy and reduce poverty.

Diamonds

In addition to agriculture, Ghana's 239,460 sq. km of land (roughly the size of the state of Oregon) is endowed with an abundance of natural resources including gold, timber, bauxite, aluminum, manganese, and diamonds that serve as the other primary source of exports for foreign exchange. Ghana continues to attempt to stabilize its currency and recently introduced the new Ghana cedi in 2007 (10,000 old cedis equals 1 new cedi). This move has contributed to the recent reduction of the county's inflation rate to single digits (9.6 percent, 2007 est.).

While Ghana continues to carry large amounts of debt, its economy is seen as one of the most promising in west Africa for international investment. Ghana's economy is now under the direction of its Growth and Poverty Reduction Strategy, which outlines the country's plans for macroeconomic stability, tax simplification, increased private sector competitiveness, human resource and agricultural development. Most recently, the discovery of large offshore oil reserves has prompted increased exploration and infrastructure development on the country's west coast.

See Also: Africa; Company Profiles: Neocolonialism.

Bibliography. Ernest Aryeetey and S. M. Ravi Kanbur, *The Economy of Ghana: Analytical Perspectives on Stability, Growth & Poverty* (James Currey, 2008); CIA, "Ghana," World Factbook, www.cia.gov (cited March 2009); *Ghana's Economic History: Reflections on a Half-Century of Change* (Lynne Rienner, 2008); Roger Gocking, *The History of Ghana* (Greenwood Press, 2005); Geeta Gandhi Kingdon and Måns Söderbom, *Education, Skills, and Labor Market Outcomes: Evidence from Ghana,* Education Working Paper Series, no. 11. (World Bank, 2008); Library of Congress Federal Research Division, "Ghana Country Study," www.loc.gov (cited March 2009); Kwame Okoampa-Ahoofe, *Ghanaian Politics Today* (Atumpan Publications, 2008); Department of State, "Millennium Challenge Corporation and Republic of Ghana to Sign $547 Million Millennium Challenge Compact," www.state.gov (cited March 2009).

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Gift-Giving

Gift-giving is the act of transferring a present, or gift, to another. Gift-giving occurs in both social relationships and economic or business exchanges. A gift is anything of value, however large or small in value. The gift can be money or something else of value such as personal goods, services, property, or in many cases entertainment.

In principle, a gift should be a voluntary free transfer not requiring any form of compensation or reciprocity. A voluntary gift is neither a gratuity or a tip, provided as full or partial compensation for some personal service (such as restaurant tipping), or a bribe, provided or offered to an agent in expectation of some desired opportunity. Customary gift-exchange occurs mostly at specified times of the year, such as Christmas, in ritualized social relationships.

Gifts and entertainment are typical aspects of business etiquette and marketing or promotion efforts in various countries. Business practices and national laws vary with respect to such activities. Multinational enterprises typically provide guidance to employees concerning gift-giving and entertainment to customers and from suppliers. Gift-giving, gift exchange, and gratuities are also established customs or traditions in various societies to express appreciation or as a sign of thoughtfulness. In some advanced economies, tipping for personal services is expected income in lieu of full wages.

Because the boundary between bribery and gift-giving may be ambiguous, the overlapping of economic and social relationships, varying by culture, is a problematic dimension of anti-corruption efforts. The Foreign Corrupt Practices Act (FCPA) of 1977, as amended, exempts facilitating payments (i.e., "grease") under some circumstances and provides for certain affirmative defenses concerning marketing and promotion expenses including entertainment. All such expenses must be carefully reported. Some gifts, gratuities, and entertainment permissible under the FCPA may be illegal under local anti-bribery laws.

In practice, gift-giving may be a mandatory part of ritualized social and economic reciprocity. A transfer of value with the appearance of a gift might arise in a number of motives including appreciation, altruism, bribery or extortion, custom or tradition, gratuity, reciprocity, or tax incentive.

Reciprocity is an act or expectation of exchange between two parties. This reciprocity may be an established custom or tradition in some societies or communities. It may be traditional to provide some gifts, particularly entertainment and small tokens of respect or appreciation, in business settings. Corruption is bribery of or extortion by agents in which typically money, or some other item of value, is exchanged for a contract or other valuable opportunity. The key feature of corruption, demonstrated in the form of bribery, is that an agent accepts something of value from a third party to act contrary to the interest(s) of the agent's principal(s).

Public employees in democracies and private-enterprise employees are agents. Their principals are the citizens or the owners, respectively. With certain exceptions, it is not generally possible under this definition to bribe a principal. Some transactions with a hereditary sovereign, as a principal, might still be corrupt or unethical on some other basis. Gifts and entertainment expenses are important even in advanced market economies. The pharmaceutical industry is well known for company gifts to business customers, such as physicians. Reciprocal exchange relationships may be highly established in some societies, such as Japan and China. In Japan, ritual and courtesy are still very important in social and economic relationships. A classic instance of a gift economy is China. The *guanxi* networks of gifts, obligations, and reciprocity are reportedly important sources of personal influence in business and government circles. These networks are systems of trust relationships for mutual support through favors. Such networks may function in some circumstances as patron-client relationships, which were important in ancient Rome.

Multinational enterprises commonly have policies and guidelines governing gifts and entertainment expenses for customers and from suppliers. In general terms, for U.S. and European companies, some "reasonable and limited expenses" by employees may be acceptable for gifts, entertainment, and customer travel and living expenses in connection with promotion or contract execution. Employees may sometimes accept purely nominal-value gifts and entertainment expenses from suppliers. With respect to both customers and suppliers, there must be no appearance of impropriety and no improper advantage sought (a violation of the FCPA, as amended). Accurate records must be maintained and local anti-bribery laws, as well as the FCPA, must be obeyed.

See Also: Bribery; Corruption; Foreign Corrupt Practices Act; Guanxi; Nepotism.

Bibliography. Allan K. K. Chan, Luther Denton, and Alex S. L. Tsang, "The Art of Gift Giving in China," *Business Horizons* (v.46/4, 2003); Michael Conlin, Michael Lynn, and Ted O'Donoghue, "The Norm of Restaurant Tipping," *Journal of Economic Behavior & Organization* (v.52/3, 2003); Josie Fisher, "Business Marketing and the Ethics of Gift Giving," *Industrial Marketing Management* (v.36/1, 2007); Arvind K. Jain, "Corruption: A Review," *Journal of Economic Surveys* (v.15/1, 2001); Harvey S. James, Jr., "When Is a Bribe a Bribe? Teaching a Workable Definition of Bribery," *Teaching Business Ethics* (v.6/2, 2002); Catherine A. Marco et al., "Gifts to Physicians from the Pharmaceutical Industry: An Ethical Analysis," *Annals of Emergency Medicine* (v.48/5, 2006); Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies* (Routledge, 2001 [1954]); Patricia E. Salkin, *Ethical Standards in the Public Sector* (American Bar Association Section of State and Local Government Law, 2008); J. C. Scott, "International Business: Global Gift Giving," *Business Education Forum* (v.61/2, 2006); Mayfair Yang, *Gifts, Favors, and Banquets: The Art of Social Relationships in China* (Cornell University Press, 1994).

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Gini Index

The Gini index is a commonly used measure of inequality in the distribution of income, wealth, consumption, and other economic variables—although it can be used to calculate inequality of anything that can be measured. It was developed by the Italian statistician Corrado Gini and published in his 1912 paper "Variabilità e mutabilità" ("Variability and Mutability"). It is defined as 100 times the Gini coefficient, which is the ratio of the area inside the Lorenz curve to the area under the line of perfect equality. The Lorenz curve graphically shows the distribution by plotting the cumulative percent going to the bottom x percent of the population. The Lorenz curve for U.S. income data from 2005 shows that the poorest 20 percent of households earn 3.5 percent of the pre-tax/pre-transfer income, while the poorest 40 percent (which includes the bottom 20 percent and the next poorest 20 percent) collectively earns 12 percent of income.

Thus, a lower Gini index indicates more equality. The lowest possible value of the Gini index is 0, in which case the Lorenz curve lies on top of the line of perfect equality and everyone has exactly the same amount. The highest possible value of the Gini index is 100, in which case the Lorenz curve lies along the horizontal axis and one person has everything, while the others have none.

The Gini index is useful because it condenses the entire distribution into a single, unitless measure that can easily be compared over time, across groups and countries and across economic (and noneconomic) variables.

World Bank

The most widely cited Gini estimates are from the World Bank's *World Development Indicators.* Using data from recent years, the World Bank estimates that the most economically equal countries in the world—with income Ginis below 30—include many smaller European countries such as Austria, Bulgaria, the Czech Republic, Hungary, and all the Scandinavian countries, as well as Germany, Ukraine, and Japan. In the low to mid 30s are Australia, Bangladesh, Britain, Canada, Egypt, Ethiopia, France, Indonesia, Italy, Pakistan, Poland, South Korea, Spain, and Vietnam. In the high 30s and low 40s are India, Iran, Israel, Kenya, Morocco, Russia, and Thailand.

The average Gini coefficient in the 126 countries on the World Bank's list is 40.8—exactly the same as the rate in the United States, but almost all the countries with higher levels of inequality than the United States are much poorer. China's Gini is about 47. Other countries in the mid and upper 40s are Malaysia, Mexico, Nigeria, the Philippines, Uganda, and Venezuela. Among the highest in the world are many nations in Latin America and Africa, with Bolivia, Botswana, Brazil, Colombia, Haiti, and South Africa near 60. Topping the chart is Namibia in southwest Africa at 74.

Ironically, the Gini index for the world as a whole—estimated to be between 56 and 66—is almost higher than for any single country, since rich people tend to live with other rich people, fairly equally in rich countries, and poor people tend to live with other poor people, fairly equally in poor countries.

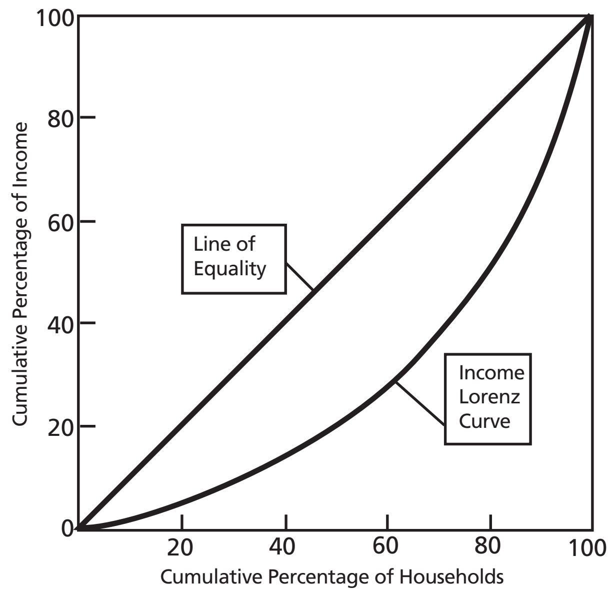
From 1970 to 2005, the Gini index for the United States rose almost 6 points. The leading explanation for this rising inequality in the United States is technological changes that have boosted the demand for skilled labor relative to unskilled labor. Gini indexes for wealth tend to be much higher than for income, but consumption Ginis are noticeably lower.

In practice there are a number of problems in calculating and interpreting Gini indexes. First, defining the units of analysis can be difficult. Does income include only monetary income or nonmonetary income such as health insurance and food stamps? A broader definition is probably better, but dollar values of nonmonetary totals are open to debate, so these are often omitted from official figures. Is the household or the individual the appropriate level of analysis? Since income is shared within households, the income Gini is usually calculated at this level, but this leads to some anomalies that skew the statistic. For example, in the United States poor households tend to be smaller than rich households. Thus, the poorest 20 percent of households contains only about 15 percent of people, while the richest 20 percent contains about 24 percent of people.

Each country collects its data differently, making comparisons difficult—although the levels and patterns reported above are generally believed to be approximately correct. Economies with similar incomes and Gini coefficients can still have very different income distributions. This is because the Lorenz curves can have different shapes and yet still yield the same Gini coefficient.

As an extreme example, an economy where half the households have no income and the other half share income equally has a Gini index of 50, but an economy with complete income equality, except for one wealthy household that has half the total income, also has a Gini index of 50.

There is no consensus on the optimal Gini index. The ideal will vary across individuals, cultures, and time. Most analysts agree that a certain degree of economic inequality is inevitable and desirable to give individuals the incentive to obtain skills, work hard, and undertake economic risks. However, if the



The Gini index equals 100 times the ratio of the area inside the Lorenz curve to the area under the line of perfect equality.

disparity gets too great, the inequality it represents can tear apart the fabric of society.

See Also: Economic Indicators; Globalization; Latin America; Low Wage Production; World Bank, The.

Bibliography. Gianni Betti and Achille Lemmi, *Advances on Income Inequality and Concentration Measures* (Routledge, 2008); Philip Nel, *The Politics of Economic Inequality in Developing Countries* (Palgrave Macmillan, 2008); Robert Rector and Rea Hederman, Jr., "Two Americas: One Rich, One Poor? Understanding Income Inequality in the United States," *Heritage Foundation Backgrounder* (n.1791, 2004); Bradley R. Schiller, *The Economics of Poverty and Discrimination* (Pearson/Prentice Hall, 2008).

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GlaxoSmithKline

GlaxoSmithKline (GSK) is one of the world's largest pharmaceutical companies. While it is based in London, in 2008 it employed around 100,000 people in over 100 countries. Close to 15 percent of its staff is assigned to research and development. Unlike some of its other pharmaceutical counterparts, GSK possesses a strong pharmaceutical pipeline and promising products, but it has also generated some controversy for some of its goods (such as its diabetes drug Avandia).

With strengths in therapeutic areas such as vaccines, oncology, cardiovascular and metabolic drugs, neurosciences and biological-based products, GSK is a key player in the pharmaceutical arena. GSK has also demonstrated increased interest in the consumer healthcare segment by commercializing products such as nutritional drinks and over-the-counter (OTC) medication.

GlaxoSmithKline is the result of the $30 billion 2001 merger of GlaxoWellcome (which itself is the result of the mergers of Burroughs Wellcome & Company and Glaxo Laboratories in 1995), and SmithKline Beecham (which is the result of the merger of Beecham Instruments, Allergan, and SmithKline in 1982).

The current company traces the bulk of its history to the 1800s in the United Kingdom and has a strong history of growth through mergers and acquisitions. It was the first company to dedicate a factory exclusively to manufacturing medicine in 1859, and has a long history of diversification in novel drugs, over-the-counter medicine, nutritional, and animal health products.

Pharmaceutical products include treatments for asthma, HIV/AIDS, malaria, depression, migraine, diabetes, heart failure, digestive conditions, and cancer. They also have an important division that manufactures and sells vaccines for diseases such as hepatitis A and B, diphtheria, tetanus, whooping cough, typhoid, and influenza. Most of the products have enjoyed modest growth in the last few years, except for Avandia, which has garnered some controversy. The drug, which was used to treat diabetes, was a blockbuster drug (which means it generated over $1 billion in annual sales) until scientific literature demonstrated that it could lead to heart attacks. The FDA required label warnings, but did not demand the withdrawal of the product. Nonetheless, sales of Avandia fell almost 22 percent in 2007.

GlaxoSmithKline has been selling its HIV drugs at cost in 64 of the world's poorest countries.

The company is different from other big pharmaceutical companies in that it has an important division dedicated to consumer healthcare, while the other big pharmaceuticals have divested their over-the-counter (OTC) divisions over the last few years. As such, GSK sells a wide array of consumer packaged goods through divisions such as consumer healthcare (with products such as NyQuil and Nicorette), dental products (with products like Aquafresh), and nutritional drinks (such as Boost). In 2007 the consumer healthcare division accounted for close to 15 percent of GSK's total business, and grew an impressive 14 percent over 2006.

GSK develops many products that target diseases that afflict populations in poorer countries, as well as developing medication for "orphan" diseases. As such, the company has traditionally adapted its price structure to accommodate poorer economies. For example, in 2007, GSK cut the price of its HIV drugs for the world's poorest countries for the fifth time since 1997, and sold those drugs at cost in 64 of the world's poorest countries. It also dedicated £282 million in 2007 for educational and community programs around the world, and is currently dedicating resources to three "priority" diseases identified by the World Health Organization: HIV/AIDS, tuberculosis, and malaria.

Through its long history, GSK has been implicated in a number of scandals. In one case, it was accused of overcharging Medicaid, to which it pleaded guilty and paid a fine of $87.6 million.

Other scandals include tax fraud, patent fraud, and antitrust behavior. Also, like all major pharmaceuticals, GSK is the subject of lawsuits relating to secondary effects in some of its drugs (such as Paroxetine and SeroXat), as well as the controversy surrounding its drug Avandia.

See Also: Corporate Social Responsibility; Pfizer; Novartis; Research and Development; Sanofi Aventis; United Kingdom.

Bibliography. Jean-Pierre Garnier, "Rebuilding the R&D Engine in Big Pharma," *Harvard Business Review* (v.86/5, 2008); GlaxoSmithKline, "Answering the Questions that Matter," *GSK Annual Report 2007* (2007); Mike Gordon, "International Business: EU Adviser Faults Glaxo Actions," *Wall Street Journal* (April 2, 2008); Edgar Jones, *The Business of Medicine: The Extraordinary History of Glaxo, a Baby Food Producer* (Profile, 2001); Gerald Zaltman and Lindsay Zaltman, "The Sure Thing That Flopped," *Harvard Business Review* (v.86/7–8, 2008).

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Global Account Management

The globalization of industries and intense competitive environments have induced some firms to undertake global account management (GAM), a systematic, firm-wide process that suppliers use to identify, develop, and retain their most important customers in global business-to-business markets.

When they expand internationally, firms often use global sourcing and expect suppliers to provide goods and services worldwide with consistent quality, efficiently, and at harmonized prices. When mergers and acquisitions reduce the number of buyers, fewer and larger customers tend to purchase higher volumes, which gives buyers purchasing power over suppliers.

Suppliers hope to protect their key business, because if they fail to supply a global buyer in one market, they may endanger their business with that buyer in other markets as well. They also tend to prefer to accelerate their organic growth by deliberately concentrating their resources on select global customers, or global accounts. Global accounts benefit from GAM, because this approach entails a value-adding sourcing and innovation partnership. Overall, GAM can help both suppliers and their global accounts strengthen their relationship and expand their global business.

A supplier's GAM program usually consists of a program director and program manager, several global account managers and their team members, and specialists who provide product-related, logistical, financial, and legal support. For example, Procter & Gamble introduced a dedicated, several-hundred-person GAM team, led by one global account manager, to cater on a worldwide basis to Wal-Mart Stores, Inc., its single largest customer. Thus, GAM programs may locate at the corporate level if they cater to firm-wide customers, as in the case of Procter & Gamble, or they may be situated within strategic business units if global customers purchase mostly from a particular business unit. The program director generally provides strategic direction for the GAM program and reports directly to the board; the program manager usually is responsible for developing and operating the processes, tools, and systems required for GAM.

Important program processes include global accounts selection and de-selection, appointment and development of global account managers, account business planning, multilevel relationship building, customer knowledge management, and relationship performance measurement.

Common criteria for selecting and deselecting global accounts encompass, for example, future business volume and profit potentials, strategic and cultural alignment between the organizations, and the degree to which the customer purchases on a centralized, global basis.

Perhaps the most important function in a GAM program is the global account manager (gam). Suppliers generally assign one full-time gam per global account, whom they locate in geographic proximity to the headquarters of the global account. Thus, the gam provides a prime contact for the buyer and orchestrates all supplier activities worldwide. The gam also leads the multifunctional global account team, which should mirror the customer's buying team to ensure optimal collaboration. The role and responsibilities of a gam thus go beyond those of an international sales manager; the gam develops and leads the implementation of a global, long-term collaboration strategy with the global account. This effort requires in-depth understanding of the global account's markets, entrepreneurial skills to identify and develop new business, and political aptitude to align the supplier's internal organization with that of the global customer. At IBM, for example, the gam's position equates with that of a managing director who leads a dedicated business team that caters to a particular global account on a full profit-and-loss basis.

The challenges of GAM primarily pertain to the organizational complexity and cultural diversity inherent to such global, inter-organizational relationships. For example, GAM programs introduce additional global structures that attempt to coordinate the supplier's activities by embracing several functions, markets, and business units, which often pursue diverging objectives. Furthermore, teamwork in a GAM team may be challenging because of the cultural diversity that results from different functional mindsets, such as research and development versus marketing, or from team members with different educational or cultural backgrounds. Consequently, suppliers implementing GAM attempt to align their go-to-market strategies and reward systems firm-wide to ensure goal congruence. Furthermore, they try to develop GAM talent and the collaborative capabilities of organizational members. Finally, suppliers need to resolve the global-local tensions that arise in response to a firm-wide program like GAM, such as product/service adaptation versus standardization.

See Also: Business-to-Business; Customer Relationship Management; Sales; Supply Chain Management; Wal-Mart Stores.

Bibliography. N. Capon, D. Potter, and F. Schindler, *Managing Global Accounts* (American Marketing Association, 2006); Peter Cheverton, *Global Account Management: A Complete Action Kit of Tools and Techniques for Managing Key Global Customers* (Kogan Page, 2008); C. Senn and A. Thoma, "Worldly Wise," *The Wall Street Journal*, Eastern ed. (March 3, 2007); Linda H. Shi et al., "Executive Insights: Global Account Management Capability: Insights from Leading Suppliers," *Journal of International Marketing* (v.2/13, 2005); Omar Toulan, Julian Birkinshaw, and David Arnold, "The Role of Interorganizational Fit in Global Account Management," *International Studies of Management and Organization* (v.36/4, 2006); G. S. Yip and A. J. M. Bink, *Managing Global Customers: An Integrated Approach* (Oxford, 2007).

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Global Benchmarking

Global benchmarking is the process of identifying best practices in organizations anywhere in the world to seek information that can help an organization to measure and compare its performance against those best practices in order to improve its operations. A benchmark is a reference point for taking measures against. Best practices are the techniques that have worked reliably in different situations to achieve their desired purpose in the most efficient and effective way. The best practices are demonstrated to repeatedly work in different situations and can be replicated in different situations with more or less the same results. The process of benchmarking is aimed at finding the best practices within and outside the industry to which an organization belongs. The purpose of benchmarking is to find the best performers in an area so that one can match them and even surpass them. Thus, if Dell is thought to have the best supply chain management practices or Toyota the best manufacturing processes, organizations of any type, anywhere in the world, can benchmark their own practices and processes against these and make improvements in their own practices and processes.

Global benchmarking is a subset of benchmarking, which is a generic term that refers to the systematic and continuous process of measuring and comparing an organization's practices, products, or services against best practices demonstrated to be effective by industry leaders. The American Productivity and Quality Center gives an interesting interpretation of the term *benchmarking* by proposing that it is "the practice of being humble enough to admit that someone else is better at something, and being wise enough to learn how to match and even surpass them at it."

An often cited example of benchmarking is that of Xerox when it was facing trouble in the 1980s. It decided to implement benchmarking to identify ways to improve its performance. Xerox benchmarked against L. L. Bean for distribution procedures, Deere & Company for central computer operations, Procter & Gamble for marketing, and Florida Power & Light for total quality management. By the early 1990s, Xerox was benchmarking 240 functions against comparable areas in other companies. Benchmarking is credited with dramatically improving Xerox's performance.

In the United Kingdom, Lucas Industries is widely reported as a company using benchmarking, looking outside their own organization when measuring performance and generating targets. Managers at Lucas are required to prepare competitive action plans on an annual basis. These plans provide targets for performance designed to align the business unit with leading international competitors in a particular function and explain how the business unit will achieve such performance levels.

When an organization is interested in finding out what is to be compared, there are three types of benchmarking: performance, process, and strategic benchmarking. Performance benchmarking is to compare one's own performance with that of some other organization for the purpose of determining how good one's own performance is. Process benchmarking is to compare the methods and practices for performing processes. Strategic benchmarking is to compare the long-term, significant decisions and actions undertaken by other organizations to achieve their objectives.

When an organization looks to compare itself to other organizations, four other types of benchmarking may be used. Internal benchmarking is comparison between units or departments of the same organization. Competitive benchmarking is direct comparison of one's own performance against the best competitors. Functional benchmarking is comparison of processes or functions against noncompetitive organizations within the same sector or technological area. Generic benchmarking is comparison of one's own processes against the best practices anywhere in any type of organization. Global benchmarking is generic benchmarking as it involves comparisons with any type of organizations anywhere around the world.

A firm can attempt benchmarking at several levels using the different types of benchmarking. The major application of benchmarking is for performance improvement. It can also be used to find out the relative cost position of an organization in comparison with competitors. Benchmarking is a good learning experience for an organization because it helps to bring in new ideas and facilitates sharing of experiences. The main purpose of benchmarking is to find out the best practices so that one can conform to them. But before one conforms, benchmarking is enough to show where a firm excels or lags behind. This is helpful in assessing the strengths and weaknesses of an organization and finding ways to gain strategic advantage.

Benchmarking involves these steps:

- Selecting a product, service, or process to benchmark
- Identifying the key performance metrics such as efficiency of a process
- Choosing functions, business, departments, or internal areas to benchmark
- Collecting data on performance and practices
- Analyzing the data and identifying opportunities for improvement
- Adapting and implementing the best practices, setting reasonable goals, and ensuring company-wide acceptance

Despite its popularity in industry and elsewhere, benchmarking has some limitations. First, it is a tough process to use, is time consuming and expensive, and requires a high level of sustained commitment. Second, it serves little purpose if it is used sporadically, so it should be done on a continuous basis for effective results. Third, financial statements of publicly-held companies are easily and openly available and therefore organizations may be tempted to do benchmarking on the basis of these. However, it must be remembered that financial statements provide lagging indicators and may not be really useful as the basis for benchmarking. Last, it may be difficult to find comparable benchmarking candidates in all types of areas and activities, and organizations may have to rely on the second-best available choice.

See Also: Comparative Advantage; Conformance/Conformity; Corporate Change; Cost Structure; Industry Information; Productivity.

Bibliography. A.M. Ahmed, M. Zairi, and S.A. Alwabel, "Global Benchmarking for Internet and E-Commerce Applications," *Benchmarking: An International Journal* (v.13/1–2, 2006); Conference Board of Canada, *Exploring Canada's Innovation Character: Benchmarking against Global Best* (Conference Board of Canada, 2004); Mark T. Czarnecki, *Managing by Measuring: How to Improve Your Organization's Performance Through Effective Benchmarking* (AMACOM, 1999); Ralph Horne and Carolyn Hayles, "Towards Global Benchmarking for Sustainable Homes: An International Comparison of the Energy Performance of Housing," *Journal of Housing and the Built Environment* (v.23/2, 2008); Rob Reider, *Benchmarking Strategies: A Tool for Profit Improvement* (John Wiley & Sons, 2000); Gregory H. Watson, *Strategic Benchmarking Reloaded with Six Sigma: Improve Your Company's Performance Using Global Best Practice* (John Wiley & Sons, 2007); Mohamed Zairi, *Benchmarking for Best Practice: Continuous Learning Through Sustainable Innovation* (Butterworth-Heinemann, 1998).

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Global Branding Strategy

Managers are gradually recognizing that brands are among their firm's most valuable assets. Strong global brands allow companies to increase their international revenues and growth. Global branding also helps to improve margins by driving down unit costs through economies of scale associated by winnowing agencies, ad copies, and marketing messages.

Brands also simplify decisions for consumers, who are busier, more cynical, and face a wider array of choices in an increasingly cluttered world. By maintaining a consistent brand image they reduce consumer confusion and reinforce the message in a cluttered market.

Brands can also help to mobilize and generate resources. Firms use strong brands to attract and retain talent. Obtaining external equity and debt financing becomes easier with enhanced visibility and credibility. Brands help to quickly roll out new products and protect innovations from imitation. Emphasizing a brand during market entry solidifies a firm's market position. Brands buffer firms during recessions and propel them forward when recessions end. For all these reasons, brands are intangible assets that increase the market value of firms.

Clarifying Global Branding

A brand is a collection of perceptions that may be positive or negative about a name or symbol of a product/service. It goes beyond short-lived product features to include emotional benefits and associations. At their heart, brands create trust with stakeholders.

A misconception is that global branding seeks to pursue an identical name, product, and marketing message worldwide. This practice is uncommon and often counterproductive. Most brands are not global in this sense. Procter & Gamble has over 89 brands, but only a handful are promoted identically worldwide. Its well-known laundry detergent is sold in some countries as Tide and in others as Ariel. A global branding strategy is a cross-national process to improve and harmonize a brand. The goal of a global brand strategy is to develop strong brands in all countries through a continuous improvement process using organization structure, processes, and culture to allocate brand-building resources, to create synergies, and to coordinate and leverage multiple country brand strategies.

Brands are becoming more valuable. In a globalizing world, brands can protect firms from international competition. The marketplace is confusing and cluttered with the entry of more players and the introduction of products with short lives. There is a shift, especially in industrialized countries, from manufacturing products to providing services, which are harder to evaluate and compare. Buyers lead busier lives and have less time to discern among products and sellers. So there is a need for the decision shortcuts and simplification provided by trusted brands.

The lowering of trade barriers and freer information flows make it easier for brands to cross borders and be exploited internationally. The economic center of gravity is shifting from low-growth industrialized countries to rapidly growing emerging countries. While consolidation is often emphasized in industrialized countries, enthusiasm is the theme in growing parts of the world. In industrialized countries, brands may exploit loyalty among aging consumers, while in emerging countries they may reach out to their large population of younger consumers that is climbing the economic ladder.

From emerging markets, indigenous brands (such as Tata, Lenovo, Infosys, and China Mobile) are gaining strength in international competition. Brands (such as IBM, Goldman Sachs, and Morgan Stanley) are important also in the business-to-business space because of their reputation for expertise, reliability, and security.

Other recent trends include the proliferation of media among which consumers can now choose. Environmental issues are also growing in importance. Positioning a product close to environmental issues strengthens a brand. And some trends, such as being online, have become necessary to bolster brands.

Brands can appreciate, like McDonalds, or depreciate in value, like Starbucks. The rise and fall of brands is in part tied to the popularity of their product category. Private equity groups are on the lookout to buy tarnished brands to restore their health. Managers should review their corporate practices that may tarnish their brands, such as Wal-Mart's labor relations, Microsoft's market dominance, and Nike's international contract manufacturing.

Most brands fail. Over 30,000 consumer products are launched each year, but less than a tenth have any staying power. Myopic companies reduce the quality of their products or stretch their brands unwisely, only to spend years attempting to repair the damage. Starbucks' strong brand was commoditized by overexpanding to over 13,000 coffee shops too quickly, which diminished its cachet. Brands that survive may be vulnerable to competing brands from retailers who also sell their private labels, from generic manufacturers, and from imitators where intellectual property protection is weak. They are also affected by the rise and fall of product categories, such as the Internet or unhealthy carbonated beverages.

A global branding strategy has to overcome various execution difficulties. It needs to understand the varying needs of many markets and be very creative to satisfy them. It must overcome coordination problems, varying coverage of agencies, and available media. It also needs to craft a process and design an organization to develop, strengthen, and leverage a brand.

Developing Strategy

Firms need to define various aspects of their brand. This includes a brand's personality, which is how the brand would be described if it were a person. They should develop brand associations that resonate with the public. What does the brand stands for? They should clarify user imagery: how a typical user of the brand would be described. What symbols and logos will be associated with the brand? Is the product category new, growing, and not crowded?

Key decisions must be made on the elements that should be kept constant and those that may be adapted. When going global, the following elements usually remain constant throughout the world: corporate brand, the logo, and the brand essence or values. Factors that may vary from country to country are corporate slogan, products and services, product names and features, positioning, and marketing tactics based on local differences. Abstract general values travel more easily, and can more easily be tailored to local situations than specific product features and marketing tactics.

Managers should resist pressures for short-term gains at the expense of long-term value. These pressures may overextend a brand to unrelated areas, which leads to brand dilution and public confusion. Or it may tempt managers to go down-market with the same brand, which depreciates it.

Firms can use umbrella branding to endorse innovations and, in turn, be endorsed by them. Consider the Apple iPod, the Apple iPhone, and the Apple iMac, for which consumers are willing to pay over a 20 percent price premium. They are much more than an MP3 player, a cell phone, or a PC. Otherwise standalone innovations per se will be easily imitated. Firms should consider investing in design as a way to distinguish their brand through aesthetics and ease of use. Nissan improved its brand ranking by emphasizing bold design rather than quality to differentiate itself from Toyota and Honda.

The Samsung brand, whose value has increased substantially and surpassed that of Sony, illustrates some of these brand-building principles. Less than a decade ago, it was a maker of lower-end consumer electronics sold under several little-known brand names including Wiseview, Tantus, and Yepp. It retrenched these brands and put all its resources behind the Samsung name. Then it focused on building a more upscale image through better quality, design, and innovation in mobile phones and digital TV product categories. Consumers form strong bonds with their cell phones, which they carry everywhere, and with their TV, which is at the center of their family room.

Global Brand Components

Managers should focus on building their brand leadership architecture, rather than chasing one identical global brand that may prove elusive. To implement this larger task, it should be broken down into its components. Each component should be designed to support the larger global branding goal. And the components must be consistent and dovetail with one another.

Managers need guidelines for where, how, and how much to invest in order to build global brands. Since brands have high, long-term value, firms should budget for brand building more than what would be justified with a short-term view. And broader global brands need more total investment than what would be justifiable with a narrow country view. However, this larger total budget should be allocated to conduct many pilot experiments across countries in order to discover what works. Once a successful theme is discovered, investment should be stepped up and it should be leveraged to multiple countries quickly.

Given how hard it is becoming to reach the consumer who increasingly selects his/her media, firms should not rely on one media, such as traditional advertising, to break through. They should invest in multiple campaigns using diverse media: the Web, entertainment event promotions, cell phones, handheld computers, and a retail presence. New growth media may be a particularly effective avenue. Procter & Gamble once used the emerging TV and radio soap opera to market its household products. And Google's ties to the rise of the Internet helped it become the most valuable brand in less than a decade since its founding.

Rather than restricting themselves to one marketing agency, managers should use multiple agencies to achieve broader reach while capitalizing on their relative strengths. They may have multiple agencies compete for creating new copy, then use one agency for execution, except in countries and media where that agency is weak, where they can bring in other agencies. When negotiating large contracts, firms should use their clout to insist on the best creative talent from an agency to work on their account.

Global Brand Managers

Responsibility for building a global brand should be given to an executive with branding and marketing experience. In some companies, an executive with this expertise can be found at the top management level. In other companies, this expertise is found at the middle-management level. Ideally, the appointed leader should have branding expertise, credibility, and contacts to put together a branding team. The members of the team should reflect expertise and perspectives from different countries, products, and marketing functions. The marketing functions represented should include marketing research, promotion, pricing, and advertising. Having such a diverse team reduces local bias and helps to attain synergies across units.

A global brand manager should be given more authority, especially if affiliates have been locally autonomous in the past in order to provide a counterbalance. The functions of the global brand manager are to make sure everyone knows what the brand stands for, what the guidelines are, and to approve any deviations from the guidelines when implementing it internationally. The global branding team should hold periodic meetings and conferences that bring together people from different units, marketing functions, and countries. These sessions should include a mix of formal presentations and informal idea sharing. The informal idea sharing develops contacts, transfers expertise, and leads to collaboration.

If managers are serious about building a brand, they need to develop metrics that measure its effectiveness, results, and value. These measures need to use a common vocabulary across markets and products so that performance can be compared and aggregated internationally. Brand equity may be measured by product performance in blind tests, consumer surveys of brand awareness and loyalty, and market distribution within and across markets. Brand value may be measured by the sum of all future earnings improvements that a brand is expected to generate, discounted to a present-day value. This discounted value is then capitalized to estimate the boost in the market value of the business over its tangible assets.

The International Brand Planning Process

These metrics form a common planning template and are part of a common international brand planning process. This planning process should conduct pilot experiments in different settings, evaluate performance, share insights, and leverage best practices across countries. The sharing of insights can be encouraged through meetings, conferences, and an intranet knowledge-sharing system. An example of international knowledge sharing occurred when Procter & Gamble developed a shampoo, Pantene Pro-V, whose branding was floundering in developed countries. But an experiment in Taiwan came up with a successful tagline—Hair so healthy that it shines! This tagline was then quickly rolled out to 70 other countries.

Building a global brand requires identifying and nurturing supportive values in the firm. Innovativeness is needed to try new marketing themes, messages, and product innovations. An appreciation for continuous improvement encourages brand refinements in an ongoing journey. A willingness to collaborate helps to share ideas so that insights can be leveraged internationally. And determination and a long-term view provide the discipline not to succumb to cutting corners because of short-term profit pressures.

Employees need to be rewarded for contributing to the brand-building effort. Rewards and recognition must be given for experimentation that leads to breakthrough ideas. Inventors may be recognized in company newsletters and given financial bonuses. Some companies track and reward in annual reviews the number of contributions made by employees to the knowledge-sharing system. Another possibility is to provide incentives and recognition to employees who share their insights and best practices at conferences and meetings.

A global branding strategy has the potential to create long-term value for the firm's stakeholders, but requires dispelling misconceptions and adopting a strategic process. Managers should not chase a single global brand, product, or marketing message. Instead, they need to distill and emphasize the essence of what their brand stands for. And they need to put in place a planning process to innovate, share insights, and leverage best practices internationally to continuously improve their brand in order to develop a global leadership position.

See Also: Advertising; Branding; Brand Loyalty; Buying Motives/Behavior; International Marketing Research; Marketing; Market Research.

Bibliography. D. A. Aaker, "Brand It or Lose It," *California Management Review* (Fall 2007); D. A. Aaker and E. Joachimsthaler, "The Lure of Global Branding," *Harvard Business Review* (November–December, 1999); David A. Aaker, *Strategic Market Management* (Wiley, 2008); Keith Dinnie, "21st-Century Perspectives on Global Brands," *Journal of Brand Management* (v.12/5, 2005); Chekitan S. Dev, James. R. Brown, and Kevin Zheng Zhou, "Global Brand Expansion: How to Select a Market Entry Strategy," *Cornell Hotel and Restaurant Administration Quarterly* (v.48,1, 2007); Hiro Minamiyama, *World Branding: Concept, Strategy and Design* (Gingko Press Inc, 2007).

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Global Capital Market

Throughout the early modern period, as communications increased in speed and effectiveness, there were attempts to make larger capital markets, with the end goal being the creation of a global capital market where money can be raised internationally, allowing for greater access by all companies to the same pool of capital regardless of where the company is located, and also free of legislative and other restrictions that apply in some parts of the world.

Historically, the raising of capital involved transactions conducted between governments and private individuals. These processes were fraught with problems for both sides, and by the late 17th century, in western Europe, there was an attempt to formalize the process. This saw the creation of the Bank of England in 1691 (incorporated in 1694), and in the early 18th century the origins of other schemes in other countries, some for city corporations, others for governments.

However with the Industrial Revolution many capitalists wanted to be able to raise capital to embark on their projects and there was no regular system of raising capital and sharing the risk. As a result with the building of the Bridgewater (or Worsley) Canal, Francis Egerton, the 2nd Duke of Bridgewater, had to take the entire risk for the venture himself, and although he did end up very wealthy, it was a move that nearly sent him bankrupt. Similarly some major capitalist ventures could come to create major crises in the countries where the vast majority of the investors lived. Two of the most extreme examples of these came from France—the attempt by the Mexican government of Benito Juarez to abrogate the debts incurred by previous Mexican governments leading to the French military intervention in the country to install Emperor Maximilian in the 1860s; and another being the Panama Canal Crisis in the 1880s when French investors lost fortunes in speculation in the shares of a company which hoped to build the Panama Canal.

20th Century

By the 20th century, there were numerous banks that were able to lend capital for industrial and other projects. This certainly helped with the needs of the vast majority of borrowers. However there were companies which invested in one country, financed by investment from another. Some of this was to do with the colonial empires, with the capital for the Malayan rubber industry in the 1900s raised in London; but there was also other examples, including the financing of the building of the Argentine railroad system, also financed in London. By the 1900s London had certainly emerged as the main capital market in the world but it was about to be challenged by New York, which started from 1919 to become the dominant center for global capital. With better communications through a regular telephone and telex service, and now with computer systems, it has been possible to link the capital markets around the world and provide, for the customer, wider options and more access to this capital, and for the lenders, a greater ability to spread the risk among capital investors, and also speculators, around the world.

As well as the global capital market which arose in the major financial centers in the world: New York, London and Paris, and later Frankfurt and Tokyo; the oil price rises of the 1970s created a new area of wealth with the availability of what came to be known as "petrodollars." This led to a number of schemes by which people claimed to have access to a more secretive "global market" with "agents" approaching governments. The most infamous was Tirath Khemlani and his dealings with the Australian government in the early 1970s. The Bank of England warned against these schemes, which profited largely through large cancellation fees which would have to be paid if the government in question wished withdraw from these—there has been no evidence of this hidden "global capital market."

The need for the global capital market became essential with increasingly larger numbers of companies having cross-listings by which their stock was quoted on a number of stock markets around the world. With the global capital market, it was possible to raise far larger sums of money than had been possible earlier, and this allowed investors and speculators to spread their risks over a wide range of capital investments all over the world.

The End of the Bretton Woods System

One of the developments that arose from this global capital market was a convergence of real interest rates around the world. This coincided with the end of the Bretton Woods system and the floating of many currencies in the 1970s, coupled with the U.S. government's suspension of the convertibility of the dollar into gold. This allowed the rates of exchange between most major currencies in the world to be set by the market, albeit with the government able to influence this through altering the exchange rates to increase or decrease demand for a currency.

As a result, if the government of a specific country sought to use macroeconomic instruments such as interest rates, and they were raised, the demand for the currency would create a rise in the value of the currency, after which the real interest rates would be comparable to those in other countries. With open markets, full and audited accounting by governments, and with the free flow of capital into and out of countries, market forces would balance the currency market forming an equilibrium. Economists defined this as the purchasing power parity theory, although similar theories had been around since the Swedish economist Gustav Cassell (1866–1945) suggested that this could become the case as early as 1916.

Speculation

If the global capital market could cope with balancing out the value of the various currencies, it was soon suggested that widespread speculation could affect the prices of the currencies allowing speculators to make (or lose) vast sums of money. This had led to the Bretton Woods system, which was a deliberate attempt by the United Kingdom, United States, and many other governments to constrain the global capital market in terms of the values of currencies, although it did not stop the two devaluations of the pound sterling to the U.S. dollar in September 1949 and November 1967.

The floating era from 1971 saw a large rise in world interest rates, largely through the rise in the price of petroleum. With the doubling of oil prices in 1978–79 after the Iranian Revolution, the effect was that the economies of North America, Western Europe, and other parts of the world went into recession. George Soros and other operators of hedge funds used the global capital market to raise large sums of money and this in turn resulted in the "Battle for Sterling" in 1992 when Soros fought the Bank of England, and later in 1997 with the Asian Economic Crisis. Since the late 1990s there has also been the increasing role of China in global capital markets, helping create a boom that led to estimates made in 2006 that the global capital market would exceed $228 trillion by 2010, although with the current crisis, this figure now seems improbable.

2008 Crisis

Thus the result of the global capital market and the spreading of risks can lead to many countries seemingly unconnected to the area at economic risk becoming affected. In 2007 with the start of serious problems in the U.S. subprime home mortgage market, the effects were felt not just by the individual lenders, and especially by Fannie Mae and Freddie Mac, but by banks and financial institutions around the world that had invested their money in Fannie Mae and Freddie Mac and suddenly found themselves exposed to the collapse of the subprime market. The crisis was triggered to a certain extent by undue offering and securitization of low-quality subprime mortgages and other lows in the United States, which were abetted by a certain extent by deregulation in the 1990s and a laxity in enforcement of regulations that continued. Stunned American legislators initiated a bailout coupled with a stream of new regulations.

Another dramatic effect in 2008 was following a crisis in the Icelandic banking system, it was revealed that vast numbers of individuals, companies, town corporations, and public organizations had invested their money in Icelandic banks because of the better returns offered, without realizing that this increased their level of risk. While there was confidence in the global capital market, there were no problems, but as soon as "panic" breaks out, there is a quick flight of capital, leaving those less able to quickly react to take potential or actual losses, and in extreme cases to lose their investments as well.

See Also: Asian Financial Crisis; Capital Flight; Currency Speculation; Foreign Direct Investment, Horizontal and Vertical; Globalization; Iceland; Mortgage Credit Crisis of 2008; Subprime Loans; Securitization; Purchasing Power Parity.

Bibliography. Joshua Aizenman and Reuven Glick, *Sterilization, Monetary Policy, and Global Financial Integration* (National Bureau of Economic Research, 2008); Marc Alvarez, *Market Data Explained: A Practical Guide to Global Capital Markets Information* (Butterworth-Heinemann, 2007); Brendan Brown, *What Drives Global Capital Flows?: Myth, Speculation and Currency Diplomacy* (Palgrave Macmillan, 2006); Barry Eichengreen, *Globalizing Capital: A History of the International Monetary System (*Princeton University Press 1996); Charles W. L. Hill, *Global Business Today* (McGraw-Hill Irwin, 2008); Michael H. Hyman, *The Power of Global Capital: New International Rules—New Global Risks* (Thomson South-Western, 2004); Michael T. Kaufman, *Soros: The Life and Times of a Messianic Billionaire* (Alfred A. Knopf, 2002); Harinder S. Kohli, *Growth and Development in Emerging Market Economies: International Private Capital Flows, Financial Markets and Globalization* (Sage, 2008); Maurice Obstfeld and Alan Taylor, *Global Capital Markets: Integration, Crisis and Growth* (Cambridge University Press, 2004); Robbie Robertson, *The Three Waves of Globalization: A History of a Developing Global Consciousness* (Zed Books, 2003); Robert Slater, *Soros: The Unauthorized Biography* (McGraw-Hill, 1997); E. Joseph Stiglitz, *Globalization and Its Discontents* (W. W. Norton, 2002); E. Joseph Stiglitz, *Making Globalization Work* (W. W. Norton, 2006).

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Global Competitiveness Index

The Global Competitiveness Index (GCI) is an aggregate measure of the set of critical factors that, as a group, determine the degree to which countries are expected to achieve levels of economic prosperity in the short and medium term. The GCI, introduced in 2004, was developed by Columbia University professor Xavier Sala-i-Martin for the World Economic Forum (WEF). The WEF, incorporated as a foundation in 1971, is a nonprofit, independent international organization based in Geneva, Switzerland. It publishes the annual competitiveness ranking of countries in its *Global Competitiveness Report* (GCR) based on the GCI. The report also includes comprehensive listings of the main strengths and weaknesses of countries, making it possible to identify critical areas in need of policy reform. While there are other similar reports published using their own competitiveness measures (e.g., Ease of Doing Business Index and the Indices of Economic Freedom), economists generally consider the WEF's index and rankings as representing the most competitiveness.

The GCI rankings are calculated from both publicly available data—such as that provided by the United Nations—and the Executive Opinion Survey (EOS). The EOS is a comprehensive annual survey conducted by the WEF, together with its network of "Partner Institutes" (leading research institutes and business organizations) in the countries covered by the GCR. The EOS is designed to measure a wide range of factors that impact a country's current and future business climate. For the 2007–08 EOS, approximately 11,000 business executives—deemed as representative leaders in their field—were polled in 131 countries. This represents the most comprehensive report to date in terms of number of countries included (the 2006–07 EOS covered 123 countries). Countries added to the 2007–08 EOS, and in turn the GCI, include Puerto Rico, Libya, Oman, Saudi Arabia, Senegal, Syria, and Uzbekistan. In addition, Serbia and Montenegro, previously analyzed as a single country, are now included separately. The theoretical-empirical model used to determine the GCI rankings incorporates over 90 variables that relate to a country's current and prospective economic profile. Two-thirds of these variables come from the EOS and the remaining one-third from publicly available sources.

Pillars and Stages

The GCI is based on 12 categories—referred to in the GCR as "pillars"—of competitiveness. These categories as a whole provide a comprehensive picture of the competitiveness landscape in countries around the world at all stages of development. These categories are Institutions, Infrastructure, Macroeconomic Stability, Health and Primary Education, Higher Education and Training, Goods Market Efficiency, Labor Market Efficiency, Financial Market Sophistication, Technological Readiness, Market Size, Business Sophistication, and Innovation. Certain categories are more important than others within different countries in determining their degree of competitiveness. For example, what generates productivity in Denmark significantly differs from what drives it in Cameroon. This is because the two countries are in different stages of economic development. Accordingly, the GCI separates countries into three specific economic stages according to per capita income. These stages—designated "factor-driven," "efficiency-driven," and "innovation-driven"—reflect a growing measure of complexity with regard to how a country's particular economy operates.

In the factor-driven stage, countries compete based on their factor endowments, which are mainly unskilled labor and natural resources. Companies compete on the basis of prices of basic products or commodities and low productivity is accompanied by low wages. At this stage of development, competitiveness depends on a country having decent public and private institutions, acceptable infrastructure, a strong macroeconomic framework and good healthcare and basic education for its population.

As wages rise with growing development, countries move into the efficiency-driven stage of development. In this stage, they must begin to develop more efficient production processes and increase the quality of products they already make. At this point, competitiveness becomes increasingly driven by higher education and training, efficient markets, and the ability to harness the benefits of existing (or impacted) technologies. As countries eventually begin to compete through innovation, they are only able to support higher wages and a higher standard of living if their businesses are able to compete through product innovation as well as novel productivity-enhancing innovations.

Depending on which stage a country is in, the GCI for that country is calculated by giving greater weights to the more relevant pillars. The weights used are the values that best explain growth in recent years. For example, the sophistication and innovation factors contribute 10 percent to the final score in factor and efficiency-driven economies, but 30 percent in innovation-driven economies (values between 10 percent and 30 percent are applied for those economies in transition between stages).

GPI for 2007–08

The United States heads the GCI ranking for 2007–08. The GCR attributes this to its competitive economy, efficiency of its markets, sophistication of its business community, capacity for technological innovation, and its high-quality system of universities and research centers. Despite this ranking, the GCR notes that the United States has serious weaknesses in its macroeconomic structure as evidenced by the sub-prime mortgage crisis and the resulting credit crunch and shocks to the stock market. These problems can pose a risk to the country's future overall competitive potential.

Switzerland and the Scandinavian countries of Denmark and Sweden follow the United States in the GPI ranking. The major European economies—Germany, United Kingdom (UK), and France—rank 5th, 9th, and 15th, respectively. While Germany moved up in the rankings compared to 2006–07, both the UK and France fell, suggesting that the United States has been moving ahead of western Europe in terms of overall competitiveness.

Estonia ranks the highest in eastern Europe (27th), followed by the Czech Republic (33rd). Hungry and Poland rank 44th and 48th, respectively. A number of important eastern European economies have seen their 2006–07 standing erode, including the Czech Republic, Hungary, and Poland, indicating a loss of competitiveness in this region. However, the Baltic region has continued to progress competitively. Estonia, Lithuania, and Latvia have all advanced in their GCI rankings, reflecting their growing integration into the western European economy.

Within Latin America, Chile (26th) ranks the highest. The rest of Latin America trails far behind and, for the most part, in the bottom half of all countries in competitiveness. The highest ranking Latin American countries in terms of competitiveness after Chile are Mexico (52nd), Costa Rica (63rd), El Salvador (67th), Colombia (69th), Brazil (72nd), and Uruguay (75th). Venezuela's competitiveness slipped from 85th in 2006–07 to 90th in 2007–08, testifying to that country's continuing and deep-seated economic and political problems. Within Asia, China (34th) and India (45th) continue to lead the way among large developing economies. However, both countries slipped competitively from their 2006–07 rankings. Indonesia at 54th place also remains formidable as a competitive force in the region. Several countries in the Middle East and North Africa are in the upper half of the rankings. Israel (17th) remains the dominant competitive economy in the region. The remaining countries, while ranking far lower than Israel, still reside comfortably in the top third of all GCI countries, including Kuwait (30th), Qatar (31st), Tunisia (32nd), Saudi Arabia (35th), and the United Arab Emirates (37th). In sub-Saharan Africa, only South Africa and Mauritius stand in the top half of the rankings, with several countries from the region positioned at the very bottom of the GCI, reflecting the persistent economic troubles and political and social dislocations that hinder the region's global competitiveness.

See Also: Competition; Economic Indicators; Economies of Scale; Globalization Index; Productivity.

Bibliography. Robert Albritton, *Political Economy and Global Capitalism: The 21st Century, Present and Future* (Anthem Press, 2007); European Commission, *European Competitiveness Report: Staff Working Document* (Office for Official Publications of the European Communities, 2002); Sanford L. Moskowitz, *The Advanced Materials Revolution: Technology and Economic Growth in the Age of Globalization* (John Wiley & Sons, 2009); Michael Porter, *The Competitive Advantage of Nations* (Free Press, 1991); Brian Snowdon, *Globalisation, Development and Transition: Conversations with Eminent Economists* (Edward Elgar, 2007); Richard H. K. Vietor, *How Countries Compete: Strategy, Structure, and Government in the Global Economy* (Harvard Business School Press, 2007).

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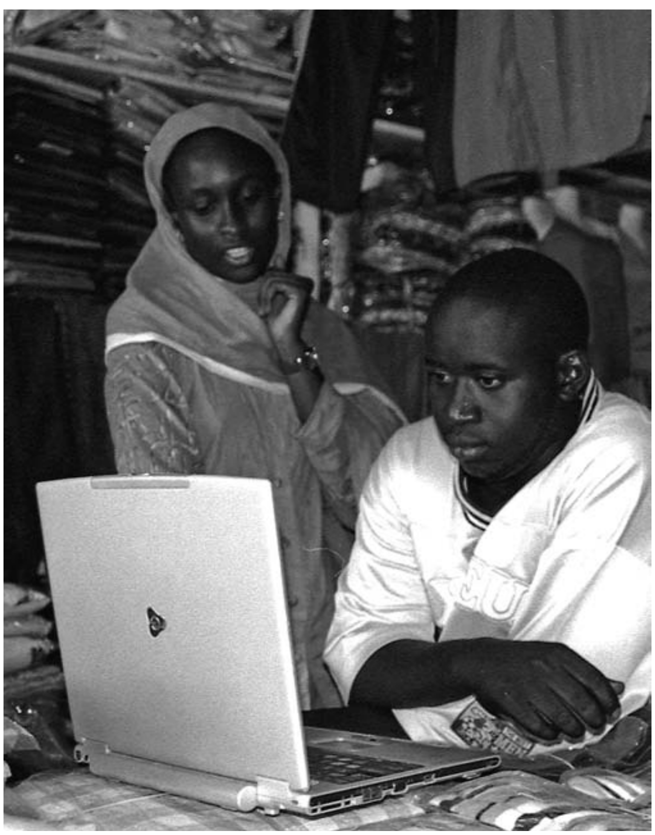
Global Digital Divide

The global digital divide refers to differences in Internet and other telecommunications access and usage across countries. The global digital divide encompasses two concepts. First, there is a divide in access and usage across definable groups within countries, and second, there is a divide in access and usage across countries themselves.

Individual country statistics routinely show an intra-country digital divide. In a Pew Internet and American Life study and nearly all the countries surveyed in a 2008 OECD study, Internet use within OECD countries decreases with the age of the user, increases with the education of the user, and increases with the income of the user. Globally, households with children are more likely to use the Internet and urban/suburban users more likely to have access than rural users. And in many countries men access the Internet more than women. This same study also found that Internet access varies with firm size. Larger firms (firms with more than 100 employees) are twice as likely to have Internet access than smaller firms.

According to Internet World Stats, the latest number of world Internet users in 2008 is 1.5 billion, which represent 21.9 percent of the world population. According to recent studies, there are several major contributors to the inter-country, or global, digital divide among these users including differences in income, literacy, infrastructure, and the regulatory climate. As expected, the lower income developing countries have lower access to the Internet. In these same countries, illiteracy also complicates Internet usage. When the Internet is accessed, users must share a very low bandwidth. As a result, text-based Internet pages are the most likely to be successfully accessed. The irony is that these pages often cannot be read because of low literacy levels and translation difficulties. These users are deprived of the audio and video components of the Web that would be most beneficial to them due to low bandwidth. In 2004 a single user in Japan has access to more bandwidth than the 45 countries with the lowest bandwidth *combined*.



This clothing merchant in Dakar, Senegal, was learning how to use a laptop in his business in 2005.

The focus of reducing the global digital divide has changed over time from expanding landlines to increasing dial-up access to expanding broadband via fiber optic cables. In OECD countries, broadband subscribers increased by 11 times 2000–06. Expanding broadband into developing countries is still a prominent interest of telecommunications companies and governments. A variety of public and private telecommunication structures has developed connecting to one vast network. Public policy analysts fear that monopoly pricing and limited access by private firms will continue to isolate vast geographical areas. One OECD study suggests that the solution to the global digital divide is through liberalizing telecommunications markets while keeping a sound regulatory framework.

Studies of the global digital divide often focus on both Internet access and PC availability. Moves to expand laptop and PC availability to developing third world countries will help increase access to broadband and reduce the global digital divide. However, the popularity of mobile communications in developing countries may suggest that satellite technology is the medium of the future. Mobile phones are less expensive for developing country citizens and providing access is cheaper for firms than building or repairing landline infrastructure. It is therefore easier to use satellite transmission to extend access in these areas. A Nielson report in July 2008 finds that while the United States leads in overall mobile Internet usage (of total users), other nations, such as Russia, Brazil, and India, are now using mobile devices as the primary mechanism for getting online.

Closing the global digital divide requires coordination via companies that produce the broadband and satellite access, telcos and ISPs that provide the access to the consumers, and governments. Provision of access alone will not close the divide. The price of that access for the consumers, their income, their literacy level, and their willingness to learn new technologies are also factors. Continuous technological improvement and competitive markets reduce the price of access. There are many groups seeking to reduce the other burdens of access and provide the tools necessary to equalize access to these markets, such as funds and equipment, accords between governments, and cooperation between private companies.

See Also: Economic Development; Information Systems; Infrastructure.

Bibliography. Menzie D. Chinn and Robert W. Fairlie. "The Determinants of the Global Digital Divide: A Cross-Country Analysis of Computer and Internet Penetration," *Oxford Economic Papers* (v.59, 2007); Internet World Stats, www.internetworldstats.com (cited March 2009); OECD, "Internet Address Space: Economic Considerations in the Management of IPv4 and in the Deployment of IPv6," www.oecd.org (cited March 2009); OECD, "Regulatory Reform as a Tool for Bridging the Digital Divide," www.oecd.org (cited March 2009); OECD, "Understanding the Digital Divide," www.oecd.org (cited March 2009); *Pew Internet & American Life Project, October 24–December 2, 2007 Tracking Survey*, www.pewinternet.org (cited March 2009).

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Globalization

Globalization is the ever-increasing process of integration of local and regional markets into one unitary market of products, services and capital. The main results of this process have been an increase in the interdependence of traditionally national markets on the macroeconomic level and the internationalization of corporate processes, especially production, distribution, and marketing, as well as the adoption of international business strategies on the microeconomic level.

Development

Economists recognize the early signs of globalization in historical phenomena, such as the increased economic activity in the Age of Discovery in the 16th and 17th centuries, which led to the founding of the British and Dutch east India companies; and the new economic opportunities enabled by the scientific discoveries of the 18th and 19th centuries, followed by the 20th century's breaking ground on the Information Age.

The World Bank identifies three waves of globalization, which happened between 1870 and the 21st century. The origins of the process are attributed to the falling costs of transport and the lowering of the politically-driven trade barriers. Trade in commodities developed into trade in manufactured goods. Initially land intensive production became labor intensive. Mass migrations for work became an everyday phenomenon, traveling becoming easier with the development of the more advanced transport technologies. The telegraph allowed more distant countries to benefit from the capital available on the stock exchanges, as stock exchange institutions were brought to new locations, contributing to the growth of financial markets.

Two world wars blocked international trade as individual countries turned protectionist. The situation persisted up till the 1980s, by which time the international exchange between the developed countries was largely freed from the barriers, leaving the developing world outside of the free trade market. It was during the second phase of globalization, when the countries started to specialize in production and the businesses started to function around agglomerations and clusters, that economies of scale started to matter.

A discussion on the wealth inequality and the rising poverty in the developing countries started, resulting in the postulates to allow all the nations to participate in the benefit of a free trade. Interestingly enough, the inequalities of the early globalization era in the 19th century were largely related to the ownership of the land, crucial both for the commodity trade and for the manufactures. However, the inequalities during the second phase of globalization showed a more systemic nature, being driven by the protectionist policies of the developed world.

The third wave of globalization brings the "death of distance" in a traditional geographical sense. It does not matter any more whether the whole business process is situated at the same location, as the service and non-core functions, thanks to communication technologies, can be successfully performed even on different continents.

The third wave of globalization created off-shoring locations in central and eastern Europe and the new, previously developing, economic empires of India and China. Although some of the former developing countries broke their way to the free market and compete successfully for the investments, others remained marginalized and are becoming even more excluded from the benefits of the world economic growth, than ever before. One of the most striking examples of poverty levels and inequality are in the region of sub-Saharan Africa.

Features

The relationship between economic, social, political and cultural aspects of globalization is visible in the main determinants of globalization, which can be attributed to various spheres of human activity. They include but are not limited to

- digitization, which enables easy distribution of data, information and knowledge paired with a parallel advancement and accessibility of communication channels, especially the Internet;
- development and internationalization of mass media, which creates certain convergence of consumer patterns (e.g., mass accessibility of TV such as MTV makes the icons of contemporary pop culture such as McDonald's or Barbie the symbols of capitalist world, which developing societies demand, aspiring to the Western style of life; moreover increasing capital consolidation in the sector of media enables the formation of media empires, like Rupert Murdoch's, which allow a relatively small group of opinion-makers to influence whole societies);
- increasing cross-border and overseas migration trends, caused by people's urge to improve their lives and economic standing;
- longing for freedom in those countries, which suffer internal oppression either from the ruling class or from any other form of political or economic regime; this enables the democratization political systems and in consequence the introduction of economic liberalization and popularization of the free market philosophy (e.g., the spectacular transformation of central and eastern Europe countries from centrally planned economies to the free market);
- advancing skills of global management allowing entrepreneurs to operate in the wider geographical scale (a new category of companies, called transnational corporations, is both a consequence of globalization processes and a response to increasingly tighter competition, stimulating global dispersion of corporate influence, management methods, production patterns and technologies);
- convergence of various economic orders toward a free market and liberal economy and, in consequence, a creation of the unified economic model—the only acceptable economic philosophy;
- technological advancement and dynamics of innovations with their net effects such as a quicker use up of limited Earth resources; this in consequence creates new organizational behavior patterns (i.e., business sustainability, where business models are created on the basis of energy savings and social responsibility);
- new rules of international labor division and, in consequence, creation of geographical competence centers (e.g., information technology [IT] services in India);
- centralization of purchasing by global clients and the economy of scale, which is a direct motivation for global expansion (unit production costs are significantly decreasing with a growing share of B&R, marketing and promotion costs in a total cost of production);
- standardization of production and services being a consequence of adopting certain strategies on the global market (a classical example of such standardization is presented by the quality measurement norms—series ISO—certified by independent bodies such as TUV; getting a certificate, which is determined by adopting

standard procedures in the organization, often determines whether the company can obtain good contracts as the big companies with large international networks of suppliers and distributors often select partners for co-operation on the basis of quality certificates possessed);

- less restrictive trade tariffs;
- strategies adopted by transnational corporations, which aim at gaining more competitiveness on a wider market and which change the rules of labor division as well as internationalization of production process as a result of the complex network of relations between corporate branches in many countries.

Strategy

Among the strategic decisions of enterprises, two have significant gravity in terms of their ability to force further globalization. First, mergers and acquisitions that contribute to enlargement of organizations per se. Second, off-shoring, or locating some business functions and processes in countries that offer cost reductions without compromising on the quality of the service.

Enterprises forced to compete in a tighter and more challenging market seek strategic assets, which are often purchased through takeovers of other companies or through various forms of mergers. Increased mergers and acquisitions activity can be characterized not only by an increased volume of transactions, but also by its significant dynamics (measured by scale of change as compared to the previous year). It is one of the main stimulators of globalization and a response to more demanding and challenging conditions for competition (companies are looking for foreign markets, which are often less saturated than those of the enterprises' origin, however, as foreign markets accept more players and in due course become a global market, entrepreneurs must compete through taking over the strategic assets). In 2006 the value of assets acquired by purchase or through takeovers reached $88.5 billion globally in almost 7,000 transactions.

Off-shoring (or near-shoring in the case of locating operations in the countries in a close proximity to the home country) is a strategic trend stimulating foreign direct investments. Enterprises are largely driven by a paradigm of cost reductions these days. They can achieve it by locating their service functions and non-core activities in the countries that offer significantly lower labor costs and a decent level of skills at the same time. Key criteria used in making such decisions are: local economic and political stability, infrastructure, labor market and the level of education, language attainment, and the real estate market. A typical off-shored operation includes call centers and shared services centers, hosting mostly the IT, administration and accounting functions. As such investments bring many new jobs, they contribute to the growth of local economies.

The most competitive locations, in terms of labor costs and overall investment climate, attract great numbers of investments and as the local market saturates, wages start to increase in a natural way—stimulated by the demand-supply situation. At the same time, local governments tend to encourage the investments in the more complex and sophisticated processes to benefit from a transfer of knowledge and perhaps technologies as well. More sophisticated jobs require higher wages and as the local markets develop toward maturity, as the hosts for off-shoring operations, enterprises move on to the new, less-saturated locations, where they can benefit from the lower costs again. This specific form of colonization is also a part of the globalization loop, where transnational corporations are the reason and the result of the process at the same time.

Last but not least, a change in the very nature of competition remains to be mentioned as a key driver of globalization. Geographic regions compete for resources, for example for the capital and external financing opportunities on the global market. Together with liberalization of capital transfers, new opportunities for obtaining external financing for the projects became available. Companies do not need to apply to banks anymore; they can raise the capital directly on the market, for example through the emission of stock. This phenomena changed the core role of the banks as the sole capital providers. Banking institutions now need to diversify their activity in order to stay competitive. Regions also compete for the investments, specifically foreign direct investments (FDIs), which bring new technologies and jobs.

Globalization should be analyzed in the macroeconomic context—as an aggregated phenomena taking place in the global scale, and in its microeconomic context—at the level of individual enterprises, adopting certain development strategies and making strategic decisions (e.g., locating elements of a value chain in the countries with local advantages or centralizing them in one location).

Economic globalization stimulates a significant institutional evolution. Global institutions are set up to manage certain aspects of activity in the global marketplace. They are equipped with both political and economic tools to control and influence the global market players. The most important include the World Bank, International Monetary Fund, and World Trade Organization.

Commodity, Financial, and Labor Markets

Globalization of various types of markets, i.e. products, services, or financial markets can be characterized by various scale and dynamics, although most clearly it can be observed on the financial markets. It is stimulated by the huge scale of capital being transferred worldwide through the rapidly growing intermediary institutions, e.g., investment funds. The transfer most often happens in virtual terms only, with the use of electronic money and a variety of new financial instruments. For that reason financial markets operate in a fairly autonomic way, relatively independently from the real sphere.

Independence from the real sphere coupled with the inter-relatedness of the whole financial system globally carries the risk of the "domino" effect. A domino effect occurs when dangerous economic trends, such as financial system crises, transfer from one market to another, infecting them. The reason for this is a high sensitivity of the local markets toward the changes in direction of capital flows and a high level of interrelatedness of the whole system.

It is worth noticing that although financial globalization is caused by an increase in the volume of world trade, financial markets globalize much quicker than the market of products. Moreover, the phenomena of financial markets leadership over the market of commodities can be observed in the relation of foreign direct investments toward export. Foreign direct investments show much higher dynamics than the trade volumes.

There are also significant differences in the pace and dynamics of foreign direct investments regionally. To an extent, it is a good measure of the share in the globalization process that respective countries have. For example, there was significant growth of foreign direct investment volume globally in the beginning of the 1970s. However, a change of FDI numbers in the European Union (EU) countries was more dynamic than its overall global trend. A closer look at foreign direct investments trends by region reveals the decreasing attractiveness of the United States and Japan as targeted FDI locations for the benefit of the emerging markets of central and eastern Europe and the former Soviet Union.

The EU countries, both EU-15 and the EU after enlargement, have significant share in world foreign direct investments volume. Although investments in the EU-15 countries, as well as in central and eastern Europe are quite dynamic, the CIS countries (the Commonwealth of Independent States) have recently become more and more attractive for investors (this applies especially to Ukraine and Belarus, although both countries are known to be difficult to navigate because of bureaucracy and low transparency). It is expected, though, that business attention will be naturally drawn to this part of the world, with the maturity of the currently attractive CEE markets getting more advanced and their labor costs increasing as a natural consequence of economic prosperity.

Data from the individual countries provides further information. Within the EU-15 countries, which overtake the United States and Japan by the total volume of FDIs attracted, individually only France and Germany show FDI growth significant enough to be considered a driving force for the whole EU. In the CEE and CIS regions, a similar role is played by Poland, the Czech Republic, and Russia.

Financial Markets

Among the reasons for the globalization of financial markets is the fact that more countries guarantee the exchange of currency (as a result of liberalization of the capital trade) and have deregulated their financial sectors (for example through the cancellation of interest rate limits and opening of the domestic financial sector to foreign capital). This, among other reasons, is happening because of the technological advancement, which on one hand, allows doing transactions on a wide geographical scale and in the real time, while on the other hand, makes them difficult to control, mainly due to the very liquid nature of money.

The fact that there are no significant transport costs related to the trade with use of electronic money, is not unimportant.

Liberalization of capital flows may pose a substantial threat for the stabilization of domestic, local economies, for example a risk of spread of financial crisis, as already mentioned before. The scale of those threats is subject to a wider discussion on the pace and degree of opening the local, national markets for international capital. Economists seem to agree that a high quality of local financial system, determined, among other things, by the existence of effective institutions and measures of the bank governance, is fundamental for this process to be safe for the local economies.

The scale of globalization within countries or regions can be measured in a few ways. For example, the freedom of financial transfers, related to a possibility of investing on the foreign markets, is measured by the Investment Freedom Index, which is a part of a wider Economic Freedom Index. It illustrates how regions differ in globalizing their economies. The majority of the EU countries saw the Index increasing in the last decade, contributing to the overall growth of investment freedom in the EU, which is now at a similar level to the United States. However, global investment freedom decreased in the last decade, mainly because of the situation in countries such as Bolivia, Burma, China, Ecuador, Nigeria, Venezuela, and Zimbabwe. In the central and eastern European countries, the Investment Freedom Index shows a tendency to grow. The wider measure of the Economic Freedom Index is growing on the global scale (5.52 percent in the last 10 years). The main driving forces behind this growth are: growing fiscal and monetary freedom, the freedom of trade, and the decrease in state interventionism.

The markets of commodities and services are the second important sphere where globalization processes can be observed. Globalization in those markets is stimulated by the common membership of countries in the WTO (World Trade Organization), which ensures that liberal rules are adopted by its members in the trade exchange.

The Trade Freedom Index, which measures globalization of the markets of commodities and services, is increasing, showing growth of 22.16 percent in the last decade globally, 11.14 percent in the EU-15 countries and 21.24 percent in the central and eastern European countries and the Commonwealth of Independent States. It decreased only in Japan (–1.23 percent).

The labor market is not immune to globalization, however, it subdues to the process more slowly, although mobility of a labor force is a significant factor in internationalization of domestic economies. It is easily observed in the trans-national corporations, where higher management is characterized by significant mobility.

The freedom to work on the different international markets and the freedom to employ international staff, measured by the Labor Freedom Index, has grown globally only by 0.36 percent since 1997. In some cases such as Finland, Germany, and the United States, it actually decreased (–10.47 percent, –8.78 percent, and –0.85 percent, respectively).

Globalization can be measured by indexes specially constructed for the purpose, such as the KOF Index. Economic globalization, one part of the index, is measured by the scale of financial transfers, which include trade volumes, foreign direct investments, portfolio investments, and wages paid to foreign employees—all as a percentage of gross domestic product (GDP) of a country, and by the scale of restrictions such as tariffs, hidden import barriers, taxes, and import duties. Financial transfers and trade barriers are getting more flexible and loose, leading to growing index values. Economic globalization can be therefore considered to be an ongoing and constantly developing process.

Effects

A single interpretation of globalization would be difficult to offer. The complexity of the process with its net effects is visible in a simple analysis of its benefits and costs. Positive results of globalization may include

- easier participation in international trade and exchange, which enables an export driven economic growth;
- wide access to information and knowledge sharing, which decreases the isolation of whole societies and individuals;
- deconstruction of national monopolies, through new market entries and the enrichment of local economies with new technologies.

On the other side, it is difficult to ignore the costs of globalization, such as

- increasing divergence between the high-income and the low-income countries (the GINI coefficient, measuring inequality in income distribution and/or expense, confirms that the rich countries become even richer, while the poor ones face being marginalized);
- lack of solutions to global poverty and no guarantees for economic stabilization (the number of people living on less than $1 per day is constantly increasing);
- negative social effects related to migrations, e.g., ethnical conflicts and solidifying differences in the economic standing and social status of the immigrants.

One of the obvious aspects of globalization is a deconstruction of the traditional, geographical structure. The distinction between the European Union, the Americas, and Africa, seems to be less significant now, as from the economic perspective, the countries that show the highest participation in globalization come from various countries, e.g., Argentina, Bangladesh, Brazil, China, Columbia, Costa Rica, and India.

Last, but certainly not least, ethical and theoretical doubts cannot be ignored. Noam Chomsky points to the report of Goodland and Dale—the World Bank economists—who discussed the fact that globalization changes the market architecture as understood in conventional economic theory. Individual enterprises, compared to islands in the ocean of the market, where none of them have enough power to influence demand and supply and therefore the price, are growing bigger because of the international expansion and a growth in transactions done within the same organizations (e.g., capital groups, subsidiaries, etc.). Those enterprises resemble continents more than islands. This changes the nature of transactions on the market, which effectively become similar to those that are centrally managed, mainly due to the fact that expanding enterprises are interconnected through complicated international capital structures. Often, a majority of transactions happen within the same capital group or in effect within the same company, operating in the various markets and continents. Market consolidation and an ongoing concentration of capital, together with creation of the huge capital groups, makes governance one of the key problems of contemporary management.

Shrinking of the business environment, caused by the common participation of countries in the trade, based on the liberal rules of capital transfer, paradoxically makes the market tighter and more demanding in terms of competition. Due to the existence of the global market with less and less restrictive rules for economic activity, the distance between the market players is diminishing, which becomes a reason for growing tensions and conflicts.

Paradoxically, what has been overlooked is that the conditions are not those of a “free market” anymore, and despite that many still pursue the liberal philosophy. Joseph Stiglitz describes the hypocrisy and systemic imperfections of the international institutions such as the International Monetary Fund, the World Trade Organization, or the World Bank. They were expected to improve the standing of the developing countries and de facto, in many cases, they caused a negative result (e.g., increasing poverty, the unsolved problem of wealth distribution).

The distribution problem, according to Joseph Stiglitz, is related to the representation rules and a structure of power in the international institutions—there can be no just distribution if the only interest groups represented are those from the commercial, business, and financial environments, while the consumers and taxpayers are largely marginalized. According to Joseph Stiglitz, the institutional background of globalization became the seed of destruction, as the original ideas behind the creation of those institutions and the logic of Keynesian economy were already abandoned in the 1970s.

A theoretical discussion, related to the changing conditions for economic activity, focuses around the paradigm of the “new economy.” The notion was coined in the context of attempts to explain the reasons for the long-term growth in the United States in the 1990s. It describes the economy characterized by massive technology advancement and a development of communication and information techniques enabling the growth of labor productivity. The net result of those factors combined together is a noninflationary growth of wages with a parallel stabilization or even a fall of unemployment (due to the quick pace of creation of new jobs in new areas of production).

Accepting the new conditions for economic activity provokes a natural question of whether the traditional economy has tools enabling a proper description of a new reality. Moreover the question remains, whether it is true that the economic laws are unchangeable and only technologies become new. Perhaps the observed changes in economy demand a brand new theory, which could describe and explain them. The key problems of the new economy include the specifics of new products on the market and so-called network effects. The products of information technology generate benefits proportionally to the number of users. This means that once a given product wins its position on the market, demand for competing products will start to weaken.

The issue of the usefulness of the "invisible hand" paradigm remains also to be determined. The fact that it treats employees' creativity as an exogenous variable does not seem adequate under the conditions of the new, knowledge-based economy, where the share of the knowledge employees create is getting bigger and bigger. Under such circumstances, the paradigm of creative destruction seems to prevail.

The main question related to the new economy, however, is the character and persistence of a positive combination of macroeconomic factors. It seems that in the view of current slowdown of the American economy and the continuously strong economic growth of the central and eastern European countries, the question remains especially valid.

Socio-Cultural Aspects

Cultural globalization is often defined as a homogenization of the norms, standards, and behavioral patterns resulting from consumerism and the influence of American pop culture. It is characterized by three features: it is technologically driven, it is empowered by economic liberalization and the opportunities for international exchange created by free trade, and to a large extent it is dominated by the United States.

It seems that two industries are specifically responsible for the international transfer of behavior patterns and other cultural artifacts: the music industry and film industry. Music became a forerunner of globalization due to its unique ability to be understood without translation—when free trade was still a long way off in the communist countries with centrally planned economies, young people were already imagining Western lifestyles because of music broadcasts from foreign radio stations. Second, the film industry started to increase its output, influencing the public initially through cinemas, then through more and more sophisticated communication channels, i.e., television, cable, and satellite broadcasts, and recently through the Internet. When paired with sociologically underpinned aspirations of people—having one's own television set or a satellite dish is a sign of prestige and better economic standing—broadcasting forms a powerful platform for influencing a wide international audience.

The critics of globalization per se point to the fact that cultural homogenization destroys national identities. Moreover, global culture is accused of being mainly consumption driven. The key question in the current debate over cultural globalization is whether it carries a common, global set of values and what might they might be. One of the concepts proposes democracy as a universal, globally demanded standard, built upon longings for freedom, which can be considered a truly common value. The spread of democracy to countries originally under heavy state control and various forms of oppression, such as communism, is often mentioned as a positive outcome of globalization.

See Also: Acquisitions, Takeovers, and Mergers; Antiglobalization Movement; Corporate Social Responsibility; Democratic Globalization; Deregulation; Emerging Markets; Financial Market Regulation; Foreign Direct Investment, Horizontal and Vertical; Free Trade; Gini Index; Global Capital Market; Globalization Index; International Monetary Fund; Tariff; Trade Barriers; Trade Liberalization.

Bibliography. Noam Chomsky, *The Prosperous Few and the Restless Many* (Odonian Press, 2002); A. Drexer, "Does Globalization Affect Growth? Empirical Evidence from a New Index," *Applied Economics* (v.38/10, 2006); Yehuda Hayuth, "Globalisation and the Port-Urban Interface: Conflicts and Opportunities," *Ports, Cities, and Global Supply Chains* (2007); Andrew Herod, *Geographies of Globalization: A Critical Introduction* (Wiley-Blackwell, 2009); John S. Hill, *International Business: Managing Globalization* (Sage, 2009); *Globalization and the State Trade Agreements, Inequality, the Environment, Financial Globalization, International Law and Vulnerabilities* (Palgrave Macmillan, 2009); *Globalization: A Reader* (Routledge, 2009); Karl Moore and David Lewis, *The Origins of Globalization* (Routledge, 2009); Joseph S. Szyliowicz, "Globalization and Transportation Security," Handbook of Transportation Policy and Administration (CRC, 2007); Organisation for

Economic Co-operation and Development, *OECD Factbook 2007, Economic, Environmental and Social Statistics* (OECD, 2007); J. Stiglitz, *The Roaring Nineties* (Penguin Books, 2003).

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Globalization Index

According to the *Oxford English Dictionary*, the use of the term *globalization* emerged in an article in the October 5, 1962, issue of *The Spectator.* However, it was not until the early 1980s that the term began to take shape within academia. Since then, the term *globalization* has been considered the most quoted, mentioned, and used term in world history so far. The term *globalization* encompasses a range of social, political, and economic changes. Some disciplines including anthropology and sociology focus on cultural changes of growing interconnectedness and the increasing ease of travel. Some disciplines such as political science examine the role of international political institutions like the United Nations and the increasing power of transnational corporations. Other disciplines such as economics track the exchange of finances, goods, and services through expanding global markets.

Theodore Levitt defines globalization as a powerful force driving the world toward a converging commonality. Sociologist Anthony Giddens defines globalization as a decoupling of space and time, emphasizing that with instantaneous communications, knowledge and culture can be shared around the world simultaneously. As one of the most well-known economists and pioneers of globalization, Jagdish Bhagwati claims that globalization is very often used to refer to economic globalization, that is, integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and technology via reductions in the barriers to trade, and increased capital flows, stimulated foreign direct investment, technology and knowledge transfer.

World explorations in the 16th century linked continents, economies, and cultures as never before, and that led to a big expansion in international trade and investment throughout the late 19th century. However, Kevin O'Rourke and Jeffrey Williamson demonstrated that there is little evidence of global integration of commodity markets before the early 19th century by utilizing data on commodity price convergence. Their evidence shows that the first wave of globalization began in 1820 rather than the 16th century and it was the period from about 1870 up until World War I that witnessed the most impressive period of globalization.

Then, for Brian Snowdon, the first age of globalization came to an end in 1914 with the beginning of the first world war, and the first age of globalization went into sharp reversal during the 1914–50 period as it collapsed during the gold standard crisis in the late 1920s, the Great Depression in the early 1930s, and World War II between the years of 1939 and 1945. The world economy deglobalized as the world's economies became more protectionist. This was the period when "great reversals" in globalization took place in the goods, financial, and labor markets. Until the end of World War II there were no discussions regarding development with the process of globalization, and it has taken over 50 years to rebuild the global economic system. Finally, the second phase of globalization started in the 1950s, developed with the establishment of the international organizations with the Bretton Woods agreements in 1944, such as the General Agreement on Tariffs and Trade (GATT), World Bank, International Monetary Fund (IMF), World Trade Organization (WTO), and continues today with the liberalization activities in financial markets, international trade, foreign direct investment, and with the innovations in technology and the knowledge economy.

Measurements

The most well-known index for globalization is the KOF index. The KOF Index of Globalization was introduced in 2002 by the KOF Swiss Economic Institute and the index was published by Axel Dreher and his team. The overall index measures the economic, social, and political dimensions of globalization. Now data is available on a yearly basis for 122 countries, and the 2007 index introduces an updated version of the original index. In constructing the indices of globalization, the variables are transformed to an index on a scale of 1 to 100, where 100 is the maximum value for a specific variable over the periods and 1 is the minimum value. Higher values denote greater globalization. According to the index, the world's most globalized countries are Belgium, Austria, Sweden, the United Kingdom, and the Netherlands. The least globalized countries are Haiti, Myanmar, the Central African Republic, and Burundi.

Another very popular measure of globalization is the joint publication of A. T. Kearney Foreign Policy Magazine Index (KFP). The KFP aims to provide a comprehensive measure of the extent of globalization across the world by assessing and ranking 62 countries, representing all the major regions that account for 96 percent of the world's gross domestic product (GDP), and 85 percent of the world's population. The KFP index concentrates on four main dimensions of globalization: economic integration, technological connectivity, personal contact, and political engagement. According to the KFP Index, in 2006, Singapore, Ireland, Switzerland, the United States, the Netherlands, Canada, and Denmark were the most globalized countries, while Egypt, Indonesia, India, and Iran were the least globalized countries in the list.

Key Players

Antiglobalization (mundialism) is a term used to describe the political, economic, and sociological stance of people, groups, and organizations who oppose the neoliberal ideology of globalization. Some antiglobalization groups and organizations are the International Institute for Sustainable Development; the International Forum on Globalization; Greenpeace; the World Wide Fund for Nature; Oxfam; Friends of the Earth International; the Center for International Environmental Law; Public Citizen; Consumers International; the World Conservation Union; Focus on the Global South; One World; the Third World Network; the International Center for Trade and Sustainable Development; and the Center for Research on Globalization. Some antiglobalization individuals are Naomi Klein, George Monbiot, Martin Khor, Mary Robinson, Joseph Stiglitz, Noam Chomsky, Dani Rodrik, and John Ralston Saul.

Pro-globalism (globalism) is a term used to describe the political, economic, and sociological stance of people, groups, and organizations who defend the neoliberal ideology of globalization, such as free trade, economic freedom, libertarianism, and democratic globalization. Some pro-globalization groups and organizations are the International Policy Network; Sustainable Development Network; the Competitive Enterprise Institute; the Cato Institute; the Institute of Public Affairs; the American Enterprise Institute for Public Policy Research; World Growth; the Heritage Foundation; WTO; IMF; World Bank; and the Organisation for Economic Co-operation and Development (OECD). Some pro-globalization individuals are Johan Norberg, Douglas A. Irwin, Jeffrey Sachs, Jagdish Bhagwati, Martin Wolf, Philippe Legrain, and Mike Moore.

See Also: Antiglobalization; Economic Indicators; Economic Liberalization; Free Trade; Globalization.

Bibliography. Jagdish Bhagwati, *In Defence of Globalization* (Oxford University Press, 2004); Axel Dreher, N. Gaston, and P. Martens, *Measuring Globalization: Gauging Its Consequences* (Springer, 2001); Harold James, *The End of Globalisation: Lessons from the Great Depression* (Harvard University Press, 2001); Theodora Levitt, "The Globalization of Markets," *Harvard Business Review* (May–June 1983); Kevin O'Rourke and Jeffrey Williamson, "Once More: When Did Globalisation Begin?" *European Review of Economic History* (April 2004); Kevin O'Rourke and Jeffrey Williamson, "When Did Globalisation Begin?" *European Review of Economic History* (June 2002); Brian Snowdon, *Globalisation, Development and Transition* (Edward Elgar, 2007); Peter Temin, "Globalisation," *Oxford Review of Economic Policy* (December 1999); "The Globalization Index," *Foreign Policy* (v.157, 2006).

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Global Leadership and Organizational Behavior Effectiveness Project

A key approach to understanding culture in international management has been to study work-related values as expressed through national culture (a national culture approach assumes that members of a nation share a common ancestry and identity, thereby establishing the basis for a shared culture). Initiated by Robert J. House in 1993, the Global Leadership and Organizational Behavior Effectiveness Project (GLOBE) is a multi-phase study that examines the impact of culture on leadership and organizational practices. The GLOBE team consists of over 200 researchers in 62 cultures/countries collaborating to gather data through multiple research methods. One aim of the project has been to validate and build upon Hofstede's five dimensions of culture, while yet another has been to measure cultural perceptions of leadership.

GLOBE Dimensions of Culture

The GLOBE project presents both societal-level and organizational-level results on nine cultural dimensions. Middle managers were asked to answer questions based on what they perceived in relation to society (a "societal-level" score) and what they perceived in relation to their organization (an "organization-level" score). The GLOBE project also measures culture in two ways, by looking at what is actually done in a society/organization (the culture "as is" or "practices") and by looking at what should be done in a society/organization (the culture "as it should be" or "values").

Nine cultural dimensions were found: Uncertainty Avoidance, Power Distance, Institutional Collectivism, In-Group Collectivism, Gender Egalitarianism, Assertiveness, Future Orientation, Performance Orientation, and Humane Orientation.

1. Uncertainty Avoidance is the extent to which members of an organization or society strive to avoid uncertainty by relying on established social norms, rituals, and bureaucratic practices.
2. Power Distance is the degree to which members of an organization or society expect and agree that power should be stratified and concentrated at higher levels of an organization or government.
3. Institutional Collectivism is the degree to which organization and societal institutional practices encourage and reward collective distribution of resources and collective action.
4. In-Group Collectivism is the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families.
5. Gender Egalitarianism is the degree to which an organization or a society minimizes gender role differences while promoting gender equality.
6. Assertiveness is the degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships.
7. Future Orientation is the degree to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future, and delaying individual or collective gratification.
8. Performance Orientation is the degree to which an organization or society encourages and rewards group members for performance improvement and excellence.
9. Humane Orientation is the degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring and kind to others.

GLOBE Dimensions of Leadership

The GLOBE project also relates dimensions of culture to six global leader behaviors in order to examine in which cultures certain types of leadership styles would be favored. The study shows that there are culturally based shared conceptions of leadership, which the GLOBE team refers to as the "culturally endorsed implicit theories of leadership" (CLT). While they found some leadership styles culturally contingent, the GLOBE team also found evidence for universal support of the charismatic/value-based dimension.

The six global leadership dimensions found are: Charismatic/Value-Based, Team Oriented, Participatory, Humane Oriented, Autonomous, and Self-Protective.

1. Charismatic/Value-Based leadership portrays the ability to inspire and motivate others to perform well based on deeply held values.
2. Team Oriented leadership demonstrates the effective working toward a common goal among members of a work group or team.
3. Participatory leadership suggests the degree to which mangers involve others in making and implementing decisions in an organization.
4. Humane Oriented leadership encompasses a supportive and compassionate stance toward others.

5. Autonomous leadership suggests an independent and individualistic leadership style.
6. Self-Protective leadership is concerned with safeguarding the well-being and security of individual members and the group as a whole.

The GLOBE project provides additional knowledge on cultural dimensions and helps establish cross-cultural leadership as an independent field of inquiry. Until the GLOBE project, such multi-level cultural and leadership data on a large number of countries were not available.

See Also: Cross-Cultural Research; Culture-Specific Values; Hofstede's Five Dimensions of Culture.

Bibliography. Nancy J. Adler, *International Dimensions of Organizational Behavior, 5th ed.* (Thomson/South-Western, 2007); Nakiye Boyacigiller, Jill Kleinberg, Margaret E. Phillips and Sonja A. Sackmann, "Conceptualizing Culture in International Cross-Cultural Management Research," in Betty Jane Punnett and Oded Shenkar, eds., *Handbook for International Management Research* (Blackwell, 1996); Robert J. House et al., *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies.* (Sage, 2004); Steven A. Y. Poelmans, "Review of Culture and Leadership Around the World: The GLOBE Book of In-depth Studies of 25 Societies," *International Journal of Cross Cultural Management* (v.7/3, 2007); Terri Scandura and Peter Dorfman, "Leadership Research in an International and Cross-Cultural Context", *Leadership Quarterly* (v.15, 2004).

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Global Product Divisions

Global product divisions are part of a multinational's organizational structure when the primary division of the firm's activities is based on product (or service) categories. For example, an automobile manufacturing firm may be primarily divided into a truck division, a passenger car division, and an SUV division; or a large professional service firm may be divided into audit, business advising, information technology, and tax divisions. Then each of these "global product divisions" may be divided into several geographic (e.g., Americas, Africa–Middle East, Asia-Pacific, Europe) and/or market subdivisions (e.g., corporate, government, and private clients).

The strategic logic underlying the global product division is the need to concentrate resources at the level of the product (or product group). Thus, in the above automobile example, the firm may feel that these three markets are quite independent, and that appointing a separate management team for each division will allow each to focus on their markets and thus develop their businesses and compete more effectively. Further, C. K. Prahalad and Gary Hamel and other proponents of the resource-based view of the firm would insist that the firm should be structured around the key resources that give the firm sustainable competitive advantage. Thus, for example, a certain set of products could be based on certain technologies and competencies—and a global product division is a natural structure to house these products and resources.

Traditionally a global product division had control over most of value chain relevant to its market. For example, Procter & Gamble (P&G) has three global product divisions, namely Global Beauty, Global Household Care, and Global Health & Well-being (as well as a Global Operations division). Thus, the Global Beauty division would have its own manufacturing facilities, suppliers, brands, distribution network, and service department. However, contemporary managerial and organizational approaches have de-emphasized the advisability of this kind of control for two sets of reasons. First, as stated by Stephen Young and Ana Teresa Tavares, complete autonomy is not necessarily an optimal situation. Along these lines, authors like Julian Birkinshaw have suggested that the overall global firm is better off with coordinating mechanisms across its global divisions that seek to find economies of scale, economies of scope, and other efficiencies and synergies. Thus the normative tendency would be to share information systems, production, facilities, and services across its product divisions; and P&G's Global Operations division would have a mandate to facilitate many of these synergies.

Another popular contemporary approach is "outsourcing" (or off-shoring) of parts of the value chain—such as production of various components or a service call center—to an external service provider. For example, Stanley Holmes writes that Boeing is outsourcing more than 70 percent of the 787's airframe, allowing Italian, Japanese, and Russian engineering concerns to design and build major parts of the fuselage and wings. The benefits of these programs include cutting costs and forging relationships with potential clients. For example, Kristien Coucke and Leo Sleuwaegen report on a recent study whereby off-shoring programs increase the likelihood that Belgian manufacturing firms will survive.

Nevertheless, there is a general acceptance and adoption of global product divisions by multinational firms. This is especially the case in corporations moving away from international division structures—over time, the domestic and international businesses are recombined and then split into either product, market, or geographic structures. However, along the same developmental process, these structures often continue to evolve into some form of matrix—whereby managerial authority descends to the business via two (or sometimes, three) dimensions. For example, one dimension may be like the global product structure responsible for various offerings and the other may be geographic. A more advanced stage of development would be what Chris Bartlett and Sumantra Ghoshal call the "transnational" structure, whereby the firm develops dual capacity to deal with both local (national) as well as global contingencies.

See Also: Boeing; Economies of Scale; Economies of Scope; Ford Motor; General Motors; Global Brand Strategy; Globalization; Global Structure; International Division Structure; Matrix Structure; Subsidiary; Value Chain.

Bibliography. David A. Aaker, *Strategic Market Management* (Wiley, 2008); C. A. Bartlett and S. Ghoshal, *Managing Across Borders: The Transnational Solution* (Harvard Business School Press, 1989); Julian Birkinshaw, *Entrepreneurship in the Global Firm* (Sage, 2000); Kristien Coucke and Leo Sleuwaegen, "Offshoring as a Survival Strategy: Evidence from Manufacturing Firms in Belgium," *Journal of International Business Studies* (May 29, 2008); Stanley Holmes, "Boeing's Global Strategy Takes Off: The Aerospace Titan is Taking a Measured Approach to Outsourcing, with Help from Local Teams," *BusinessWeek* (January 30, 2006); Stuart Paterson and David M. Brock, "The Development of Subsidiary Management Research: Review and Theoretical Analysis," *International Business Review* (v.11/2, 2002); C. K. Prahalad and Gary Hamel, "The Core Competence of the Corporation," *Harvard Business Review* (May–June 1990); Stephen Young and Ana Teresa Tavares, "Centralization and Autonomy: Back to the Future," *International Business Review* (v.13/2, 2004).

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Global Structure

A multinational firm's organizational structure that reflects the "global" philosophy that the world is basically one homogeneous market is called a "global structure." For example, by this philosophy, many large electronics and consulting firms, while allowing for minor local adjustments to packaging and language, basically project the same kinds of products and services around the world. However, there are several differences in terminology and philosophy in this field.

First, a "global" philosophy is characterized by seeing the world as one more-or-less monolithic market with similar tastes and preferences. In contemporary parlance this is opposite to a "multidomestic" (or multinational or multilocal) philosophy by which one sees the world as made up of many more-or-less unique markets, each with its distinct tastes and preferences. A position between these two extremes is called regionalism, whereby one sees the world as being made up of a small number of quite homogenous regions.

These constructs can be applied to industries, firms, and organizational structures, and it is informative to understand how global thinking at industry and strategic levels apply. For example, George Yip sees globalization as a function of the degrees to which the global marketplace is fragmented, local customer needs are distinct, local sourcing imperatives exist, costs are heterogeneous, and trade barriers are significant to cross-border commerce. Thus Randall Schuler, Peter Dowling, and Helen De Cieri and other scholars refer to some industries—like commercial aircraft, copiers, generic drugs, most electronics and computer hardware—as global industries; while retail, the food industry, and most services are considered substantially multidomestic.

Multinationals—and other large firms, for that matter—generally are divided into several parts, units, or divisions that reflect some aspect of their strategy. This link between structure and strategy was made famous in the classic book *Strategy and Structure* by Alfred DuPont Chandler. For example, a firm with five product categories may have been structured into five divisions, each division mandated to manage one of the product categories.

Chris Bartlett and Sumantra Ghoshal build on this logic as they focus on organizational responses to global and local forces; and they describe four organizational types (or mentalities) for the global organization that represent organizational and strategic responses to various industry contingencies. For example, they describe the global firm that views the world as its market, assumes that national tastes are more similar than different, and that believes in standardized products; and these strategic approaches require structural integrative mechanisms that are to coordinate worldwide activities, production, marketing, research and development (R&D), and planning. Thus, it is these structural processes that are implied by the term *global structure.*

Mechanisms

All large organizations need some structures that coordinate and integrate to some degree. However, the global strategy relies on these structures for implementation There are three major aspects to this kind of structure. The first is the locus of strategic responsibility. Second, the way the structure separates reporting relationships and dictates how the firm is divided. This aspect of structure may be called structuring. The final aspect is the kinds of coordination and integration systems—these may be called processes.

Locus of strategic responsibility: A crucial aspect of organization structure is the extent to which decision-making autonomy is delegated from corporate headquarters to parts of the business. In the global firm there is a strategic imperative to centralize important strategic decisions. For example, decisions on product range, research and development, branding, and human resource management tend to be made at corporate rather than subsidiary level. Even customer service, which is the function most likely to be located closer to the customer, may have its major policies and standards set at corporate level.

Structuring: A characteristic of the global structure is that it is relatively blind to geographic distance and instead focuses on one or more other strategic dimensions—like products or markets—that it considers more important (than geography) to its success at implementing a global strategy. Thus a global structure commonly has a major top-level division into product categories (generally called a global product structure), markets (global market structure), or some matrix (global matrix structure). As an example of a global product structure, Procter & Gamble (P&G) has three global product divisions, namely Global Beauty, Global Household Care, and Global Health & Well-being.

However, the distinction between product and market structures is likely to be blurred—for example, Boeing's business units seem like different product divisions (commercial airplanes, integrated defense systems, and Boeing capital corporation), but in effect all three have the aim of marketing various aircraft and aerospace products and services to different market groups—in this case commercial airlines, governments, and financial intermediaries. The global matrix structure attempts to organize activities by two (or more) managerial dimensions—like product, geography, and/or market. For example H. J. Heinz has simultaneously geographic divisions in North America, Europe, Australia/New Zealand, and emerging markets (selected countries in Asia and eastern Europe); several product categories, namely ketchup/condiments/sauces, meals and snacks (including frozen foods), soups/beans and pasta, and infant feeding; and separate operations for retail and food service channels. In a global structure these various departmental and business divisions may have necessary aspects of local focus, but essentially they work together for implementing the firm's global strategy.

Processes: Finally, and very importantly, structure implies processes such as coordination, integration, and information systems. These processes tend to be pronounced in the global structure, and generally very common in contemporary organizations. Kwangsoo Kim and Jong-Hun Park identify four generic integrating mechanisms: (1) people-based integrating mechanisms that use people to coordinate business operations across borders, involving the transfer of managers, meetings, teams, committees, and integrators; (2) information-based integrating mechanisms use information systems such as databases, electronic mail, Internet, intranet, and electronic data interchanges to integrate business operations across borders; (3) formalization-based integrating mechanisms rely on the use of standardized or common work procedures, rules, policies, and manuals across units; and (4) centralization-based integrating mechanisms retain decision-making authority at the corporate headquarters—a similar concept to that in the "locus of strategic responsibility" section above.

The more global the firm, the more it uses these processes. Intel, for example, uses relatively few formal structural mechanisms, but several cross functional teams—including information technology (IT), knowledge management, human resources, finance, legal, change control, data warehousing, common directory information management, and cost reduction teams—as integrating processes that allow them rapid adaptation to changing conditions. Integrating mechanisms can also have negative effects—perhaps tying the hands of local managers, imposing compliance costs (both time and other resources), and creating unintended bureaucratic barriers to efficient decision making. A study by David Brock and Ilene Siscovick, for example, found effects of integrative factors at subsidiary level were often negative.

See Also: Globalization; Global Product Divisions; Home Country; International Division Structure; Matrix Structure; Microsoft; Multidomestic Structure; Regional Divisions; Subsidiary.

Bibliography. Klaus E. Agthe, "Managing the Mixed Marriage—Multinational Corporations," *Business Horizons* (January–February 1990); Christopher A. Bartlett, Sumantra Ghoshal and Paul W. Beamish, *Transnational Management: Text, Cases and Readings in Cross-Border Management,* 5th ed. (McGraw Hill, 2007); Julian Birkinshaw, *Entrepreneurship in the Global Firm* (Sage, 2000); David M. Brock, "Autonomy of Individuals and Organizations: Towards a Strategy Research Agenda," *International Journal of Business and Economics* (v.2/1, 2003); David M. Brock and Ilene Siscovick, "Global Integration and Local Responsiveness in Multinational Subsidiaries: Some Strategy, Structure, and Human Resource Contingencies," *Asia-Pacific Journal of Human Resources* (v.45/3, 2007); Alfred D. Chandler, *Strategy and Structure: Chapters in the History of the Industrial Enterprise* (MIT Press, 1962); Stephanie A. Fernhaber, Patricia P. McDougall, and Benjamin M. Oviatt, "Exploring the Role of Industry Structure in New Venture Internationalization," *Entrepreneurship Theory and Practice* (v.31/4, 2007); Michael Porter, *Competition in Global Industries* (Harvard Business School Press, 1986); C. K. Prahalad and Gary Hamel, "The Core Competence of the Corporation," *Harvard Business Review* (May–June 1990); Charles Wankel, *21st Century Management: A Reference Handbook* (Sage, 2008).

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Gnomes of Zurich

The Gnomes of Zurich is an old tongue-in-cheek term for the Swiss market, and especially Swiss bankers. The term was first used by Harold Wilson, the Shadow Chancellor of the British Parliament in 1964, who believed the Swiss were speculating on the British pound on foreign markets in order to keep its value down. In a speech to the House of Commons, Wilson said:

> Traders and financiers all over the world had listened to the Chancellor. He had said that if he could not stop wage claims the country was facing disaster. Rightly or wrongly, these people believed the Chancellor. On September 5th, when the T.U.C. unanimously rejected wage restraint, it was the end of an era, and all the financiers, all the little gnomes in Zürich and other financial centers, had begun to make their dispensations in regard to sterling.

It is interesting to note that Wilson originally spoke of gnomes "in Zurich and other financial centers," but it was "gnomes of Zurich" that caught on. The use of *gnomes* here implies the secrecy, shadiness, and miserliness associated with both the fairy-tale creature and the stereotypical Swiss banker. Zurich, though not the political capital of Switzerland, is its cultural and commercial capital—a relationship much like that of New York City to the United States. The Swiss stock exchange, SWX, is located in Zurich, and has been since 1873. It is controlled by an association of 55 banks—those Swiss bankers that so concerned Wilson. SWX was the first stock exchange to fully automate its trades, implementing this system in 1995. The economy of Switzerland, once the richest nation in Europe, has steadily slowed since the 1990s, allowing Ireland, Denmark, and Norway to pass it by. The Swiss Market Index (SMI) has tracked the performance of 20 significant stocks on the SWX since 1988. It is calculated in real time, adjusted whenever a trade transpires involving one of the 20 stocks; while many indices adjust their lists quarterly, the composition of the SMI is reexamined annually.

The 20 companies on the SMI are: ABB, an electronics company; Adecco, an employment services company; Baloise, an insurance provider; Clairant, a chemicals company; Credit Suisse, a banking corporation; Holcim, a building materials company; the Julius Baer Group, an investment services provider; Nestlé, the food company; Nobel Biocare, the medical equipment company; Novartis, the pharmaceuticals company; Richemont, a clothing company; Roche, a pharmaceuticals company; Swatch Group, a clothing company; Swiss Life, an insurance provider; Swiss Re, a reinsurance company; Swisscom, a telecommunications company; Syngenta, a chemicals company; Synthes, a medical equipment company; UBS, a banking company; and Zurich Financial, an insurance provider.

See Also: Company Profiles: Western Europe; Dow Jones Index; European Union; Swiss Market Index; Switzerland.

Bibliography. Andreas Grünbichler and Hanspeter Wohlwend, "The Valuation of Structured Products: Empirical Findings for the Swiss Market," *Financial Markets and Portfolio Management* (v.19/4, 2005); Sherrill Shaffer, "Ownership Structure and Market Conduct Among Swiss Banks," *Applied Economics* (v.34/16, 2002).

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Gold Standard

The gold standard was a fixed exchange rate system that operated as the primary monetary regime of the international economy from the late 19th century through to the outbreak of World War I. The apparent virtues of the gold standard lay in (1) its ability to eliminate exchange rate risk, thereby facilitating trade and international investment and (2) its ability as a self-equilibriating mechanism to eliminate balance of payments problems.

The operation of the gold standard required the monetary authorities of each nation to adhere to certain basic principles. First, the money supply of each country (in the form of bank notes and bank deposits) was directly linked to the gold reserves held by the monetary authorities. Second, the monetary authorities would always be willing to exchange a specified weight of gold for any amount of its currency presented to it at a pre-defined fixed rate. Throughout the 19th century, countries such as Great Britain, France, Germany, and the United States all linked their currencies to gold in this manner. The outcome of this was a fixed and stable rate of exchange between the respective currencies. To take one example, the price of one ounce of gold in Britain and the United States was set at £3 17*s.* 10.5*d* and $20.67, respectively. With both currencies permanently equivalent to a definite weight of gold, the price of one unit of sterling expressed in terms of dollars was therefore fixed at £1 = $4.866.

The gold standard not only served as a stimulus to trade and investment by removing the risk of loss from exchange rate fluctuations, but also provided an automatic mechanism for maintaining a nation's balance of payments in equilibrium. We can illustrate this idea by means of a simple example. Let us assume that there are two countries, *X* and *Y*, and that country *X* is experiencing a prolonged balance of payments deficit. How would this problem be resolved?

Given that the gold standard represented a fixed exchange rate system, a downward movement in the exchange value of country *X*'s currency—such as deliberate monetary authority devaluation—would almost certainly be ruled out. If devaluation were pursued, it could undermine confidence in country *X*'s currency if it was expected that *X* would resort to such measures were she to get into future balance of payments difficulties. An alternative method to resolve this excess of imports over exports would be to settle such debts in terms of international gold movements. Based on the above-mentioned relationship between the nation's money supply and her gold reserves, the shipment of gold from country *X* to country *Y* would lead to the contraction of the money supply in *X* and the expansion of the money supply in *Y*.

The contraction of the domestic money supply in *X* would, in turn, lead to reductions in the money cost of production (deflation) that would act to reduce demand for imports and stimulate exports. In contrast, the expansion of the domestic money supply in *Y* would lead to an increase in the money costs of production (inflation) that would reduce exports and stimulate the demand for imports. Thus, under the gold standard, international gold movements appear to be a perfect, self-equilibriating mechanism that brings about changes in expenditure and prices sufficient to eliminate a balance of payments deficit. Yet there are numerous situations that could act to undermine its success. In the above example, the monetary authorities in country *X* could speed up the adjustment process, and so facilitate speedy gold movements, by lowering their discount rate relative to that in country *Y*.

When gold reserves held in banks backed national currencies, exchange rates such as the dollar-to-pound rate were stable.

However, historical research has suggested that few central banks throughout the 19th century actually adhered to the "rules of the game" and did not always vary their discount rates in the prescribed manner. We should also note that there is no guarantee that the necessary relationship between money supply and price level movements would function properly so as to eliminate the trade deficit.

For example, the necessary fall in the money cost of production in country *X* would not take place if labor within the country refused to accept reductions in wage rates.

The gold standard was dealt a severe blow by the economic chaos of World War I, and finally collapsed during the Great Depression of the early 1930s. After World War II, the gold standard was replaced by the Bretton Woods fixed exchange rate system, which lasted from 1947 until 1972. This was essentially a special form of the gold standard, referred to as a gold exchange standard, in which the exchange rates of other currencies were fixed, via the U.S. dollar, against gold.

See Also: Bretton Woods Accord; Exchange Rate; Fixed Exchange Rate.

Bibliography. Tamim A. Bayoumi, Barry J. Eichengreen, and Mark P. Taylor, *Modern Perspectives on the Gold Standard* (Cambridge University Press, 2008); Michael D. Bordo, "The Classical Gold Standard: Some Lessons for Today," *Federal Reserve Bank of St. Louis Review* (1981); Michael D. Bordo and Anna J. Schwartz, eds., *A Retrospective on the Classical Gold Standard, 1821–1931* (University of Chicago Press, 1984); Barry J. Eichengreen, *Globalizing Capital: A History of the International Monetary System* (Princeton University Press, 2008); B. Eichengreen and M. Flandreau, eds., *The Gold Standard in Theory and History* (Routledge, 1997); R. Hawtrey, *The Gold Standard in Theory and Practice* (Longmans Green, 1935); L. H. Officer, *Between the Dollar-Sterling Gold Points: Exchange Rates, Parity, and Market Behavior* (Cambridge University Press, 1996); A. Redish, "The Evolution of the Gold Standard in Britain," *Journal of Economic History* (1990); Friedrich

A. von Hayek and Stephen Kresge, *Good Money* (Liberty Fund, 2008).

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Government Bonds

A government bond is a security issue by the national government of a particular country that gives the right to the bearer to request the promised interest to be paid in agreed intervals (usually annually). This is a special type of bond, based on the qualities of the issuer. It is like any other "I owe you" (IOU) instrument, but the only specific is that the issuer is the national government, or an authorized agent on behalf of the national government.

National governments issues bonds in order to finance shortfalls in their budgets, and as the level of sovereign debt is growing worldwide, government securities in general, and government bonds in particular, are becoming an increasingly interesting form of investment. As these instruments are, theoretically, highly liquid, they can be used (although they are medium- and long-term instruments) for liquidity management by various economic subjects. As in the case of bonds issued by private companies (nonstate entities) they represent a promise to pay the holder a set level of interest (known as the coupon) during the lifetime of the bond and to repay the money in full on a set date.

This is the general rule, although it is possible to issue a perpetual bond, whose principal will never be repaid, but the government will service them. This is, for instance, the case with consols in the United Kingdom (UK). They are a rare living example of perpetuity in bond issuance, although technically speaking an issuer has an option to redeem them. They have been particularly popular in financing military conflict in the past and there are still some live consols that were issued in order for the UK government to raise funds to finance Napoleonic wars.

Government bonds are, as a rule, denominated in domestic currency and are often referred to as sovereign bonds. A national government is a sovereign power and therefore the bonds have those qualities as well. Government bonds are regarded, in theory, as risk-free bonds, assuming there is a very low or no probability that the national government will default and go bankrupt. Although economists may claim that every economic agent (including the national government) is prone to bankruptcy if insolvent, the legal theorists would (rightly) state that the government can always resort to the unpopular and somewhat immoral option of nationalization and confiscation in order to meet its financial obligations. Most recently, Russia, following the 1998 crisis, declared a moratorium on debt servicing, but the servicing of the public debt resumed after a short while.

Government bonds are regarded as virtually riskless, but one should know that this is only in relation to the credit risk—namely, the risk that the credit will not be returned. All other risks are still present and largely are shared with all other types of bonds, regardless of an issuer, such as foreign exchange, operational, and so on. Government bonds, like other bonds, are also rated by rating agencies, and despite the perception of their stability and inability to go bankrupt, their ratings differ. Only the most advanced industrialized nations have a "triple A" rating, while for instance Japan and Italy (although members of the G7 group of countries) have ratings below the maximum one.

Government bonds being literally default free may be more attractive, especially if the investment is not made at the peak of an interest rate cycle, in which case there is a clear opportunity for capital gain. If the investment is made at the peak of the interest rate boom, then when the interest rate falls, the value of the bond will be reduced and can go well beyond the nominal value. Bonds being fixed-income financial instruments are highly dependent on the (current, market) interest rate, and their market value is linked with the level of interest rates applied. A rise in the price of a bond means a fall in the interest rate, while the reverse applies when the price falls.

Often the issuance of government bonds is centralized at the national level, although often local governments may be empowered by law to raise needed finances in the financial markets. Most recently the debt management function was entrusted to a government agency that would issue securities on behalf of the national government and its finance department/ministry. For instance, in the UK the Debt Management Agency is authorized by law to issue government securities (bonds, or "gilts") and manage servicing of the outstanding stock.

There are also other modalities present. In some countries the central bank, as a fiscal agent of the government, may be authorized to issue bonds, that is, the government securities, while in others the Ministry of Finance may be in charge of issuing securities for the national government. However, as we have already pointed out, the current trend is to organize a separate government agency where the professionals will be entrusted with the task of managing public debt, free from day-to-day political pressures. However, the practice has shown that independence from daily politics is very difficult to sustain.

The importance of government bonds will grow, especially as traditionally debt-averse governments are looking into the issue of public debt, as it is becoming increasingly difficult to finance needs with the budgetary inflows, and monetization of public debt has devastating consequences on economic development and economic and financial stability.

See Also: Debt (Securities); Debt; Sovereign Borrowing.

Bibliography. José Manuel Amor, ed., *Government Bond Market in the Euro Zone* (John Wiley & Sons, 2002); H. M. Coombs and D. E. Jenkins, *Public Sector Financial Management*, 2nd ed. (International Thomson Business Press, 1994); B. Coyle, *Government Bonds*, rev. ed. (Financial World Publishing, 2004); "Economic and Financial Indicators: Statistics on 43 Economies, Plus Closer Looks at Foreign Direct Investment and Government Bonds," *Economist* (v.382/8512, 2007); Esme Faerber, *All About Bonds, Bond Mutual Funds, and Bond Exchange Traded Funds* (McGraw-Hill, 2009).

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Greece

Greece's official name is the Hellenic Republic and the official form of government is the presidential parliamentary republic. Other conventional names include the names *Hellas* or *Ellada*. It is a Mediterranean country in southern Europe comprising an area of 131,944 sq. km and with an extended coastline of 15,021 km. It consists of a mountainous mainland and thousands of islands and islets scattered in the surrounding Aegean and Ionian archipelagos. According to the latest 2001 census, the population in Greece is 10.93 million people who mostly reside in the major cities of Athens and Thessaloniki.

Greece belongs to the OECD group of developed nations and it has a mixed capitalist economy with gross domestic product (GDP) per capita estimated at around US$29,200. Moreover, annual GDP growth reaches 3.6 percent. Greece is the major business and energy hub for the eastern Mediterranean and southeast European regions with an existing network of thousands of export-oriented and investment companies. It is often the major gateway for investors seeking business access to the region and is rapidly being transformed into the major transit point for oil and natural gas carried from the Caucasus and central Asia to major European markets.

Greece is primarily a service-based economy and major industries of the Greek business landscape include shipping, tourism, food (wines, olive oil, cheese, yogurt, fruits and vegetables, honey, mastic, saffron, organic farming), tobacco, apparel, chemicals, pharmaceuticals, mining products, and financial services.

In this respect, the major trading partners of Greece are mostly western European Union (EU) countries such as Germany, Italy, France, and the United Kingdom plus countries such as the United States, Poland, Bulgaria, and Romania.

An important sector of the economy is the shipping industry—the Greek-owned merchant fleet is the largest in the world. In 2008, Greek-owned ships registered under various flags, including Greece's flag, amounted to 4,173, meaning the Greek fleet represents about 20 percent of the world's tonnage. Greek shipping accounts for about 60 percent of the EU's total shipping; and approximately 23.5 percent of the world's oil tankers belong to Greek ship owners. We can easily estimate the contribution of the Greek shipping sector to the economy of Greece and to international trade given the fact that 90 percent of the world's goods are transported by sea.

Another powerhouse of the Greek economy is the tourism sector, which accounts for almost 15 percent of the nation's GDP. Greece boasts an unparalleled position in the Mediterranean Sea, enjoying a pleasant and healthy climate and a unique combination of mountains (reaching up to approximately 3,000 m. and dominating 75 percent of the territory) and 6,000 islands, of which only 227 are inhabited. The country's position at the crossroads of three continents (Europe, Asia, and Africa) has endowed Greece with the richest variety of flora and fauna in Europe, and its indented coastline of varied seascapes is easily the longest in the Mediterranean. An alluring history dating back to Ancient Greece, a legacy of being the cradle of Western civilization, and a vivid folk culture manifested in culinary traditions and performing arts are also primary reasons for a diversified tourist portfolio that makes Greece a top destination for around 16 million travelers per year.

Greece is a member of various international organizations such as the European Union (since 1979) and NATO (since 1952). A positive outcome of the country's constant involvement with international bodies is its ranking among the world's top 20 countries in terms of pollution control and management policies of natural resources. The country also grants US$362 million annually in foreign aid (Hellenic Aid Service) to Third World countries and holds the 16th place worldwide in Official Development Assistance (ODA).

A major milestone in the country's modern history has been the highly successful organization of the 2004 Olympic Games in Athens. The challenge of managing the largest project on earth was met and, partly due to historical associations, Athens 2004 is considered the most authentic games ever organized. As a result, the Olympic Games projected the modern face of Greece and reinforced the country's competitiveness in the global arena.

The event helped Greece position itself as an exclusive destination for business in a diversified spectrum of industries ranging from energy, construction, and finance to food processing, maritime industry, and tourism. The Greek state and its citizens may have spent a huge amount of money to organize the safest Olympic Games in history, but the legacy that remained in terms of infrastructure is phenomenal. State-of-the-art facilities in sports and urban transportation, accumulation of managerial know-how in organization of mega-events, and a new image for the country and its products are among the many benefits Greece enjoys in the post-Olympics era.

On the downside, Greece, despite its highly skilled workforce, suffers from a high unemployment rate. Unemployment's negative impact is even more reinforced due to the inflation of prices since the introduction of the euro in 2002. More than 8 percent of the population is unemployed, and this phenomenon primarily affects women and the younger population. Part of the problem seems to be the disproportion between employees' supply and the ability of the economy to generate sustainable employment for educated youth. Several sectors such as the food industry and high-tech/telecommunications have shown healthy progress, but traditional industries such as textiles have significantly declined. Moreover, agriculture, which employs more than 12 percent of the workforce, is still characterized by small farms, inadequate marketing techniques for the internationalization of the country's agricultural produce, and low capital investment despite significant support from EU subsidies and structural funds.

Greece is a developed country that looks to the future with optimism and seems eager to exploit opportunities arising from its protagonist role in the region. Its long-standing membership in international bodies such as the EU and NATO and its traditional democratic values ensure a stable political environment in which business can be facilitated and promises for further progress abound.

See Also: Cyprus; European Union; Transportation.

Bibliography. Embassy of Greece in the United States, www.greekembassy.org (cited March 2009); Kevin Featherstone and Dimitris Papadimitriou, *The Limits of Europeanization: Reform Capacity and Policy Conflict in Greece* (Palgrave Macmillan, 2008); Alkman Granitsas, "Shipping That's Not All in the Family; A New Generation Is Bringing Transparency to an Industry Long Shrouded in Secrecy," *BusinessWeek* (v.2946, 2005); Jacqueline Grosch, *The 2007 Guide to Greece & South East Europe: The Partnership Grows* (Euromoney Publications, 2007); National Statistical Service of Greece, www.statistics.gr (cited March 2009); T. Serafin, "The Exchange That Launched 1,000 Ships: With Little Fanfare, Greece Has Become One of Europe's Best-Performing Economies and Stock Markets," *Forbes* (v.180/2, 2007); John Shea, *Macedonia and Greece: The Struggle to Define a New Balkan Nation* (McFarland, 2008).

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Green Revolution

The term *Green Revolution* refers to the series of advances in agriculture and agronomy that led to exponentially higher cereal harvests in the 1960s and 1970s, especially in food-scarce nations in Asia and Latin America. Genetic improvement of high-yield plant seed was fundamental to the increases, but synthetic nitrogen fertilizers, pesticides, irrigation, and economic incentives also played important roles. Private foundations initially conducted independent agricultural development research, but, as the Green Revolution spread, the World Bank and the United Nations assisted with funding and organization. Although agricultural production exponentially increased in the second half of the 20th century and ended the immediate threat of famine for millions, critics have cited the adverse social, economic, and environmental implications of the Green Revolution.

Most of the Third World experienced significant population increases during the mid-20th century. This fueled a demand for grain that nations could not meet with domestic production. After World War II, large, once-agriculturally rich regions, especially in South American and Asia, became net importers of American grain. Large surpluses in the United States allowed for direct food aid to other nations. Unfortunately, this aid allowed nations to postpone domestic investment in agricultural improvement, and the increased supply limited the price small-scale, domestic farmers could get for their harvests. In the context of the Cold War, famine represented a threat to social and political stability that American politicians feared would lead to communist revolutions.

In March 1968 William S. Gaud, head of the U.S. Department of State's Agency for International Development, in a speech to the Society for International Development, assessed various international projects that had been working for the past 25 years to limit famine in developing countries. Gaud noted the vast improvements in the agricultural yields of India, Pakistan, the Philippines, and Turkey, and remarked that, unlike wars and coups that required violence to enact change, this agricultural, or "green," revolution was a peaceful yet world-changing development. This was the first time someone used the term *Green Revolution* to describe the series of rapid agricultural developments during the 1960s and 1970s, and the term was almost universally accepted.

Origins

The roots of the Green Revolution can be traced back to 1943, when Mexican president Manuel Avila Camacho and the Rockefeller Foundation, at the urging of vice president–elect Henry A. Wallace established the Office of Special Studies (OSS) to experiment with strategies to avert famine among Mexico's peasant class. The United States had seen rapid agricultural increases since the Great Depression of the 1930s, and the OSS was intended to export these successes to other nations struggling with food scarcity. The OSS grew in importance as an international agricultural research and training center, and by 1966 was renamed the International Center for the Improvement of Corn and Wheat (CIMMYT). J. George Harrar, head of the project, oversaw a group of scientists, most notably Norman Borlaug, who developed a "high-yielding variety" (HYV) of wheat. HYV of all grains have an elevated ability to absorb nitrogen. Since plants with high levels of nitrogen tend to grow tall, bend over, and break before harvest, researchers cross-bred the HYV's with semi-dwarf, or stubby and hardier, wheat varieties that Japanese farmers had cultivated since the 19th century. Unlike traditional varieties that required long growing seasons, responded poorly to fertilizers, and failed to produce consistent yields, Harrar and Borlaug's HYVs responded well to intense fertilization, matured quickly, and were well-adapted to tropical and sub-tropical growing conditions. However, in the absence of fertilizer, irrigation, and pesticides, HYV's may fail to outperform traditional varieties.

In the 1940s, the deserts of northwestern Mexico had recently been opened to irrigation, and the new HYV wheats were planted there on a large scale. In 1962 Pitic 62 and Penjamo 62, the first Mexican dwarf wheat varieties, were commercially released. In conjunction with rational fertilization, Mexican wheat yields dramatically increased. Whereas Mexico produced 300,000 metric tons of wheat in 1950, by 1970 annual national yields had increased to 2.6 million metric tons. The nation achieved wheat self-sufficiency in the late 1950s and even began to export some of its crop. In 1970 Borlaug received the Nobel Prize for Peace for his work that ended the threat of persistent famine for Mexicans.

The Mexican successes were quickly applied around the world, and the search for HYVs extended to other crops. In 1960 the Filipino government founded the International Rice Research Institute (IRRI) with Ford Foundation funds and Rockefeller Foundation scientific staff. The concept of an international research project had been articulated by Harrar and others as early as 1952 and was based on the belief that the basic genetic and biological problems of high-yield agriculture, once solved, could be universally applied with only minor adaptations to local conditions.

Under the direction of Robert Chandler, a university scientist and administrator, IRRI collected indigenous breeds of Asian rice and genetically improved them in the hope of increasing their yields. Early in the process, a cross-breed between an Indonesian rice variety, Peta, and a Taiwanese-Chinese rice variety, Dee-Geo-Woo-Gen, resulted in an HYV of dwarf rice known as IR-8. This "miracle rice," which achieved double and triple yields as compared to traditional varieties, was commercially released in 1966. Cultivation of IR-8 rapidly spread across Asia, allowing farmers' rice yields to increase at a faster rate than population and, in the process, to combat hunger.

The research conducted by CIMMYT, IRRI, and several other regional research centers sponsored by the Ford and Rockefeller foundations not only fostered agricultural innovation but also nurtured an international agricultural research community of experts trained in the tenets of the Green Revolution. Often, these researchers returned to their home countries to take high-level positions in government and therefore influence agricultural policy. Widespread acceptance of the Green Revolution was also promoted by Lyndon Johnson's 1966 reform of the "Food for Peace" program. Johnson announced that food aid shipments would depend on recipient nations' willingness to implement Western agricultural development measures. This meant that nations would be required to accept the Green Revolution if they expected to receive food aid.

The Case of India

The first application of this policy came in the mid-1960s, when India was confronted with droughts and widespread famine and requested not only food but also technical advice. Monkombu Sambasivan Swaminathan, a plant geneticist and Indian minister of agriculture, invited Borlaug to offer advice on improving the food supply and the cultivation of Mexican dwarf varieties provided by the U.S. Department of Agriculture. To the dismay of Indian grain monopolies, Swaminathan, Borlaug, and the Ford Foundation cooperated to import 18,000 tons of wheat seed from the CIMMYT. India selected well-watered and agriculturally successful Punjab as an experimental site, and, after some initial successes, this became another center of innovation. In addition to wheat, India also imported IR-8 from IRRI.

In 1968 S. K. DeDatta, an associate agronomist with IRRI, published his research findings that Indian IR-8 crops produced nearly 10 times the yield of traditional rice strains. This report increased the popularity of IR-8 and promoted its widespread acceptance. Agricultural improvements had direct social and economic implications: Between 1973 and 1974, the average real income of small farmers in southern India rose by 90 percent and the threat of famine accordingly decreased. During the same period, Pakistan also imported CIMMYT wheat seed and experienced a doubling of wheat yield between 1966 and 1971.

Organizations

From 1969 to 1971, the heads of various agencies working on agricultural issues held a series of four meetings, known as the Bellagio conferences, intended to develop strategies to prolong and expand the Green Revolution.

Although the Ford and Rockefeller foundations had successfully established the initial research infrastructure, they realized that they could not bear the increasing financial burden of ongoing research without outside help. Robert McNamara, then president of the World Bank, attended the conference and came away enthusiastic about the Bank's ability to finance

Green Revolution leader Norman Borlaug (left) working with researchers beside a wheat field in Kenya in 2006.

agricultural development. McNamara reached out to the United Nations' Development Programme and the Food and Agriculture Organization, and both agencies agreed to assist with the type of applied research that until then had only been carried out by private foundations.

The Bellagio conferences and McNamara's promotional work resulted in the 1971 founding of the Consultative Group on International Agricultural Research (CGIAR), an informally organized group of donors and experts who shared the goal of eliminating hunger.

CGIAR's primary focus was plant breeding, improved adaptability, and technical advances in cereal, rice, and maize production, but, significantly, the organization's founding resolution also expressed an interest in the "ecological, economic, and social factors" involved with agricultural development. This emphasis anticipated criticisms of the disruptive nature of the Green Revolution. Whereas traditional agriculture required very little investment, HYV agriculture required farmers to purchase fertilizer, pesticides, and even seed.

Through such purchases, farmers accrued debts that, over time, led to the loss of their farmland. This process, along with generally lower food costs, caused greater urbanization. CGIAR recognized the need to deal with the implications of agricultural development, in order to make the system perpetually tenable.

Challenges

The most sophisticated challenges to the Green Revolution have argued that the energy inputs necessary to raise and harvest HYV crops are so great that they outweigh any perceived advantages. Agriculture that relies on intense fertilization and pesticides consumes large amounts of petroleum. Long-term and widespread use of irrigation and chemicals also fundamentally alters the natural environment with unknown and unforeseen health and quality of life consequences. Further, poor transportation, lack of credit, and insufficient education have prevented scientific agriculture from curbing African famines that take millions of lives every year.

Although the most rapid increase in agricultural production took place during the 1960s and 1970s, the Green Revolution continues into the 21st century. The two primary international research centers, CIMMYT and IRRI, the umbrella funding organization, CGIAR, and a network of institutes around the world continued to lead agricultural development research intended to improve crop yields and, ideally, limit the threat of starvation. Plant cross-breeding to achieve HYV crops remains as the fundamental characteristic of the movement, but agricultural rationalization, economic development, education, and technological exchange are also essential to the current Green Revolution.

See Also: Economic Development; Food and Agriculture Organization; World Bank, The.

Bibliography. Warren C. Baum, "CGIAR—How It All Began," *CGIAR 1985 Annual Report Reprint* (1988); Lester Brown, *Seeds of Change: The Green Revolution and Development in the 1970s* (Praeger, 1970); Harry Cleaver, "The Contradictions of the Green Revolution," *American Economic Review* (v.62/2, 1972); Elenita C. Daño, *Unmasking the New Green Revolution in Africa: Motives, Players and Dynamics* (Third World Network, 2007); Desmond A. Jolly and Isabella Kenfield, *California's New Green Revolution: Pioneers in Sustainable Agriculture* (UC Small Farm Program, 2008); Terri Raney and Prabhu Pingali, "Biotechnology: Sowing a Gene Revolution: A New Green Revolution Based on Genetically Modified Crops Could Help Reduce Poverty and Hunger, but Only if Formidable Institutional Challenges Are Met," *Scientific American* (v.297/3, 2007); Donald A. Sonnenfeld, "Mexico's 'Green Revolution,' 1940–

1980: Towards an Environmental History," *Environmental History Review* (v.16/4, 1992); "The Next Green Revolution," *Economist* (v.386/8568, 2008).

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Grey Market

Grey market (also sometimes known as "gray market") involves the trade of legal goods through unauthorized, unofficial, and unintended channels of distribution. Hence, trademarked products are often exported from one country to another and sold by unauthorized individuals or firms. This practice is also often known as parallel importing, product diverting, and even arbitrage, and typically flourishes when a product is in short supply, when manufacturers resort to skimming strategies in specific markets, or when the products are subject to substantial markups.

For example, even as Apple, Inc., rolled out its latest third-generation iPhone on July 11, 2008, several retail stores throughout the world, including those in China and Thailand, continued to take orders even though this product was not being sold in those markets. Their computer codes were unlocked, so that the phones could be used with different mobile service providers. Even in India, one of the fastest-growing markets for cell phones, Apple delayed the release of the original iPhone until mid-2008, a year after the release in the United States and six months after its release in Europe, for fear of grey market sales.

A wide range of goods and services have been sold through grey markets, including automobiles, broadcasting delivery, college textbooks, pharmaceuticals, photographic equipment, video games, and even wines. Research has demonstrated that every one of the world's eight major export regions has experienced grey marketing activity damaging to their operations. One trade group, the Anti-Grey Market Alliance, in conjunction with a study with the consulting firm KPMG, estimated the global grey market for information technology (IT) products to be over $40 billion.

In the United States, grey market goods are prohibited according to Section 526 of the Tariff Act of 1930, which expressly forbids importation of goods of foreign manufacture without permission of the trademark owner. However, the implementation of regulation by the U.S. Customs Service and the courts' interpretation of the law have not been in line with each other. In a recent study, about 13 percent of the firms in North America have reported some form of grey marketing.

A positive outcome of grey markets is that they form an arbitrage that forces prices down and provides brand-name goods at lower prices to the customer. They can create incremental sales in markets not in direct competition with sanctioned dealers, and sometimes help companies overcome distribution bottlenecks because of local government regulations. Occasionally, it is less expensive to tolerate grey marketing than to shut down the operations completely because of the time and resources required to monitor the violations. Finally, uncovering grey marketing activities can provide a firm with sound marketing intelligence regarding customers in these markets and their buying behavior.

On the other hand, the phenomenon obviously also has several drawbacks for companies. It simultaneously undermines the manufacturer's distribution arrangements and their ability to control quality—it creates the dilution of exclusivity and damages existing channel relationships. Official dealers may not choose to offer significant services in order to compete with the grey market price for the product. There is likely to be an erosion of the brand's global image, and the firm is unlikely to have the ability to use traditional pricing strategies, thus having less control over their overall marketing strategies.

In order to reduce the impact of grey market goods, firms can take pragmatic strategies to evaluate quantity-discount schedules, reduce price differentials between markets and keep them lower than the costs of shipping and inventory holding costs, differentiate products sold to different markets, and sell unique products and names in each market. They can also leverage the Web and Internet technologies to facilitate surveillance of the names and locations of grey marketers. On the demand side, customers can be made aware of the risks of buying goods sold in these markets, refused warranties for the products purchased through these markets, and offered attractive rebates on authorized and legal goods to compensate for the price differentials between those sold through legitimate channels versus those that are not.

See Also: Arbitrage; Black Market; Branding; Channels; Distribution; Export; Global Brand Strategy; Import; Intellectual Property Theft; Trademark Infringement.

Bibliography. Kersi D. Antia, Mark Bergen, and Shantanu Dutta, "Competing With Gray Markets," *MIT Sloan Management Review* (v.46/1, 2004); Kersi D. Antia, Mark E. Bergen, Shantanu Dutta, and Robert J. Fisher, "How Does Enforcement Deter Gray Market Incidence?" *Journal of Marketing* (v.70/1, 2006); Barry Berman, "Strategies to Combat the Sale of Gray Market Goods," *Business Horizons* (v.47/4, 2004); G. Brian Busey and Rory J. Radding, "Trademark Owners Beware: Use of Alternate Sales Channels Jeopardizes Enforcement Against Gray Market Goods," *Intellectual Property & Technology Law Journal* (v.18/2, 2006); Lynne Eagle, Philip J. Kitchen, Lawrence Rose, and Brendan Moyle, "Brand Equity and Brand Vulnerability: The Impact of Gray Marketing/Parallel Importing on Brand Equity and Values," *European Journal of Marketing* (v.37/10, 2003); Jen-Hung Huang, Bruce C. Y. Lee, and Shu Hsun Ho, "Consumer Attitude Towards Gray Market Goods," *International Marketing Review* (v.21/6, 2004); Bruce C.Y. Lee, "Consumer Perceived Importance of Channel Authorization: A Post Hoc Segmentation Approach to Dealing with Gray Markets," *Australasian Marketing Journal* (v.14/1, 2006); Guan H. Lim, Khai S. Lee, and Soo J. Tan, "Gray Marketing as an Alternative Market Penetration Strategy for Entrepreneurs: Conceptual Model and Case Evidence," *Journal of Business Venturing* (v.16/4, 2001); Mintel International Group Ltd., *Finances of the Grey Market* (Mintel International Group Ltd., 2007); William Vetter and C. Jeanne Hill, "The Hunt for Online Trademark Infringers: The Internet, Gray Markets, and the Law Collide," *Journal of Academy of Marketing Science* (v.34/1, 2006).

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Gross National Product

Decisions about allocation of a society's resources require some understanding of how these decisions will affect the welfare of the citizens. The most convenient measure for the welfare of citizens has been found to be the volume of goods and services available in the society. Ideally we would like to assess how the availability of each type of good or service that people enjoy is changing. This, however, makes an overall assessment difficult when the availability of these goods changes by unequal amounts. Are we better off today because we have more of some of these products but less of some others? The concepts of gross national product (GNP) and its very close, and more popular, cousin gross domestic product (GDP) were developed to aggregate and measure the welfare effects of changing supplies of millions of goods and services in a modern economy.

To understand GNP, we start with the concept of GDP, which is the sum of the values of each and every good or service produced within the territory of a society during an accounting period. Every person who works for monetary wages is deemed to produce a good or a service equal to the wages paid to the individual. Every businessperson who coordinates a business activity is deemed to have produced goods or services equal to the value added to the goods and the profits of the business. Aggregate of these wages and profits is the GDP of the society. Divided by the population of the society (measured in the middle of the accounting period), GDP per capita provides an important measure of the average living standard of a country and is a useful measure for comparison of economic performance of different countries. GNP is the aggregate of all goods and services produced by citizens of a society anywhere in the world during an accounting period.

Gross Domestic Product and Gross National Product

GDP includes output of all residents of a country regardless of whether the resident is a citizen of the country or not. Thus the income earned by an American technician who accepts a job with a Japanese firm in Tokyo is counted as part of the Japanese GDP. A Finnish firm that establishes a subsidiary in the United States to manufacture cellular phones is contributing to the U.S. GDP whether it employs U.S. or Finnish workers or managers in its subsidiary. Profits earned by this subsidiary, however, will become part of Finland's GNP even though the value added by this subsidiary will not be part of Finland's GDP. For the measurement of GDP, it does not matter who the producer is—a citizen or a foreigner—as long as the work is done within the economy. U.S. GDP is the value of all goods and services produced within the 50 states and the territories of the United States—regardless who produces it. GNP, on the other hand, measures the output (or income) of all citizens, wherever they may have earned the income.

For most countries, there is only a small difference between GDP and GNP. In the first quarter of 2008, U.S. GDP was $14.1956 trillion, whereas the GNP was $14.3508 trillion, a difference of merely about 1.1 percent. This difference reflects receipts of $796.8 billion as income from abroad by U.S. residents and a payment of $641.6 billion to the rest of the world for income foreigners earned in the United States. For some countries such as Singapore there can be a large difference between GDP and GNP. Singapore's economy depends heavily on foreign workers and Singapore's citizens and firms invest a large part of their savings abroad. Two other countries for which the foreign sector creates a significant gap between GDP and GNP are Ireland and Switzerland.

Interpretation

There are a number of considerations to keep in mind when interpreting concepts such as GDP (or GNP). GDP is a measure of production of goods and services for "final" consumption. Two main categories of final consumption are goods and services used for consumption by the citizens (as well as the government) and goods and services used by business firms to make investments to build the future productive capacity of the society. Two other categories that are included in GDP are sales to foreigners (regardless of the use) and changes in inventories. By definition, therefore, intermediate goods—goods and services that are used as inputs for the production process—are excluded from calculations of GDP. It is sometimes difficult to define whether a product is destined for final consumption or as an input for production of other goods or services. A computer used by an individual for playing games is a final product, one used by a business in an intermediate product.

Treatment of some goods and services deserves special mention. Research and development expenditures are treated as intermediate products and not counted as part of business investments. Purchase of a house by a private citizen is treated as investment whereas purchases of all consumer durable items, including cars, are treated as consumption expenditure.

GDP includes goods and services produced for exchange in a market setup and are aggregated at the price at which the exchange takes place. GDP also includes some goods and services which are produced by governments or nonprofit organizations for citizens and provided to the citizens outside the market framework. These include defense services, educational services, law and order services, and emergency medical services. GDP figures, however, do not include values of care given by family members (looking after our children) or housework (a doctor marrying her cook would lower the country's GDP), voluntary services, black market (unrecorded services paid for in cash), or illegal (street corner drug lord's contributions to fighting emotional slumps), and barter activities (a plumber and a dentist helping each other out) since these activities are difficult to measure accurately. Some countries, however, may accept that such activities are part of the economic life and may adjust their GDP figures by a certain percentage to account for the impact of such activities.

GDP calculations do not make a value judgment as to the usefulness of the products or the services offered for sale in the economy. The assumption is that people have complete freedom of choice and purchase goods and services only when they see a gain from the transaction. All transactions that lead to higher GDP, however, may not be welfare enhancing. Increased level of road accidents will create demand for medical and repair services, giving rise to higher GDP, although a higher GDP in this case does not reflect an increase in society's welfare.

GDP is aggregated by valuing every good or service at the market price—the price at which the exchange may have taken place. This could create anomalies and errors in GDP figures if a citizen or a firm carries out an activity itself replacing what was previously a market transaction. Consider an important "final" consumption product—housing for individuals. If a citizen rents the house, it is clearly a market activity because rent is paid. Should it cease to be included in the GDP if the renter buys the house? The house owner does not pay "rent" anymore, yet the consumption of final products has not decreased. To prevent a possible anomaly arising from situations like this, certain activities like house ownership are "imputed" a value equal to the value of a comparable market transaction (rental of an equivalent house). When comparable market transactions are not available, imputation can be made on the basis of costs of inputs. This type of imputation will be applied, for example, to on-the-job meals provided to employees.

GDP measures values of goods and services when they are produced, not when they are sold. The market transaction is deemed to have taken place at the price at which the goods were produced. Unsold goods at the end of an accounting period are included in the GDP as changes in inventories. Also, when the value of capital equipment that is wearing out or is damaged due to accidents is excluded from the GDP, we obtain the net domestic product.

GDP figures are estimates and not as accurate as, for example, company accounting statements. It is common for GDP figures to be revised by 1–3 percent. On occasions, some countries may revise their GDP figures by more than 15 percent (Italy in 1987, China in 2005).

Measurement of GDP

The national income accounting system divides an economy into four sectors:

- Households. This sector consists of private households, owner-occupants, and nonprofit institutions serving households. Income of this sector arises from wages and returns on investments. In the industrialized countries, household consumption may account for between 60 and 70 percent of the GDP.
- Businesses. This sector produces goods and services and includes private enterprises and government enterprises that engage in providing goods or services to other sectors at close to their cost of operations.
- Government. General government sector provides public goods and services including defense, law and order, infrastructure of the economy, education, etc., and earns revenues through taxes.
- External sector. Rest-of-the-world engages with an economy through trade and capital flows.

While each country has a different approach, there are two important sources of information that form the basis for the assimilation of national accounts. Every country requires that business firms submit detailed information on their activities. This information provides the basis for estimation of flow of goods and services as well as payments made to individuals by the private sector in the economy. Government entities also submit detailed accounts of their activities. This provides the basis for the estimation of the contribution of government to the economy. Data on individual income and expenditures is deduced from data provided by the other two sectors.

GDP is measured in three different ways allowing for more accurate assessment of the level of economic activities in the society. In the expenditure approach, total expenditures made by consumers and public authorities, investment expenditures made by business firms and any increases in inventories are first added and then net imports (imports less exports) and taxes paid to government are subtracted to obtain the value of the GDP.

The income approach adds up the incomes earned by different factors of production. Labor's income is measured as wages, entrepreneurs' income is measured as income from self-employment, and capital's income is measured as profit earned by firms. Values calculated by the income approach are often called gross domestic income. NDI is obtained after depreciation of capital stock of the economy is deducted from the sum of incomes of these factors of production. When income earned by society's factors of production employed outside the country is added, we obtain GNI.

The same result should be obtained by following the output approach, in which value added at each stage of production in basic industries (agriculture or mining), manufacturing, and services and construction are added up. Total value added within the society should add up to the total income of all factors of production as well as to the total expenditures of the society.

GDP Comparisons

We are interested in two types of comparisons of GDP data. First, we would like to compare changes in the GDP of an economy over time. Second, we would like to compare different countries on the basis of their GDPs. For comparison within the same country, we need to differentiate between real GDP and nominal GDP and understand the importance of different ways of aggregating data. For international comparisons, we need to determine an exchange rate at which numbers of one country can be compared to others.

Nominal versus Real GDP: GDP and GNP figures are always collected in terms of current prices. These numbers provide the nominal value of the GDP. For comparisons over time, we would like to know how much of the change in the nominal GDP is due to increased volume of goods and services and how much is due to increase in prices. "Real GDP" figures measure the changes in the volume of production. Along with the value of the real GDP, a "GDP deflator" is calculated that indicates the inflationary component in the rise of the nominal GDP. The U.S. GDP almost doubled between 1990 and 2007, but grew only by about 35 percent in real terms over the same period.

Fixed-weight versus chain-weighted data: GDP figures are aggregated across millions of products and services by calculating their weights in a base year. Over time, however, there may be relative price changes in the economy, that is, prices of various goods and services may change by different amounts. In what is known as the fixed-weight method of aggregation, weight assigned in the base year continues to be used to aggregate GDP figures. This can introduce significant distortions if the relative price changes are large and do not reverse themselves in the future.

This distortion is best explained with the help of an example adapted from the work of Charles Jones. Suppose there are only two products in an economy—oranges and computers—and consumers spend half their income on each of these products in the base year. Further suppose that the number of oranges produced remains the same as in a base year but the number of computers grows by 10 percent a year. Since the real GDP measures the change in the volume of production, the growth of real GDP will appear to be close to 10 percent a year in a few years if we combine the output of the two products in terms of their weights in a base year. This is because the fixed-weight method of aggregation of data ignores the effects of price changes. In reality, as the volume of computers grows, their prices will fall. With a fall in the prices of computers, households will shift their expenditure patterns between computers and oranges. Chain-weighted data attempts to correct for these price movements and shifts in expenditure patterns. This is achieved by assigning weights to different goods and services not according to a base period but by averaging the weights over shorter intervals. Thus, quarterly data may be used to calculate weights and then those weights averaged to yield annual chained-weighted data. All national income accounts data in the United States have been chain-weighted since 1997.

International comparisons: Since each country measures its nominal GDP in its national currency, an exchange rate has to be used to convert each country's information into a common currency for international comparisons. Two exchange rates are used to make such comparisons—one actual and the other an artificial construct. We can use the actual exchange rate between the country's currency and an international currency—usually the U.S. dollar—in which comparisons have to be made.

The actual or market exchange rates are heavily influenced by trade and capital flows of the economy and may distort the real value of goods and services available in that country. To overcome this problem, a concept of "purchasing power parity" exchange rate has been developed to compare national accounts across countries. The "purchasing power parity" exchange rate allows for the fact that due to differences in prices of many products, especially services, one can acquire a significantly different basket of goods in some countries than, say, in the United States for the same number of dollars. A purchasing power parity (PPP) exchange rate is defined as the rate that equalizes the cost of acquiring similar baskets of goods and services in two countries. PPP exchange rate provides a better comparison of the sizes of the economies.

According to the estimates of the World Bank, global GDP in 2006 amounted to US$48.245 trillion. With a world population in excess of 6.5 billion, this implies an average income of $7,439 per capita in the world. There is, however, a great disparity in the average incomes of countries around the world. There are many countries for which GDP calculations based on PPP exchange rates show dramatically different results than those based on actual exchange rates. For some countries, the GDP with PPP exchange rate shows much better results. For others, it shows better results with the actual exchange rate. The per capita income ranges from more than $80,000 (based on actual exchange rate) to only about $120.

Is GNP a Good Measure of Welfare?

The concept of GNP was originally developed to measure the state of welfare of a society. The assumption behind this idea was that the living standard of citizens can be measured by the volume of goods and services available in the society. Has the concept lived up to its expectations? Are other measures of economic activities available that may provide a better indication of the state of a society's welfare? Can this idea be modified to better reflect how well a society is meeting the needs of its citizens?

It is generally recognized that GNP measures only one aspect of human life—material well-being. GNP as a measure of welfare would still be acceptable if we could be sure that other aspects of our lives correlate strongly with the material well-being. Social scientists have always raised questions about this assumption, but the debate seems to have become more serious over the past decade. Some of the glaring omissions of GNP figures include consideration of distribution of income, environmental impact of economic development, and leisure time available to citizens. An OECD study has identified other measures that contribute to human welfare that correlate only poorly with GDP. These measures attempt to identify degrees of self-sufficiency, indicators of health including infant mortality rate and life expectancy, and extent of social cohesion.

The king of Bhutan introduced the concept of Gross Domestic Happiness in 1972 to measure spiritual as well as material development. The United Nations Development Programme has created a human development index that combines economic factors with health, social, and sustainability factors to provide a more balanced view of the state of welfare in countries. In early 2008 President Nicolas Sarkozy of France invited two economics Nobel laureates to develop a measure of economic activity that would take into account quality of life and environment. It is quite likely that the concept of GNP will be modified significantly in the near future.

See Also: Economic Indicators; Macroeconomics; Purchasing Power Parity.

Bibliography. Andrew B. Abel and Ben Bernanke, *Macroeconomics*, 5th ed. (Addison-Wesley,, 2005); Romina Boarini, Asa Johansson, and Marco Mira D'Ercole, "Alternative Measures of Well-Being," OECD: Economics Department Working Paper no. 476 (2006); Bureau of Economic Analysis, U.S. Department of Commerce, "Measuring the Economy: A Primer on GDP and the National Income and Product Accounts, September 2007," www.bea.gov (cited March 2009); *Guide to Economic Indicators: Making Sense of Economics* (Bloomberg Press, 2007); Charles I. Jones, "Using Chain-Weighted NIPA Data," Federal Reserve Bank of San Francisco, Economic Letter, no. 2002-22 (2002); Francois Lequiller and Derek Blades, *Understanding National Accounts* (OECD, 2006); Christine Lindstrom and Martin Lindstrom, "Social Capital, GNP per Capita, Relative Income, and Health: An Ecological Study of 23 Countries," *International Journal of Health Services* (v.36, 2006); David A. Moss, *A Concise Guide to Macroeconomics: What Managers, Executives, and Students Need to Know* (Harvard Business School Press, 2007); World Bank, *2005 International Comparison Program: Tables of Final Results* (World Bank, 2008).

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G20

The Group of Twenty Finance Ministers and Central Bank Governors, or G20, draws its members from 19 of the 25 largest national economies, plus one member representing the European Union as a whole. G20 is used to refer either to that specific group (which has no support staff or institution) or to the member-nations collectively.

The name is a little confusing. The 19 countries represented individually are not necessarily the top 19 economies in any given year, and there are additional members beyond that 19+1: the CEOs of the International Monetary Fund, the World Bank, the International Monetary and Finance Committee, the Development Committee of the International Monetary Fund and World Bank, and the European Central Bank. G20 has been a convenient shorthand emphasizing the number of member-states (plus the European Union), and succeeding the G33 and G22 in 1999.

The countries currently represented in the G20 are: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Rus-

The economic crisis of 2007–08 brought together these heads of state, along with representatives from the International Monetary Fund and World Bank, at the Summit on Financial Markets and the World Economy in Washington, D.C., on November 15, 2008.

sia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States. When the European Union is included with these 19, some 90 percent of the world's gross national product is accounted for, and two-thirds of the population. At annual meetings, the G20 representatives collectively discuss and negotiate international matters of finance and economics.

2008 Summit

In a rare move, the November 2008 meeting was held between heads of state rather than simply the finance ministers, a change suggested by European Union President Nicolas Sarkozy and British Prime Minister Gordon Brown. The work of the 2008 summit, which took place in Washington, D.C., will be continued at the April 2009 summit in London, with the aim of reforming the global finance sector and all international financial institutions (including but not limited to the World Bank and the International Monetary Fund).

The 2007–08 economic crisis precipitated the involvement of heads of state at the 2008 summit. Because of the broad scope and the depth of the problems addressed, the financial media has begun calling the summit Bretton Woods II, though the test of time has yet to be passed; to be as sweeping as Bretton Woods, a conference needs to lead to successful implementation, not just discussion. That said, the spirit of the Mount Washington Hotel was certainly present in the affirmation of free market policies and the prevailing spirit of shoring up those policies in the face of calamity, not abandoning them.

Each country's experience of and reaction to the crisis was reviewed and addressed, and common principles were outlined for financial market reform. Sarkozy, though, argued that the "Anglo-Saxon" approach to the market had failed, that United States–United Kingdom capitalism had proven too free, too unregulated, and this in the end had led to disasters like the subprime mortgage crisis. German Chancellor Angela Merkel concurred that the international financial system had to be rethought from the ground up, and representatives of the European Union emphasized the importance of global standards of regulation and financial crisis response. Manmohan Singh, the Prime Minister of India, was vocal in cautioning against the temptations of protectionism, whereby every country would try to protect its own interests at the expense of the global community.

There was a feeling that the 2008 summit was a preamble to the real work that will be done at, and in preparation for, the April 2009 London summit.

The G20 Developing Nations

G20 is sometimes also used to refer, confusingly enough, to the G20 developing nations, not because the group consists of 20 countries but because it originated on August 20, 2003. Currently consisting of 23 countries, this G20 negotiates with the European Union, the United States, and other powers in the interest of trade liberalization and anti-protectionism. In 2009 the members are Argentina, Bolivia, Brazil, Chile, China, Cuba, Ecuador, Egypt, Guatemala, India, Indonesia, Mexico, Nigeria, Pakistan, Paraguay, Peru, the Philippines, South Africa, Tanzania, Thailand, Uruguay, Venezuela, and Zimbabwe.

See Also: Bretton Woods Accord; Bretton Woods Institutions; European Union; Industrialized Countries; International Monetary Fund; Mortgage Credit Crisis of 2008; Subprime Loans; World Trade Organization.

Bibliography. Bruce G. Carruthers and Sarah L. Bibb, *Economy/Society: Markets, Meanings, and Social Structure* (Pine Forge Press, 1999); Robert Cox, *Political Economy of a Plural World: Critical Reflections on Power, Morals, and Civilizations* (Routledge, 2002); Joseph M. Grieco and G. John Ikenberry, *State Power and World Markets: The International Political Economy* (W.W. Norton and Company, 2002); Paul Langley, *World Financial Orders: An Historical International Political Economy* (Routledge, 2002); Allen J. Scott, *Regions and the World Economy: The Coming Shape of Global Production, Competition, and Political Order* (Oxford University Press, 2000).

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Guanxi

Guanxi is a Chinese word for which the closest English synonyms are *connections* and *relationships*, although neither of these words best encapsulates the broader cultural implications that *guanxi* represents. It refers to the dynamic and complex nature of friendships, trust, interpersonal relationships, and the construction of closed family relations, or a joined network, which are all deeply rooted in Chinese society.

One aspect of guanxi *networks that can hinder foreign companies is the requirement for personal introductions.*

Some have described it as "friendships with an exchange or continual exchange of favors," while others have referred to it as "the social interactions within the network place and its members in the equivalent of an infinitely repeated game with a set of people they know." It offers special relationships between people who need something and those that have the ability to give something. In summary, *guanxi* can be regarded as friendship with implications of continued exchange of favors.

Even though the use of *guanxi* networks skyrocketed after the 1979 reforms in China, and the concept started appearing in business publications in the West in the 1980s, the term has deeper roots. It involves a relationship between two individuals or organizations containing implicit agreements that are neither officially acknowledged nor written down. It is based on the fact that there is a high degree of trust and reciprocity involved, i.e., if one offers a favor today, it is with the belief that it will be returned in the near future, whenever the individual needs it.

Guanxi has been identified as one of the most critical factors in doing business in China, regarded as a source of sustainable competitive advantage, acclaimed as aligned to the concept of relationship marketing, and extolled as the future direction of business practices in the 21st century.

The right *guanxi* is shown to be a vital factor in business negotiations, bringing a wide range of benefits, including securing rare resources, bypassing the bureaucratic maze, obtaining information and privilege, selling otherwise unsellable goods, and providing insurance against uncertainty and risk when problems arose.

Tim Ambler describes how *guanxi* systematically unfolds in a business setting. He notes that

> the first part of the "*guan*" is transferable. If A has guan with B and B with C, then B can introduce A to C, or vice versa. Otherwise contact is impossible. For this reason, faxes are unlikely to receive a reply until direct personal contact has been established. In the meantime, A has to fax B, who in turn, if the guan is satisfactory, relay it to C. The "*xi*" part of the word implies formalization and structure. Favors are banked to be repaid when the time is right, if ever. There is no urge to use up the *guanxi* stored; like insurance, one hopes not to need it, but its existence is reassuring.

Guanxi has been shown to have negative consequences as well. Some have viewed this phenomenon simply an emotional desire for the pursuit of self-interest. When such a network violates bureaucratic norms, it can lead to an "under-the-table" form of corruptive behavior. This can lead to, among other things, an "old boys' network," uneven income distribution, briberies, kickbacks and imperfect legal systems. When it takes precedence over civic duties, it has been shown to lead to nepotism and cronyism. Many experts also predict that *guanxi*'s role in business is likely to diminish eventually as China moves to a more open market system in this century.

Cultural differences and language barriers are often an impediment to outsiders in Chinese society, who might find it more difficult to cultivate *guanxi* with the depth possible by Chinese individuals. A foreigner being referred to as an "old friend" by the Chinese is often the first step in developing such relationships. Even in today's China, *guanxi* is imperative to doing business and getting along in life.

See Also: Bribery; China; Confucian Work Dynamism; Context; Corruption; Culture-Specific Values; Gift-Giving; Individualism/Collectivism; Nepotism; Relationship Marketing; Value Network.

Bibliography. Jonathan Ansfield, "Where *Guanxi* Rules" *Newsweek* (December 17, 2007); Thomas W. Dunfee and Danielle E. Warren, "Is *Guanxi* Ethical? A Normative Analysis of Doing Business in China," *Journal of Business Ethics* (v.32/3, 2001); Ying Fan, "Questioning *Guanxi*: Definitions, Classifications and Implications," *International Business Review* (v.11/5, 2002); Flora F. Gu, Kineta Hung, and David K. Tse, "When Does *Guanxi* Matter? Issues of Capitalization and its Dark Sides," *Journal of Marketing* (v.72, 2008); Douglas Guthrie, "The Declining Significance of *Guanxi* in China's Economic Transition," *The China Quarterly* (v.154, 1998); Scott C. Hammond and Lowell M. Glenn, "The Ancient Practice of Chinese Social Networking: *Guanxi* and Social Network Theory," *E:CO* (v.6, 2004); T. K. P. Leung and Y.H. Wong, "The Ethics and Positioning of *Guanxi* in China," *Marketing Intelligence and Planning* (v.9/1, 2001); Y. H. Wong, "The Dynamics of *Guanxi* in China," *Singapore Management Review* (July 2004).

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Guatemala

Guatemala is a Central American country that shares borders with Mexico, Belize, Honduras, and El Salvador. Its economy is heavily reliant on the agricultural sector, in particular the export of bananas, coffee, sugar, textiles, and fresh vegetables. Its population is over 12.7 million (2007). With a highly unequal distribution of wealth, the average gross domestic product per capita in Guatemala is $2,108 (2004), and about 29 percent of the population lives below the poverty line.

Before the arrival of the Spanish, the Mayan civilization controlled much of present-day Guatemala. It had already gone into steady decline many centuries before the arrival of the Spanish, who conquered the area and, because there were no supplies of gold and silver, established an export economy based on sugar cane, cocoa, and dye from cochineal insects and also from logwood. Many tropical hardwoods such as mahogany were also exported to Spain, where they were used in the construction of churches and palaces. However, the initial Spanish settlements were badly located and faced problems from the elements; the first capital flooded and the second was destroyed by an earthquake. This led to the establishment of Guatemala City as the administrative center, and later the capital of the country. In 1821 the region gained its independence and was incorporated briefly into the Mexican Empire, and then into the United Provinces of Central America. Guatemala gained independence in 1840, when Rafael Carrera caused the end of the federation, with Guatemala firmly in the control of the conservatives and landowners who continued the export trade to Spain and to other countries. Indeed, under Carrera, the crimson natural dye that was produced from insects harvested from the nopal cactus became the principal export of country, with the dye sold largely to Great Britain.

After the "Liberal Revolution" of 1871, the new government of Justo Rufino Barrios wanted to break the control of the supporters of Carrera and the Roman Catholic Church and modernize the country through exports. He developed the infrastructure of the country with the building of railroads and the expansion of the existing ports. His policies led to the introduction of cash crops, and coffee became the major export product in the country, with the alienation of much Indian land that Carrera had resisted.

By 1871 coffee made up half of all the exports from Guatemala. The agricultural sector of the economy still employs about half of the workforce in the country, with coffee still being very important. There are about 12,000 coffee plantations in the country, with about 300,000 metric tons of coffee being produced each year. The importance of coffee can be seen from the fact that it earns about half of Guatemala's income from exports. Debt servitude became important and the wealth of the elite expanded dramatically under the dictatorship of Jorge Ubico from 1931 until 1944.

The other major export income came from bananas, with the United Fruit Company playing a part in the Guatemalan economy. Indeed, the United Fruit Company was involved in the overthrow of the Guatemalan president, Jacobo Arbenz, in 1954. Arbenz had been trying to introduce major reforms to the country that would have eroded the power of the United Fruit Company and U.S. influence, and his overthrow by the Central Intelligence Agency (CIA) has led to many studies of the involvement of the CIA in the promotion of U.S. business interests in Latin America and elsewhere. The events in Guatemala, and also in neighboring Honduras, led to the term *banana republic* entering the vocabulary of politicians, economists, and social commentators around the world.

The coup d'état that overthrew Arbenz also ended the plans for land reform, and there were a large number of right-wing presidents who presided over a desperately poor country whose economy was further adversely affected by the earthquake of 1976 that devastated parts of the country. Following a fraudulent election in 1978, a civil war began, and this only ended in 1996, by which time the economy of the country was totally wrecked, with about a million people being internal or external refugees.

Since then there have been efforts to rebuild Guatemala, and the export of coffee continues to be a major part of the Guatemalan economy. The other major agricultural exports are sugar, bananas, oil, and cardamom, with coconut products, tobacco, tea, cotton, and rubber playing a smaller role. Over half of Guatemala's exports are to the United States, and these now include meat and petroleum.

See Also: Banana Wars; Central America; Honduras.

Bibliography. Liliana R. Goldin, *Global Maya: Work and Ideology in Rural Guatemala* (University of Arizona Press, 2009); Thomas McCann, *An American Company: The Tragedy of United Fruit* (Crown, 1976); David J. McCreery, "Debt Servitude in Rural Guatemala 1876–1936," *Hispanic American Historical Review* (v.63/4, 1983); Stacy May and Galo Plaza, *The United Fruit Company in Latin America* (National Planning Association, 1958); Thomas Melville and Marjorie Melville, *Guatemala: The Politics of Land Ownership* (Free Press, 1971); John E. Spillan and Christopher Ziemanowicz, "Strategic Management in Small Retail Business: The Case of Guatemala," *International Small Business Journal* (v.21/4, 2003); Robert G. Williams, *Export Agriculture and the Crisis in Central America* (University of North Carolina Press, 1986).

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Hang Seng Index

The Hang Seng Index (HSI) is the internationally recognized stock market indicator of the Stock Exchange of Hong Kong (SEHK). The HSI is a free-float capitalization-weighted index of selected companies listed on the Hong Kong exchange. The index was developed on July 31, 1964, with an initial base level set at 100 for its 30 constituent companies. The HSI was launched as a public service in 1969. The Hang Seng Index is compiled, published, and managed by the Hang Seng Indexes Company Limited, a wholly owned subsidiary of Hang Seng Bank, itself a principal member of the Hongkong and Shanghai Banking Corporation (HSBC). The Chinese characters for Hang Seng translate as "ever growing."

Constituent stocks of the HSI are selected by a rigorous process of analysis. Only companies with a primary listing on the main board of the Stock Exchange of Hong Kong are eligible as components of the Hang Seng Index. Companies in the index play significant roles in the Hong Kong economy as evidenced by the listing requirements: A company must be among those companies that constitute the top 90 percent of the total market value of all eligible shares listed on the SEHK (market value is expressed as an average of the previous 12 months); and must be among those companies that constitute the top 90 percent of the total sales revenue of all eligible shares listed on the SEHK (sales revenue is aggregated and individually assessed for eight quarterly sub-periods over the previous 24 months); and should normally have a listing history of at least 24 months or meet the requirements of a schedule of combinations of market value and listing period.

The Hang Seng Composite Index aims to cover 90 percent of the market capitalization of stocks listed on the main board of the Stock Exchange of Hong Kong. There are currently 200 stocks on the exchange. Constituent stocks must not have more than 20 trading days without sales revenue in the preceding 12 months, excluding days when the stock is suspended from trading ("Turnover Screening"); and after the Turnover Screening, the top 200 stocks in terms of average market capitalization in the previous 12 months are selected as constituents.

The final selection of companies in the HSI is based on the following additional criteria: the market value and sales revenue ranking of the companies; the representation of the sub-sectors within the HSI reflecting the market; and the financial performance of the companies.

Total market capitalization of the HIS stands at about HK$15,000 billion or 10 times the gross domestic product of Hong Kong. The companies (currently 43) in the HSI are divided into four sub-indexes representing particular economic sectors: Commerce and Industry, Finance, Properties, and Utilities. Some of these companies are Hutchinson Whampoa (commerce and industry), the Bank of East Asia (finance), Cheung Kong (properties), and CLP Holdings (utilities).

The Hang Seng Index Composite is calculated as follows:

$$HSI_t = \{ \Sigma [SP_t * IS * FAF * CapF] / \Sigma [SP_{t-1} * IS * FAF * CapF] \} * HSI_{t-1}$$

where:

HSI_t = current Hang Seng Index
HSI_{t-1} = previous closing Hang Seng Index
SP_t = the current day's share price
SP_{t-1} = the previous day's closing price
IS = number of issued shares
FAF = freefloat-adjustment factor
CapF = capitalization factor

As of July 8, 2008, the value of the Hang Seng Index was 23,872.43. Its 52-week high was 24,195.32, and its 52-week low was 23,858.89.

Mainland enterprises (currently 45 companies) that have an H-share listing in Hong Kong are also eligible for inclusion in the Hang Seng Index (HSI) when they meet any one of the following conditions: (1) the H-share company has 100 percent of its ordinary share capital in the form of H shares that are listed on the SEHK; (2) the H-share company has completed the process of Share Reform, with no unlisted share capital in the company; or (3) for new H-share initial public offerings (IPO), the company has no unlisted share capital.

Other Hang Seng Indexes

The Hang Seng Composite Index Series is composed of 18 indexes to gauge the performance of the Hong Kong stock market from different perspectives. In addition to the Hang Seng Composite Index, there are six indexes based on geographical status and market capitalization of the constituent stocks, and 11 indexes based on industry classification.

The Hang Seng Indexes Company appoints an independent advisory committee composed of Hong Kong experts drawn from government, universities, legal professionals, accounting professionals, and investment consultants. The independent advisory committee meets at least four times a year to discuss the composition of the indexes and issues relating to the indexes.

The Hang Seng Composite Industry Indexes cover the following 11 industry sectors: Conglomerates, Consumer Goods, Energy, Financials, Industrial Goods, Information Technology, Materials, Properties & Construction, Services, Telecommunications, and Utilities.

Other important Hang Seng indexes include the following: Hang Seng Hong Kong Composite Index: constituents of the Composite Index that derive the majority of their sales revenue from Hong Kong or places outside mainland China; Hang Seng HK LargeCap Index: top 15 stocks by market capitalization in the Composite Index; Hang Seng HK MidCap Index: companies ranked 16th to 50th in the Composite Index by market capitalization; Hang Seng HK SmallCap Index: companies ranked 51st and below in the Composite Index by market capitalization; Hang Seng Mainland Composite Index: constituents of the Composite Index that derive at least 50 percent of their sales revenue from mainland China; Hang Seng China-Affiliated Corporations Index: non-H share in the Hang Seng Mainland Composite Index with at least 30 percent shareholding by mainland entities such as state-owned organizations, provincial or municipal authorities.

There are also three "Prime Indexes," each with a smaller number of companies, that are designed to facilitate the development of index-derivative products: the Hang Seng 50, the Hang Seng HK 25, and the Hang Seng Mainland 25.

See Also: Hong Kong; Stock Exchanges.

Bibliography. Kam C. Chang, Louis T. W. Cheng, and Peter P. Lung, "Net Buying Pressure, Volatility Smile, and Abnormal Profit of Hang Seng Index Options," *Journal of Futures Markets* (v.24/12, 2004); Joseph K. W. Fung, Donald Lien, Yiuman Tse, and Yiu Kuen Tse, "Effects of Electronic Trading on the Hang Seng Index Futures Market," *International Review of Economics and Finance* (v.14/4, 2005); Hang Seng Indexes Company Limited, www.hsi.com.hk (cited March 2009); Raymond W. So and Yuiman Tse, "Price Discovery in the Hang Seng Index Markets:

Index, Futures, and the Tracker Fund," *Journal of Futures Markets* (v.24/9, 2004).

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Hanseatic League

The Hanseatic League (the "Hanse") was a regional alliance of North German cities and towns that operated to control trade along the Baltic and North Seas and thrived during the late Middle Ages. Historians point to the Hanse as an early example of regional integration within Europe. Indeed, the Hanse was the most extensive and powerful of regional economic associations within Europe until the rise of the European Union (EU) in the second half of the 20th century. In a manner similar to the EU, the Hanse evolved over time into a more extensive and integrated union in order to more effectively control the economic, commercial, and political forces that threatened individual cities in the region. And, like the EU, the Hanse experienced strong centrifugal forces that limited the degree of integration achieved. Ultimately, by the 17th century, this divisiveness between the German cities, along with unstoppable global economic and political shifts, doomed the Hanse as a viable economic power in Northern Europe.

Economic historians trace the origins of the Hanse to the middle of the 14th century, when the first mention of the existence of such a league appears in commercial documents. The expanding reach and influence of the Hanse was, in fact, not an isolated development, but rather part of a more general penetration of German influence in northern, central, and eastern Europe during the high and late Middle Ages. That the Hanse formed in the region it did is no random development. In other parts of Europe, such as England and France, the rise of the centralized nation-state limited the ability of cities to independently form separate regional alliances. With no central government within the German lands, the commercially important cities in the north virtually ruled themselves. The economic history of Germany in the 13th and 14th centuries is, in fact, no less than the history of its important cities. Consequently, these cities enjoyed great latitude to do as they pleased, including organizing with one another as they saw fit, especially in regard to protecting their regional commercial interests.

The initial impetus for the formation of the "Hanse" was self-protection by merchants participating in commercial trade along the Baltic and North Seas. At that time, the German kings were virtually powerless to uphold laws and regulations of importance to the proper functioning of growing commercial interests. For the most part, this commerce consisted of the carrying by ship of bulky, low-unit-value raw materials obtained from the unindustrialized lands bordering the Baltic. One particular concern of the north German merchants was the disruption in this movement of goods by pirates and brigands. The Hanse first took shape as an alliance between the cities of Luebeck and Hamburg for the purpose of policing the rivers and roads in that part of Germany. Over time, other north German cities joined the alliance.

By the 1350s the number of members reached 50 cities and towns. While the number of towns and cities that were in the Hanse continually fluctuated (since they could enter and withdraw from the league at will), by 1375, the size of the Hanse averaged nearly 100 members. The geographical presence of the Hanse spread as well. At the end of the 13th century, the Hanse's activities extended from Flanders and England to northern Russia. By the mid-14th century, it established its merchants on Latin Christian territory—Bruges, London, Bergen, Stockholm—and in the pagan lands of eastern Europe and Russia.

As the Hanse over time expanded in membership and geographical reach, its functions extended beyond simple policing activities to include wide-ranging commercial agreements. The first of these involved reciprocal trading agreements between the member cities, and eventually included mutual arrangements to secure for members a monopoly in the trade of Baltic and North Sea products including herring and naval stores. Through such agreements, the Hanse effectively coordinated the activities of its members for economic ends and thus operated as a de facto cartel within the region.

While commercial interests remained central to the Hanse throughout its existence, it eventually took on the character of a political-military union. It created its own flag, diplomatic agenda and staff, and

This 1475 building in the medieval port of King's Lynn is the last surviving Hanseatic League warehouse in England.

naval fleet. It also put into place a sort of parliament (or diet) to create and pass laws and executive orders applicable to all the member towns and cities. The most serious political decision faced by the Hanse was entering into a war with Denmark in 1379. The close interdependence between the Hanse's political goals and commercial interests is embodied in the terms of peace demanded by the Hanse (Peace of Stralsund, 1379): free trade for the league cities in Danish territory and free passage of north German merchant shipping through Danish waters. In the century that followed, the Hanse selected economic boycott over war as the more effective—and less destructive—means to gain the advantage in geopolitical disagreements.

The decline of the Hanseatic League began to take place by the late 15th and into the 16th centuries. Internally, the weakening in the coherence of the Hanse set in with growing dissension and commercial rivalry among the members. Then, too, developments in the world within which the Hanse operated rendered the group's position untenable. The Hanse could not stand against the rise of capitalism in Europe. Indeed, the Hanseatic League's commercial operations were quite rudimentary compared with the more sophisticated capitalistic instruments and mentality that were overtaking other parts of Europe; the strict regulations imposed by the Hanse on its members seriously hindered the acceptance of the more innovative capitalistic methods. As critically, effective support—financial, commercial, and military—from their central governments gave England, France, and Holland the means to break the centuries-old monopoly of the Hanse in the Baltic. In any case, the emergence of the profitable Atlantic trade in the 16th and 17th centuries that signaled the beginning of the early modern period in world history relegated trade activity in the Baltic to secondary importance.

See Also: European Union; Germany; Mercantilism; Regional Integration; Trade Bloc.

Bibliography. F. Braudel, *The Wheels of Commerce: Civilization and Capitalism, 15th–18th Century* (Harper & Row, 1982); J. H. Dahmus, *A History of Medieval Civilization* (Odyssey Press, 1964); W. K. Ferguson, *The Renaissance* (Holt, Rinehart and Winston, 1940); J. Le Goff, *Medieval Civilization: 400–1500* (B. Arthaud, 1964); E. S. Hunt and J. M. Murray, *A History of Business in Medieval Europe: 1200–1550* (Cambridge University Press, 1999); E. Miller, C. Postan, and M. Postan, eds., *The Cambridge Economic History of Europe, Vol. 2, Trade and Industry in the Middle Ages* (Cambridge University Press, 1987); J. H. Mundy, *The High Middle Ages: 1150–1309,* 2nd ed. (Longman, 1991); Justyna Wubs-Mrozewicz, *Traders, Ties and Tensions: The Interactions of Lübeckers, Overijsslers and Hollanders in Late Medieval Bergen* (Verloren, 2008).

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Harmonized System

The harmonized system, or as it is more formally known, the harmonized commodity description and coding system, is an international classification system designed to facilitate the collection of trade statistics as well as to assist in the collection of tariffs and customs duties. For decades, individual nations used their own systems for classifying goods and services. Without a universal standard, it was difficult or impossible to categorize correctly merchandise for collecting tariffs, customs duties, or for reporting purposes. To resolve this problem, the World Customs Organization (WCO) developed the harmonized system. In this system, the WCO describes all products through a standardized six-digit harmonized system (HS) code. The six-digit number classifies goods by chapter, heading, and subheading. The United States and other developed countries have added additional commodity codes increasing the number to 10 digits.

The system is quite complex; the complete harmonized tariff schedule has approximately 5,000 item descriptions grouped into 22 sections and 97 chapters (the U.S. version has 99 chapters). In addition to customs use, HS codes provide a data set for international market research. HS codes are not the only system for comparing data on industry structure and trade. In the United States, the Standard International Trade Classification (SITC) and North American Industry Classification are also used. For purposes of trade documentation and trade data, however, the harmonized system is the world standard.

History

Prior to the development of the harmonized system, each country maintained its own system. Exporters needed specialized staff whose role was to properly code goods for entry into different markets. Specialty publishers created concordances that linked one country's system to another. The complexity of the system made it difficult for small companies to trade without employing customs brokers or other intermediaries.

In 1970 a group known as the Brussels Tariff Nomenclature Group published a study that found that a uniform system of coding was both desirable and possible. That original group became the Customs Cooperation Council (CCC) and, with the help of more than 45 countries, implemented the first Harmonized Commodity Description and Coding System. In 1994 the CCC changed to its current name, the World Customs Organization. The WCO engages representatives from its nearly 200 member countries to maintain and update the HS code system and to provide advice and policy recommendations for national customs services.

System Organization

The 10-digit HS code number classifies goods by chapter, heading, subheading, and commodity codes. Each chapter begins with a domain statement that describes goods that are included in the chapter and then goods one would exclude. As an example, Chapter 92 of the code describes musical instruments and accessories. The domain indicates the instruments are acoustic (not amplified), are not toys, would not be considered collectibles or antiques, and do not include any instrument cases. Under Chapter 92 are discrete four-digit headings (e.g., HS 9201 for pianos, HS 9202 for stringed instruments, HS 9205 for wind instruments).

The WCO refers to the six-digit HS code as the subheading—a classification that provides more information. If we consider the heading HS 9202 for stringed instruments, we discover that HS 9202.10 describes instruments played with a bow (violin, viola, cello), where HS 9202.90 describes non-bowed instruments (guitars). The last digits help provide very specific information for use with the importing country's tariff schedule. For example, HS 9202.90.20 informs a customs official that the acoustic guitar in question costs less than $100.

Commodities from the same chapter (same 2-digit HS chapter) can have differing tariffs depending on its country of origin or its value. Consider the importation of guitars to the United States. Acoustic guitars (HS 9202.90.20 00) at a value of less than $100 excluding the cost of the case (HS code, 4202.92.50 00 for cases not made of leather or plastic) have a tariff of 4.5 percent for most countries. If the guitars originate in Mexico or Canada as part of the NAFTA agreement, they enter free of tariffs. If the guitar is more than $100, the HS Code is 9202.90.40 00 and the guitars have a tariff of 8.7 percent (again, zero for NAFTA countries). Electric guitars (HS code 9207.90.00) regardless of price enter the United States from non-NAFTA countries at a tariff of 5 percent. The subtle differences in tariffs are important when you realize that over the past six years, the United States has imported more than $1 billion in acoustic guitars.

Since countries base tariff revenues on imports, most countries have more specific import codes than those for exporters. In the United States, that ratio is about two to one; there are approximately 9,000 export codes and more than 18,000 import codes. To keep from confusing businesses with different exporting and importing codes, the United States calls the export classification system Schedule B and names the import codes the Harmonized Tariff Schedule of the United States. The United States bases all import and export codes explicitly on the harmonized system. The U.S. Census Bureau manages Schedule B while the U.S. International Trade Commission manages import codes.

Research

Market researchers have found HS codes to be a powerful source for international market research. Firms can access publicly available databases like the United Nations "Comtrade" system to track imports and exports for all member countries by four-digit HS code. A researcher can enter an HS code for any country and determine how much of a particular commodity that nation imports. The source of imports provides the researcher with a proxy for competition. While further research is often necessary, in many cases this information alone can help firms rank market entry prospects.

In addition to HS codes, researchers employ two other common trade data classification systems: the Standard International Trade Classification (SITC) and North American Industry Classification (NAICS). The need to classify commodities precisely to match tariff schedules can make the harmonized system unwieldy for comparing trade data. The SITC system allows for easier aggregate analysis of commodity trade data. While closely related to HS codes, the SITC classifies data into fewer code numbers than the harmonized system.

In order to manage the economic analysis required by the North American Free Trade Agreement (NAFTA), Canada, Mexico, and the United States jointly implemented the North American Industrial Classification System (NAICS). Unlike the harmonized system that focuses upon trade and customs compliance, the developers built NAICS around a production supply-chain model. NAICS groups businesses into industries based on the processes firms use to transform materials and assemblies into goods and services. The advantage of the NAICS system is that it allows the three member countries to compare information on employment, labor costs, productivity, industry performance, and other measures of political economy. All three systems—SITC, NAICS, and HS codes—undergo additions and changes to accommodate the exponential growth of new technologies and their related industries.

See Also: Customs Broker; North American Free Trade Agreement; Tariff; World Customs Organization.

Bibliography. N. Domeisen and S. Maria-Mercedes, "Counting the Value of Crafts," *International Trade Forum* (2000); R. G. Edmonson, "Harmonized System Gets an Overhaul," *Journal of Commerce* (2006); J. Foley, *The Global Entrepreneur*, 2nd ed. (Jamric Press, 2004); M. S. Geline, "A Selected Guide to Foreign Trade Statistics," *Journal of Business and Financial Librarianship* (1990); S. P. Seidel, "How the 2007 Harmonized System Revision Affects FTA Rules of Origin Issues," *Managing Exports and Imports* (2007); Chris Winder, Rola Azzi, and Drew Wagner, "The Development of the Globally Harmonized System (GHS) of Classification and Labelling of Hazardous Chemicals," *Journal of Hazardous Materials* (v.125/1–3, 2005).

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HBOS

The HBOS group provides business, corporate, and retail banking, insurance, and investment services to 23 million customers in both the United Kingdom (UK) and internationally. While 86 percent of its profits are currently generated in the UK, the balance is provided from operations in Australia, North America, Ireland, and Europe. HBOS has the biggest private shareholder base of any UK company, and employs approximately 72,000 people. Via its 23 million retail customers, HBOS claims to have some sort of relationship with 40 percent of UK households. The company is the UK's largest mortgage (21 percent of the market) and savings (16 percent) provider and is, additionally, a leading general insurer. It also offers both business banking and corporate finance facilities. Somewhat unusually, the company is registered in Scotland.

HBOS plc was established in 2001 from the merger of the Bank of Scotland and the Halifax to thereby become the fifth-largest financial services company in the UK. Both of the merged businesses have a significant pedigree. The Bank of Scotland was created in 1695 by an act of the Scots Parliament, making it Scotland's oldest bank. Over the three centuries since, Bank of Scotland became significantly acquisitive, absorbing other household names such as the Union Bank of Scotland in 1955 and the British Linen Bank in 1971. Although not as old, the Halifax (which was stabled as a building society and only later became a bank) can still boast a history spanning one-and-a-half centuries from its establishment in 1853. Notable acquisitions over the years included the Leeds Permanent Building Society in 1995 and the Birmingham Midshires Building Society in 1999.

HBOS aims to "deliver a better deal" than its competitors (especially the UK's "big four"), and its attitude toward corporate responsibility is a key element. It thus endeavors to align the interests of its customers (80 percent of the company's small shareholders are also customers), "colleagues" (employees, in other words, a significant proportion of whom are also shareholders), and its other shareholders. Over and above the interests of these three parties, the pressing aspects of the environment (regarding such things as carbon reduction—HBOS claims these days to be carbon neutral—paper management, and water management) and the community (where the company is involved in both local and national community programs) are also recognized. Dealing fairly with suppliers is another aspect of the espoused social responsibility.

Given that HBOS's driving philosophy is "what gets measured gets done," it is not surprising that it has developed a set of key performance indicators (unique among British banks) to underpin its statement of business principles. These originally amounted to no less than 48 items, although recently reduced to only 28 so as to give prominence to the major issues the company faces. Other "firsts" the bank claims are publishing an annual financial inclusion report (as a direct response to stakeholder feedback), and the publishing of a target for new social banking accounts. HBOS is one of only two UK banks to receive the highest AAA rating from the Innovest Global Sustainability Review and to be included in the Global 100 Most Sustainable Corporations in the World. Other inclusions are in the 2006 Accountability Rating, Business in the Community Corporate Responsibility Index, Dow Jones Sustainability Index, FTSE4Good Index and Carbon Disclosure Project Climate Leadership Index.

There are five strands to HBOS's strategy to create enduring value for its shareholders. Interestingly, these appear on the first page of the company's Annual Report and Accounts, so despite the corporate responsibility "hype," it remains clear that owners' interests remain paramount in this business: (1) a clear focus on franchise growth across UK financial services; (2) targeted international growth to enhance earnings' diversity; (3) cost leadership to enable competitive pricing; (4) capital discipline so as to ensure both sufficiency and value allocation; and (5) achievement, through team development, of consistent outstanding performance.

The worldwide banking crisis of 2008 affected HBOS, the UK's biggest mortgage lender and generally considered to have consistently been at the center of the British "meltdown." The bank's problems can be traced back to the merger in 2001 of Bank of Scotland (reliant for wholesale funding to finance at least half its lending) and the Halifax (possessing a larger balance sheet) to increase its corporate lending. This enabled the making of huge loans to property developers in the midst of the global credit crisis, and led to record losses of £10 billion during 2008. HBOS was forced into a hastily constructed merger in October 2008 with Lloyds TSB. The merger created Lloyds Banking Group, in which the British public (courtesy of government financial injections) became a large shareholder. In 2009 fears grew that Lloyds would itself become nationalized if matters did not rapidly improve.

See Also: HSBC Holdings; Mortgage Credit Crisis of 2008; United Kingdom.

Bibliography. HBOS plc, *Annual Review & Summary Financial Statement* (latest available), www.hbosplc.com (cited March 2009).

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Healthcare Benefits/Systems

The organized provision and delivery of healthcare services constitutes a healthcare system. The 2000 World Health Report states the goals for healthcare systems to include good health; making the health status of the entire population as good as possible across the entire life cycle; responsiveness to the expectations of the population; and fair financial contribution:

ensuring financial protection for everyone with costs distributed according to one's ability to pay.

Systems

There are several types of healthcare system models. Entirely private healthcare systems are relatively rare. Where they exist, they are usually for a comparatively well-off subpopulation in a poorer country with a poorer standard of healthcare, for instance, private clinics for a small, wealthy expatriate population in a poor country. Yet there are countries with a majority private healthcare system with a residual public healthcare system. Other major health system models are primarily public insurance systems. These include a social security healthcare model whereby workers and their families are insured by the state; a publicly funded healthcare model wherein the residents of the country are insured by the state; or a social health insurance healthcare model in which case the whole population or most of the population are members of a sickness insurance company. Almost every country that has a government healthcare system allows private healthcare systems as well. This is sometimes referred to as a two-tier healthcare system. The scale, extent, and funding of these private systems vary.

In most developed and many developing countries, healthcare is provided to everyone regardless of their ability to pay. The United States is the only country among developed nations except South Africa that does not have a universal healthcare system. However, healthcare in the United States has different and significant publicly funded components. The United States spends more on healthcare, both as a proportion of gross domestic product (GDP) and on a per capita basis, than any other nation in the world. Current estimates put U.S. healthcare spending at approximately 16 percent of GDP. The health share of GDP is expected to continue its historical upward trend, reaching 19.5 percent of GDP by 2017. In 2007, the United States spent a projected $2.26 trillion on healthcare, or $7,439 per person.

A few U.S. states have taken serious steps toward universal healthcare coverage, most notably Minnesota and Massachusetts, with the most recent example being the Massachusetts 2006 Health Reform Statute. Other states, while not attempting to insure all of their residents, cover large numbers of people by reimbursing hospitals and other healthcare providers using what is generally characterized as a charity care scheme. New Jersey demonstrates the best example of a state that employs the latter strategy. Normally, most forms of general liability insurance sold in the United States, like home, automobile, or business insurance, have a significant premium allocation for medical damages. The U.S. legal system, which has the highest number of attorneys per capita of any country in the world, is available to assist in proving liability and collecting the money for medical bills from such insurances.

Benefits

Healthcare benefits were introduced into the United States marketplace in the 1940s. They include medical coverage, dental and vision insurance, prescription drug plans, some type of disability coverage, employee assistance programs, and in some cases, flexible spending accounts, which allow the subscriber to pay for certain medical and dependent care expenses from pre-tax dollars. Most people cannot afford to pay the full amount of their healthcare costs. Healthcare benefits are a mechanism for people to protect themselves from the potentially catastrophic costs of healthcare in case of severe illness, and also to assure that people have access to healthcare when it is needed.

Health benefits are provided by a variety of both public and private sources in the United States. Public sources include Medicare, Medicaid, the State Children's Health Insurance Program, federal and state employee health plans, the military, and the Veterans Administration. Medicare covers the elderly and disabled with a historical work record, Medicaid is available for some, but not all of the poor, and the State Children's Health Insurance Program (SCHIP) covers children of low-income families. The Veterans Health Administration provides healthcare directly to U.S. military veterans through a nationwide network of government hospitals, while active duty service members, retired service members, and their dependents are eligible for benefits through TRICARE. The Indian Health Service provides publicly funded care for indigenous peoples. Together, these tax-financed programs cover about 27 percent of the population and make the government the largest health insurer in the nation. These programs also account for 45 percent of healthcare expenditures in the United States.

Private health benefits, on the other hand, are obtained primarily through jobs or covered through a family member's insurance. Employer-based health insurance is rather common with larger employers. About 60 percent of Americans receive health insurance through an employer, although this number is declining, and the employee's expected contribution to these plans varies widely and is increasing as costs escalate. About 158 million non-elderly people were insured through employer-sponsored health plans in 2006.

Workers injured on the job are covered by government-mandated worker compensation insurance and wage replacement benefits. These benefits vary considerably state to state, and employers bear the cost of this insurance. Businesses with considerable risk, such as bridge-building, mining, or meat processing, face far higher worker compensation insurance costs than do office-based clerical businesses. Although medical colleges and research institutes form a backbone structure for providing healthcare, private hospitals and nursing homes also are becoming an increasingly necessary part of the healthcare structure in the United States.

Insurance

Employer-sponsored health plans are known as group insurance. With group insurance, very often the employer pays most or all of the costs. It is estimated that the spending on employer-sponsored health insurance will hit $355.9 billion this year, of which employers contribute about 83 percent, while employees and retirees contribute the rest. Some organizations offer only one health insurance plan and others offer a choice of plans: a fee-for-service or indemnity plan, a health maintenance organization (HMO), or a preferred provider organization (PPO). Individual policies can be purchased when the employer does not offer group insurance or if the insurance offered is inadequate. Individual plans may not offer benefits as extensive as those offered under the group policy. About 14 million non-elderly people bought individual health insurance directly in 2006.

A significant and growing number of people cannot obtain health insurance through their employer and are unable to afford individual coverage. The U.S. Census Bureau estimates that about 16 percent of the U.S. population, or 47 million people, are uninsured. More than one-third of the uninsured are in households earning $50,000 or more per year. Sixty percent of the uninsured work in businesses with less than 500 workers or are family members of those who do. Some uninsured are people under age 30 who don't believe they need to purchase healthcare; others are eligible for Medicaid but have not applied.

Indemnity or fee-for-service health insurance plans allow one to go to the doctor of one's choice and pay for services at the time of the visit. The amount that the health insurance company will pay is a predetermined benefit level of covered medical expenses, based on the deductible and co-insurance amounts. To receive payment for medical expenses, one may have to fill out forms and send them to the insurer. There is also need to keep receipts for prescription drugs and other medical costs. With this type of coverage, the patient is responsible for keeping track of all their medical expenses. This type of plan is rare these days.

Unlike an indemnity plan, managed care is a health insurance plan like a health maintenance organization, preferred provider organization, or point of service plan (described below) that encourages or requires insured individuals to use certain providers. The theory underlying managed care is that by improving the overall health of the entire population, primarily through prevention, the employer gains through reduced absenteeism, increased productivity, and employee retention. The goal of the managed care organization is to keep costs down, while having broad coverage. The managed care plan requires or creates incentives for an insured person to use providers that are owned, managed, or under contract with the insurer. These incentives may be financial incentives or additional benefits. Coverage usually includes routine physicals, pediatric immunizations and checkups, emergency care, hospitalizations, surgery, X-rays, lab tests, maternity and newborn care, and mammograms. While managed healthcare plans differ widely in their details, they all direct the patient toward a preapproved network of doctors and facilities, as well as limit coverage of any treatment sought outside the network.

In an effort to reduce healthcare costs, many organizations switched from the traditional indemnity plans to a health maintenance organization (HMO) in the late 1980s. HMOs require that a fixed monthly fee is paid, called a premium. In return, the health insurance company and its physician network provide a variety of medical benefits. From this network, a primary care physician is chosen who is then responsible for the subscriber's overall healthcare as well as for making referrals to specialists and approving further medical treatment. Usually, one's choice of doctors and hospitals is limited to those within the network, since they have agreements with the HMO to provide healthcare. However, exceptions may be made in emergencies or when medically necessary. Generally, the healthcare services offered will require a copayment to be made at each visit. The drawback of any HMO policy is that care received outside the healthcare network is not covered. The benefits of HMOs include reduction in paperwork, broad coverage for a range of medical services, including routine physicals as well as regularly scheduled preventive care visits.

Preferred provider organization (PPO) healthcare plans operate like an HMO in that a fixed monthly premium is paid, and the health insurance company and its healthcare network provide medical benefits to the subscriber. However, under a PPO insurance plan, a primary care physician is not required. As a result, seeing a specialist does not require a referral. Healthcare provided from outside the network incurs a higher copayment or co-insurance than if the provider were from within the PPO network. Thus, the subscriber gets to decide between a higher-cost plan with freedom of choice and a lower-cost plan that restricts care to within a network.

A point of service plan (POS) attempts to combine the freedom of a PPO with the lower cost of an HMO. The POS is based on the basic managed care foundation: lower medical costs in exchange for more limited choices. When enrolled in a POS plan, the subscriber is required to choose a primary care physician from within the healthcare network, who becomes the "point of service" for the subscriber. The primary POS physician may then make referrals outside the network, but then this will incur higher copay and deductibles than for the network provider. For medical visits within the healthcare network, paperwork is completed for the subscriber. However, if care is sought outside the network, it is the subscriber's responsibility to fill out the forms, send bills in for payment, and keep an accurate account of healthcare receipts.

New Developments

Recent changes in federal law have led to establishment of new types of healthcare benefits. These include health savings accounts (HSAs) and health reimbursement accounts (HRAs). These are tax-exempt accounts that can be used to pay for current or future qualified medical expenses. Employers may make these savings mechanism available to the employees, and if the employer contributes to the HSA, these amounts are not included in the employee's gross income. To be eligible to open a health savings account, the employees must have health coverage under an HSA-qualified high-deductible health plan (HDHP).

HDHPs can be provided by the employer or purchased from any organization. HRAs are employer-established benefit plans funded solely by employer contributions that are excluded from the employee's gross income, with no limits on the amount an employer can contribute. HRAs are often paired with HDHPs, but are not required to be. Many employers also offer consumer-directed health plans (CDHPs). CDHPs usually have lower health insurance premiums for the employees.

Long-term care insurance (LTCI) is the emerging healthcare benefit for the aging population to provide healthcare costs associated with skilled or custodial care. It provides benefits for nursing facility care, assisted living, and adult day care as well as personal services needed in the home and hospice care. Medicare and Medicaid will not pay for most of these services, and importantly, individuals with this type of insurance can protect their assets.

The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) allows employees to purchase extended healthcare coverage. Extended healthcare coverage can be purchased under COBRA if one's job ends for any reason other than gross misconduct, or if work hours are reduced. To qualify, the employer must have 20 or more employees, and the employee must have been a participant in the employer's group health plan, and the employer must continue to maintain a health benefit plan. In these circumstances, when a job ends, the insurance plan must provide written notice explaining the employee's rights under COBRA. The employee has 60 days from the date the notice is provided or from the date coverage ends—whichever is later—to elect COBRA coverage.

It begins the day the healthcare coverage ends and lasts for up to 18 months (and longer in some cases). Under COBRA the group rate premium may be paid for healthcare coverage.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) protects the employee and their family from discrimination because of pre-existing medical conditions. Enacted in 1996, HIPAA requires that most plans provide coverage for pre-existing medical conditions after 12 months, in most cases. Further, HIPAA requires a new employer's plan to offset this 12-month exclusion period by providing credit for the number of days the employee had previous coverage—unless there was a major break in coverage. The former employer is required to provide a certificate that documents the employee's "creditable coverage."

See Also: Benefits; World Health Organization.

Bibliography. Anne Austin and Victoria L. Wetle, *The United States Health Care System: Combining Business, Health, and Delivery* (Pearson/Prentice Hall, 2008); Gary Claxton and Janet Lundy, *How Private Health Coverage Works: A Primer 2008 Update* (Kaiser Family Foundation, 2008); Committee on the Consequences of Uninsurance, *Insuring America's Health: Principles and Recommendations* (Institute of Medicine, 2004); C. DeNavas-Walt, B. D. Proctor, and J. Smith: *Income, Poverty, and Health Insurance Coverage in the United States: 2006* (U.S. Government Printing Office, 2007); *National Health Expenditures, Forecast Summary and Selected Tables* (Office of the Actuary in the Centers for Medicare & Medicaid Services, 2008); Margaret Schulte, *How Healthcare Works: An Introduction to Hospitals, Health Systems and Other Providers of Care* (Productivity Press, 2009); Leiyu Shi and Douglas A. Singh, *Delivering Health Care in America: A Systems Approach* (Jones and Bartlett, 2008); World Health Organization, *The World Health Report 2000—Health Systems: Improving Performance* (World Health Organization, 2000); World Health Organization, *Core Health Indicators; National Health Expenditure Data: NHE Fact Sheet* (Centers for Medicare and Medicaid Services, 2006); World Health Organization, *The World Health Report 2006—Working Together for Health* (2006).

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Heckscher-Ohlin Model

The Heckscher-Ohlin model (H-O model) was constructed to understand the role of productive resources in international trade, analyzing an economy in which two goods are produced using two factors of production. It is a general equilibrium model that extends some important results of the comparative advantage theory developed by David Ricardo. One of the principal results of the model is that the countries export the products that employ their abundant factors of production intensively, and import commodities that utilize scarce factors of production. That result is known as the Heckscher-Ohlin theorem. The model was developed in the 1920s by Swedish economists Eli Heckscher and his student Bertil Ohlin (winner of the Nobel Prize in Economics in 1977), and has been extended since by other economists like Paul Samuelson, Wolfgang Stolper, Jaroslav Vanek, and Ronald Jones.

The original formulation of the H-O model refers to the case of two countries, two factors of productions—capital and labor—that have unlimited supplies, and two final goods (for that reason, sometimes the model is called the 2x2x2 model). In the model, the economies use the same technology of constant returns of scale, and the production of the goods differs between countries in the intensity of utilization of inputs. The intensity is about the proportions in which the two factors of production (capital and labor) are used. There is private ownership of the productive capital (that is, the physical machines and equipment that are used in production) and perfect mobility of factors within a country, but controls in the mobility of labor and capital between nations. Additionally, each commodity has the same price everywhere and its production takes place under perfect competition in both countries.

These assumptions widen the conception of the basic Ricardian model of international trade, because this model only supposes the existence of one factor of production—labor—that is required to produce all the goods and services in the economy. The productivity of labor is assumed to vary across countries, which implies a difference in technology between nations. It was the difference in technology that motivated advantageous international trade in the model.

In the H-O model the specialization of the production is incomplete, because of differences in factor endowments. A capital-abundant country is one that is well endowed with capital relative to another country. This gives that country the possibility to produce the good which uses relatively more capital in the production process (the capital-intensive good). As a result, if these two countries were not trading initially, i.e., they were in autarky, the price of the capital-intensive good in the capital-abundant country would be offered in a minor quantity (due to its extra supply) relative to the price of the good in the other country. Similarly, in the labor-abundant country the price of the labor-intensive good would be bid down relative to the price of that good in the capital-abundant country.

Once trade is allowed, profit-seeking firms will move their products to the markets that temporarily have the higher price. Thus, the capital-abundant country will export the capital-intensive good since the price will be temporarily higher in the other country. In the same way, the labor-abundant country will export the labor-intensive good. Commercial flows will rise until the prices of both goods are equalized in the two markets.

The Heckscher-Ohlin theorem is the main result of the model. It states that a capital-abundant country will export the capital-intensive good while the labor-abundant country will export the labor-intensive good. Thus, the H-O theorem shows that differences in resource endowments, as defined by national abundance, are one reason for international trade to take place. Another important conclusion is about the prices of the final goods and the distribution variables: a rise in the relative price of a good will lead to a rise in the return to that factor which is used most intensively in the production of the good, and conversely, to a fall in the return to the other factor.

At the time of the appearance of the original model, the empirical evidence for the 19th century and the first 20 years of the 20th century coincided with the results of the model. In 1953, economist Wassily Leontief developed an empirical test of the H-O model to analyze the case of the United States economy in the 25 years after World War II. Leontief found that the United States, despite having a relative abundance of capital, tended to export labor-intensive goods and import capital-intensive goods; this result is known as the Leontief paradox. There is not a unique explanation for the paradox, and alternative trade models and several alternative explanations have emerged as a result of the Leontief's conclusion. Recent estimates have shown some difficulties with the empirical verification of the model, associated with the key assumption that technology is the same everywhere. However, to change this assumption would mean abandoning the pure H-O model altogether.

See Also: Comparative Advantage; Factor Endowments; Free Trade; Leontief Paradox.

Bibliography. E. Heckscher, "The Effect of Foreign Trade on the Distribution of Income," *Ekonomisk Tidskrift* (1919); P. R. Krugman and M. Obsfeldt, *International Economics: Theory and Policy*, 7th ed. (Addison-Wesley, 2007); E. Leamer, *The Heckscher-Ohlin Model in Theory and Practice* (Princeton Studies in International Economics, 1995); B. Ohlin, *International and Interregional Trade* (Harvard University Press, 1933); Serdar Sayan, "Heckscher-Ohlin Revisited: Implications of Differential Population Dynamics for Trade Within Overlapping Generations Framework," *Journal of Economic Dynamics & Control* (v.29/9, 2005); W. F. Stolper and P. A. Samuelson, "Protection and Real Wages," *Review of Economic Studies* (v.9, 1941); Xiaokai Yang and Wenli Cheng, *An Inframarginal Analysis of the Heckscher-Olin Model* (Monash University, Department of Economics, 1997).

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Hedging

Hedging is a strategy applied to minimize risk. It also involves the synthetic insurance, i.e., the implementation of a dynamic trading strategy that determines the lower bound on the value of a position. Market participants in the 18th century realized the importance of avoiding uncertainty and created futures markets for certain agricultural commodities. The first futures clearing system that set the foundation for modern futures markets was authorized by Tokugawa Yoshimune, the 8th shogun of the Tokugawa era, in the Dojima District of Osaka, Japan, in 1730. The only traded commodity was rice and speculations were welcomed by the shogunate in order to support the rice price during deflation. In addition, the Dojima rice market was setting the trading standards for all of Japan. In modern financial markets, participants hedge in a multitude of both financial and real assets for various reasons such as taxes, bankruptcy and financial distress costs, managerial contracting with information asymmetry as well as the lack of diversification faced by large ownership blockholders.

Following an increase in market volatility in the last quarter of the 20th century, firms were exposed to new hedging requirements. With the breakup of the Bretton Woods system in the 1970s currency market volatility increased, which has created additional problems for both exporters and importers in planning the cost structure throughout the fiscal year. If imported goods/services are to be paid with foreign currency, the value of which is expected to decline after the expiration of the trade credit period, the exporter cannot determine with certainty what will be the exchange rate and thus the total income in domestic currency. Vice versa, importers will not be able to determine the cost in domestic currency for the payment to be made at a future date to foreign trade partners. This exposure can be hedged with the use of forward contracts that will determine the future exchange rate at which foreign currency can be bought (for the importer) or sold (for the exporter). The impending future cost will be known today, but the company is not protected against any foreign exchange movements that could benefit them, such as the higher (lower) future spot rates for exporting firms (importing firms).

This dilemma could be addressed by balancing assets and liabilities in currencies that have high positive correlations. The so-called exposure netting is routinely applied by multinational corporations' (MNCs') treasury departments and provides substantial cost savings. The Swiss franc, Swedish krone, and euro have high positive correlations, and generally demonstrate negative co-movements vis-à-vis the U.S. dollar and some Asian currencies that closely track it (e.g., the Malaysian ringgit or Hong Kong dollar).

Another effective response is the use of call or put options due to their attractive feature of providing the right, but not the obligation, to be exercised in the future. If a call option is in the money, the importer will buy foreign currency at a lower price, and the total cost will increase by a premium paid for the call option. The exporting firm will exercise a put option and sell foreign currency at a higher-than-prevailing exchange rate. The total benefits will be reduced by a premium initially paid for the put option. Third, an exporter expected to sell foreign currency at a future date can borrow foreign currency and convert it immediately into domestic currency. The total amount can be freely used for other investment purposes, because the debt will be paid on the due date after the receipt of the foreign currency. Importantly, the future principal and interest payments must equal the amount of foreign currency to be received. By contrast, importers will purchase foreign currency and invest it at a market rate until the prospective purchase date. Therefore, the final payment for imported goods will be executed without the involvement of any future forex transactions. Fourth, companies may decide not to hedge if they expect that foreign exchange rate movements will be beneficial to them. Finally, companies can request payments in their own currencies, which is a strategy routinely applied in countries with internationally traded hard currencies.

Oil shocks in the 1970s and financial deregulation in the 1980s associated with a strong globalization drive in the 1990s were characterized by market instability and interest rate swings. Market participants can lock in a short-term interest rate by entering a forward forward contract or a forward rate agreement. The forward forward contract comprises the borrowing and lending of the same sum of money over unequal time periods. The interest rate differential and the length of the net investment horizon will determine the interest rate payment. In the forward rate agreement, the interest rate is determined for a notional amount of principal.

Innovations

As part of the drive to increase returns to shareholders and adequately address the newly created market environment, financial institutions have created a whole stream of new financial innovations. Unfortunately, companies sometimes think of derivatives as a source of extra income, instead of a risk-reducing vehicle that could lead to significant losses. In addition, hedging can provide market participants with protection against downside risk, but prevent them from profiting if new market opportunities have been created. Therefore, the risk management team has to carefully plan whether or not it is justifiable to apply a hedging strategy. If so, the frequency of adjustments in instruments used to hedge the underlying instrument should be determined. This process is called dynamic hedging and determines the success of a company's risk management. Too-frequent changes impose a cost burden, while their infrequency leads to discrepancies that could ultimately result in unexpected losses.

See Also: Foreign Exchange Market; Forward Market; Futures Markets; Globalization; Interest Rates; Multinational Corporation.

Bibliography. Jose M. Berrospide, *Exchange Rates, Optimal Debt Composition, and Hedging in Small Open Economies* (Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, 2008); D. M. Chance, *Analysis of Derivatives for the CFA Program* (Association for Investment Management and Research, 2003); Björn Döhring, *Hedging and Invoicing Strategies to Reduce Exchange Rate Exposure: A Euro-Area Perspective*. Economic Papers, no. 299 (European Commission, Directorate-General for Economic and Financial Affairs, 2008); D. Duffie, *Futures Markets* (Prentice Hall, 1989); S. Hamori, N. Hamori, and D. A. Anderson, "An Empirical Analysis of the Efficiency of the Osaka Rice Market During Japan's Tokugawa Era," *Journal of Futures Markets* (2001); A. W. Lo, "Risk Management for Hedge Funds: Introduction and Overview," *Financial Analyst Journal* (2001); D. R. Siegel and D. F. Siegel, *Futures Markets* (Dryden Press, 1990); A. C. Shapiro, *Multinational Financial Management* (John Wiley & Sons, 2006).

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Hewlett-Packard

Hewlett-Packard (HP) is a technology company headquartered in Palo Alto, California, that operates in more than 170 countries worldwide. It was founded in 1939 and is a Fortune 11 company with $91.7 billion in revenue, generating $7 billion in organic growth for fiscal year 2006. It produces and sells a wide portfolio of technological products ranging from handheld devices to some of the world's most powerful supercomputer installations. Additional product categories include digital photography, digital entertainment, computing, and home printing.

HP's corporate objectives have guided the company in the conduct of its business since 1957, when first written by co-founders Bill Hewlett and Dave Packard. These objectives were and still are, according to the firm's mission, to provide products, services, and solutions of the highest quality, and deliver more value to the firm's customers in order to earn their respect and loyalty. Underlying principles supporting this objective include that continued success is dependent on increasing the loyalty of its customers and responding to customers' needs.

Therefore, a strong customer-centric orientation is the dominant philosophy of the firm, which helped it in addressing technology-related problems and challenges that individuals and firms face. It has applied innovative thinking and generated ideas that create value for its customers. The result has been increasing growth and profitability, greater value for shareholders and customers, and a stronger competitive position in global information technology (IT) markets. Between the company's 2004 and 2007 fiscal years, HP's revenues grew from $80 billion to $104 billion and more than doubled its earnings per share. For the most recent four fiscal quarters, HP's revenue totaled $110.4 billion.

The chief executive officer and president of the company since early 2005 is Mark Hurd. In September 2006, he was also named chairman of the board of directors. Prior to joining HP, Hurd spent 25 years at NCR Corp., where he held a variety of management, operations, sales, and marketing roles. He is also a member of the News Corp. board of directors. Hurd's mission is to establish HP as the world's leading technology company and in this respect, he concentrated its investments on three long-term growth opportunities: next-generation enterprise data center architecture and services; technologies for always connected, always personal mobile experiences; and a broad transition from analog to digital imaging and printing across the consumer, commercial, and industrial markets. HP's three business groups drive industry leadership in core technology areas: (1) the Personal Systems Group includes business and consumer PCs, mobile computing devices, and workstations; (2) the Imaging and Printing Group includes inkjet, LaserJet, and commercial printing, printing supplies, digital photography, and entertainment; and (3) the Technology Solutions Group includes business products such as storage and servers, managed services, and software.

Such a related diversified portfolio forms the basis for further growth, which is a major objective of the firm. Hewlett-Packard wishes to expand into new areas that build on its existing technologies, competencies, and customer interests and are enhanced by its size and diversity of businesses. The dynamic, ever-changing environment in the technological sector is seen as an opportunity by the firm to develop and produce innovative products, services, and solutions that satisfy emerging customer needs. This objective is underlined by the belief that growth stems from taking calculated risks based on the state of the industry. This requires both a conviction in studying the trends, but also in inducing change in the industry.

Central to HP's operations is the welfare of its employees. Customer loyalty is a key imperative for the firm and satisfactory performance at this level can only be achieved through loyal, motivated employees. Therefore, the firm has tried to create a stimulating work environment that reinforces invention and urges everyone to contribute to daily and strategic operations. Such an approach that values and respects the individual can be seen as part of the corporation's overall sense of social responsibility, which is manifested in its efforts toward good citizenship. Hewlett-Packard strives to be socially responsible by being an economic, intellectual, and social asset to each country and community in which it operates.

Summarizing, HP is a firm that has managed to achieve a leading position in the international technology sector. Its original vision has turned into action and, today, it is a global firm that delivers value to millions of demanding customers globally and meets its popular brands' promises.

See Also: International Business Machines; Research and Development; Technology.

Bibliography. E. Feitzinger and H. L. Lee, "Mass Customization at Hewlett-Packard: The Power of Postponement," *Harvard Business Review* (v.75/1, 1997); "Hewlett-Packard—Now Services," *Economist* (v.387/8580, May 15, 2008); HP, www.hp.com (cited March 2009); Michael S. Malone, *Bill & Dave: How Hewlett and Packard Built the World's Greatest Company* (Portfolio, 2007); Deone Zell, *Changing by Design: Organizational Innovation at Hewlett-Packard* (ILR Press, 2007).

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Hitachi

Hitachi, Ltd., a global Japanese company whose products include electronics equipment, home appliances, train cars, elevators, escalators, computers, mobile devices, power plants, and industrial machinery, originated in 1910 in the electric repair shop of Namihei Odaira. The company's first product was three 5-horsepower (hp) motors, and in 1915, it produced a 10,000-hp water turbine. It went on to manufacture electric locomotives, cells, refrigerators, and generators in the first five decades of its history.

In 1959 transistor-based electronic computers were produced and Hitachi America, Ltd., was founded. Between 1969 and 1979, Hitachi built cars and added computerized control systems for the *Shinkansen* (bullet trains), constructed elevators, produced transistors

This E257 series Hitachi train served the busy Shinjuku station in Tokyo, Japan, in 2008.

for color televisions, and developed Japan's first nuclear power station. There was further expansion of the company in the last two decades of the 20th century with the establishment of Hitachi Europe, Ltd., Hitachi Asia, Ltd., and the Hitachi Foundation for Japanese American cultural, educational, and scientific cooperation.

A milestone in Hitachi's progress was the development of the world's fastest superconductive computer in 1989 and building computers with the world's fastest processing speed the next year. The bullet train of Japan attained a maximum speed of 162 miles per hour due to upgrades by Hitachi in 1993. The company opened a branch in China in 1994. In 1995 Hitachi manufactured the 10 Gbit/s fiber optic transmission equipment. After three years it produced the optical data transmission system of 320 Gbit/s. A perpendicular magnetic recording system was developed in 2000.

At the beginning of the 21st century, Hitachi turned its attention toward developing Web gateways and processors for mobile phones. The world's first liquid-cooled notebook computers were produced by Hitachi in 2002. The credit for producing the smallest contactless IC chip also went to Hitachi. It also improvised equipment that was helpful in medical diagnosis. The development of compact DNA analysis and mapping brain functions of babies was successfully performed in 2002 and 2003, respectively. In 2004 Hitachi produced the world's smallest sensornet terminal with batteries running for about a year. In the same year, Hitachi produced lead-free solder paste. In 2005 Hitachi set up a research and development center in China. The next year, the company produced the 2.5-inch HDD on a mass scale.

With revenue of $94.998 billion and 384,444 employees, Hitachi is headquartered at 6-6; Marunouchi 1-chome, Chiyoda, Tokyo, and its present chief executive officer (CEO) and president are Etsuhiko Shoyama (1936–) and Kazuo Furukawa (1946–), respectively. Hitachi was listed on the stock exchanges of New York, Tokyo, and Osaka. The Power and Industrial Systems Information sector of Hitachi was the highest earner for the company, contributing 26 percent of the total revenue. The share of Information and Telecommunication Systems, High Functional Materials and Components, Digital Media and Consumer Products, and Electronic Equipment sectors contributed 21, 15, 13, and 11 percent, respectively. Logistics, services, and other sectors earned 10 percent of total revenue, whereas the financial service segment's share was 4 percent.

Hitachi's success as a global enterprise has been recognized with many awards and honors. The company received in 2007 Asia Pacific Entrepreneurship Awards from Enterprise Asia and Investment in People Award. Hitachi was ranked number 371 of the *Forbes* Global 2000 list for the year 2007. Much of Hitachi's success can be traced to research and development, which has kept Hitachi goods competitive. The company's laboratories in Cambridge, Dublin, and Sophia are on par with similar institutions of other organizations. It has also managed its branches in different parts of the world effectively. On April 1, 2008, Hitachi established a new company called Hitachi Information and Telecommunications System Global Holding Corporation at Santa Clara, California, to supervise two Data Systems Solution holding corporations founded in Dallas, Texas (2000), and Santa Clara (1989), respectively.

See Also: Company Profiles: East Asia; Japan; Research and Development.

Bibliography. Benjamin Fulford, "Management, Strategies, Trends—Bowing to Jack Welch—Hitachi Looks to GE as it Works to Restructure," *Forbes* (June 14, 1999); Hitachi, Ltd., www.hitachi.com (cited March 2009); Francis McInerney and Sean White, *The Total Quality Corporation: How 10 Major Companies Turned Quality and Environmental Challenges to Competitive Advantage in the 1990s* (Truman Talley Books, 1995); Lee Smith, "Hitachi: Gliding Nowhere?" *Fortune* (v.134/3, 1996); Philip Mattera, *World Class Business: A Guide to the 100 Most Powerful Global Corporations* (H. Holt, 1992); Lee W. McKnight et al., *Creative Destruction Business Survival Strategies in the Global Internet Economy* (MIT Press, 2001).

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Hofstede's Five Dimensions of Culture

Geert Hofstede identifies five cultural dimensions, which assign mathematical scores designating a particular country's beliefs about each of the dimensions. The five cultural dimensions are power distance (PDI), individualism (IDV), masculinity (MAS), uncertainty avoidance index (UAI), and long-term orientation (LTO). These ideas were first based on a large research project into national culture differences across subsidiaries of a multinational corporation (IBM) in 64 countries. Subsequent studies by others covered students in 23 countries, elites in 19 countries, commercial airline pilots in 23 countries, up-market consumers in 15 countries, and civil service managers in 14 countries. These studies together identified and validated five independent dimensions of national culture differences.

The first is power distance, that is, the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally. This represents inequality (more versus less), but defined from below, not from above. It suggests that a society's level of inequality is endorsed by the followers as much as by the leaders. Power and inequality, of course, are extremely fundamental facts of any society and anybody with some international experience will be aware that "all societies are unequal, but some are more unequal than others."

The second dimension is individualism on the one side versus its opposite, collectivism, that is, the degree to which individuals are integrated into groups. On the individualist side we find societies in which the ties between individuals are loose: Everyone is expected to look after him/herself and his/her immediate family. On the collectivist side, we find societies in which people from birth onward are integrated into strong, cohesive in-groups, often extended families (with uncles, aunts, and grandparents) that continue protecting them in exchange for unquestioning loyalty. The word *collectivism* in this sense has no political meaning: It refers to the group, not to the state. Again, the issue addressed by this dimension is an extremely fundamental one, regarding all societies in the world.

The third dimension of masculinity versus its opposite, femininity, refers to the distribution of roles between the genders that is another fundamental issue for any society to which a range of solutions are found. The IBM studies revealed that (a) women's values differ less among societies than men's values and (b) men's values from one country to another contain a dimension from very assertive and competitive and maximally different from women's values on the one side, to modest and caring and similar to women's values on the other. The assertive pole has been called "masculine" and the modest, caring pole "feminine." The women in feminine countries have the same modest, caring values as the men; in the masculine countries they are somewhat assertive and competitive, but not as much as the men, so that these countries show a gap between men's values and women's values.

The fourth dimension, uncertainty avoidance, deals with a society's tolerance for uncertainty and ambiguity; it ultimately refers to man's search for Truth. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, and different from usual. Uncertainty-avoiding cultures try to minimize the possibility of such situations by strict laws and rules, safety and security measures, and on the philosophical and religious level by a belief in absolute Truth; "there can only be one Truth and we have it." People in uncertainty avoiding countries are also more emotional, and motivated by inner nervous energy. The opposite type, uncertainty accepting cultures, are more tolerant of opinions different from what they are used to; they try to have as few rules as possible, and on the philosophical and religious level they are relativist and allow many currents to flow side by side. People within these cultures are more phlegmatic and contemplative, and not expected by their environment to express emotions.

Long-term versus short-term orientation: this fifth dimension was found in a study among students in 23 countries around the world, using a questionnaire designed by Chinese scholars. It can be said to deal with Virtue regardless of Truth. Values associated with long-term orientation are thrift and perseverance; values associated with short-term orientation are respect for tradition, fulfilling social obligations, and protecting one's "face." Both the positively and the negatively rated values of this dimension are found in the teachings of Confucius, the most influential Chinese philosopher, who lived around 500 B.C.; however, the dimension also applies to countries without a Confucian heritage.

Scores on the first four dimensions were obtained for 50 countries and 3 regions on the basis of the IBM study, and on the fifth dimension for 23 countries on the basis of student data collected by Bond. Power distance scores are high for Latin, Asian, and African countries and smaller for Germanic countries. Individualism prevails in developed and Western countries, while collectivism prevails in less developed and Eastern countries; Japan takes a middle position on this dimension. Masculinity is high in Japan, in some European countries like Germany, Austria, and Switzerland, and moderately high in Anglo countries; it is low in Nordic countries and in the Netherlands and moderately low in some Latin and Asian countries like France, Spain, and Thailand. Uncertainty avoidance scores are higher in Latin countries, in Japan, and in German-speaking countries, lower in Anglo, Nordic, and Chinese culture countries. A long-term orientation is mostly found in east Asian countries, in particular in China, Hong Kong, Taiwan, Japan, and South Korea.

The grouping of country scores points to some of the roots of cultural differences. These should be sought in the common history of similarly scoring countries. All Latin countries, for example, score relatively high on both power distance and uncertainty avoidance. Latin countries (those today speaking a Romance language, i.e., Spanish, Portuguese, French, or Italian) have inherited at least part of their civilization from the Roman Empire. The Roman Empire in its day was characterized by the existence of a central authority in Rome, and a system of law applicable to citizens anywhere. This established in its citizens' minds the value complex that we still recognize today: centralization fostered large power distance, and a stress on laws fostered strong uncertainty avoidance. The Chinese empire also knew centralization, but it lacked a fixed system of laws: it was governed by men rather than by laws. In the present-day countries once under Chinese rule, the mindset fostered by the empire is reflected in large power distance but medium to weak uncertainty avoidance. The Germanic part of Europe, including Great Britain, never succeeded in establishing an enduring common central authority, and countries that inherited its civilizations show smaller power distance. Assumptions about historical roots of cultural differences always remain speculative, but in the given examples they are quite plausible. In other cases, they remain hidden in the course of history.

The country scores on the five dimensions are statistically correlated with a multitude of other data about the countries. For example, power distance is correlated with the use of violence in domestic politics and with income inequality in a country. Individualism is correlated with national wealth (per capita gross national product) and with mobility between social classes from one generation to the next. Masculinity is correlated negatively with the share of their gross national product that governments of the wealthy countries spend on development assistance to the Third World.

Uncertainty avoidance is associated with Roman Catholicism and with the legal obligation in developed countries for citizens to carry identity cards. Long-term orientation is correlated with national economic growth during the past 25 years, showing that what led to the economic success of the east Asian economies in this period is their populations' cultural stress on the future-oriented values of thrift and perseverance.

See Also: Confucian Work Dynamism; Individualism/Collectivism; Masculinity/Femininity; Power Distance.

Bibliography. Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations* (Sage, 2001); Linghui Tang and Peter E. Koveos, "A Framework to Update Hofstede's Cultural Value Indices: Economic Dynamics and Institutional Stability," *Journal of International Business Studies* (v.39/6, September 2008).

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Holidays

The term *holiday* is derived from medieval Christian religious festivities that were collectively called "Holy Days." General usage of the word has transcended from Christian days of religious observance to include other religions' and secular celebrations and individual vacations. International business operations can be significantly impacted by national or religious differences in the adherence of holidays.

Weekly days of rest known as the weekend are not called holidays any more. Yet, they are the original religious Holy Days. Jews, Christians, and Muslims believe that God rested on the seventh day after having worked for six days to create the heavens and the earth. To the Jews, this day is Saturday, the Shabbat. For most Christians it is Sunday, and for Muslims it is Friday, called El-Gumah or Gathering Day. Muslims celebrate it with noon prayers at the mosque but often consider Friday a workday—in Muhammad's time, it was the market day in Medina. Hebrew and Muslim days last from the previous evening's sunset to that day's sunset, while Christian days last from midnight to midnight. International travelers are well advised to check in advance which days are observed as weekend in a specific country or region.

Most religions structure their year around certain spiritual holidays, some of which are rooted in older pagan traditions: Christmas happens near the winter solstice, Easter and the Hebrew Pesach are connected to the spring equinox, and St. John's Day follows Midsummer. The Hebrew Sukkot and many Thanksgiving-related festivities surround the fall equinox.

The feast of Christmas is often seen as synonymous with the word *holiday*—the weeks leading up to it are commonly called the "holiday season." Christmas traditions and dates vary internationally. Gift-giving, for example, traditionally happens on December 6 (Sinter Claas, St. Nicolas Day) in the Netherlands, but on December 24 (Christmas Eve) in other Protestant countries. Catholics celebrate on December 25, and the Orthodox on the Julian calendar's Epiphany (January 6), which currently translates to January 19 in the Gregorian calendar.

Many religious holidays do not have fixed dates. Islamic holidays, for example, are based on a lunar calendar and, in some countries, on actual sightings of the moon. Cloudy nights can delay important celebrations like Eid al Fitr, the last day of the lent month Ramadan. The dates for Chinese, Hebrew, and Hindu holidays as well as Christian holidays like Good Friday, Easter, and Pentecost follow lunisolar rules that mix a lunar and a solar year. In consequence of this and the different calendars used, dates of movable holidays do not only differ between years but also internationally.

Originally public holidays coincided with religious festivities. Until the early 19th century, the Bank of England, for example, closed on selected saints' and anniversary days, making these days "bank holidays." With the advent of nation-states, celebrating anniversaries of important historic events became part of the national folklore or self-conception. One example of such a secular public holiday is the 4th of July in the United States, honoring the signing of the Declaration of Independence. Other public holidays commemorate important persons: In Japan, the Emperor's Birthday is a public holiday. The current 125th *tenno* (emperor) was born Akihito Tsugonimaya on December 23, 1933.

There are multiple secular holidays designated by the United Nations or other organizations, e.g., International Children's Day (June 1) or World AIDS Day (December 1). These are usually not celebrated as public holidays, with Labor Day (May 1 in most countries) and International Women's Day (March 8, especially in Russia) being notable exceptions.

Around the world many other unofficial holidays are designated to celebrate or promote a cause, event, or person. This ranges from well-known days like Mother's Day (in most countries celebrated on the second Sunday in May) to obscure celebrations like "Talk Like a Pirate Day" on September 19. Sometimes holidays get postponed to the subsequent Monday if their normal date falls on a weekend. Detailed lists of the dates of religious and secular holidays can be found on sites like www.bank-holidays.com, www.interfaithcalendar.org, or www.timeanddate.com.

The British English term *holiday* (in American English, *vacation*) is also used to describe a non-illness-related leave of absence from work for relaxation and recovery. Labor laws or collective agreements in most countries include provisions for such periods of rest and vacations. Most countries require employers to give two to six weeks of paid leave for annual holidays. This has allowed tourism to become one of the world's largest industries.

See Also: Benefits; Gift-Giving; Hospitality Sector; Working Hours.

Bibliography. Elizabeth Breuilly, Joanne O'Brien, Martin Palmer, and Martin E. Marty, ed., *Religions of the World: The Illustrated Guide to Origins, Beliefs, Traditions and Festivals* (Checkmark Books, 1997); Wendy P. Higgins, *Time Off: State and Federal Laws on Employee Leave, Vacations and Holidays* (Lorman Education Services, 2008); "Public

Holidays: An Idle Proposal," *Economist* (August 30, 2007); Huston Smith, *The World's Religions: Our Great Wisdom Traditions* (HarperCollins, 1991).

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Home Country

The home country is the country in which a firm was founded and/or is considered to be the firm's traditional base. This is generally a simple concept and remains simple as long as the firm retains its headquarters in the original home country. Thus BMW considers Germany to be its home country, General Motors looks to the United States, Hyundai to South Korea, and Toyota to Japan. The allied term *host country* refers to the nation in which a foreign subsidiary is based.

Cross-border mergers complicate the picture, with the acquired firm changing from being at home to being a foreign subsidiary now hosted by its former home country. Thus, in the case of Jaguar—acquired by Ford in 1989—the United Kingdom serves as merely the host country for this subsidiary of a corporation with an American (home country) parent. And the United States became a host country for Chrysler Corporation after it was acquired by Germany's Daimler-Benz AG. Finally, simple home-host classifications lose their salience for truly global companies with multiple significant footholds. For example, South African Breweries acquired Miller Brewing Company in 2002, but after several other acquisitions in Asia, Europe, and South America, it identifies itself with United Kingdom companies listed on the London Stock Exchange.

Researchers in the international management area have generally considered home country effects to be significant to managerial (and strategic) decisions taken at headquarters; and host country effects more significant to those decisions taken at the subsidiary level. These assumptions are grounded in the logic that either level of organization—headquarters or subsidiary—is grounded in its local culture and institutional framework. Authors such as Erin Anderson and Hubert Gatignon note, however, that there are two possible approaches to understanding how a multinational corporation may tend to exert control over a foreign subsidiary: First, the corporation may choose to lessen control as a way of compensating for its lack of knowledge concerning the distant location, relying on subsidiary management to contribute local knowledge; or, it may opt for stronger managerial controls as a way of reducing potential risk and dependence upon affiliates whose actions may to be regarded as opportunistic or poorly understood. Similarly, Yaping Gong shows that headquarters management may opt for close monitoring of a culturally distant subsidiary, but this very distance makes monitoring less effective due to information asymmetry. Other researchers argue that these divergent predictions may explain the inconsistent findings regarding the relationship between cultural distance and entry mode, and go on to show how home country effects generally eclipse host country effects in crucial decisions concerning expatriate deployment. Another study by David Brock and David Barry argues that home country effects tend to overshadow those at host country level in choices and design of planning processes.

It may well be that forces of globalization are having their effect on the balance of home country and host country effects on multinational subsidiaries. Traditionally, forces for localization were stronger, and multidomestic mindsets were more common, and thus one can understand the traditional consideration of the significance of host country forces on foreign subsidiaries. However, as forces for integration are increasingly enabled and strengthened (inter alia, by technology) and global mindsets are increasingly predominant, it is inevitable that home country effects would gain the upper hand.

See Also: Acquisitions, Takeovers, and Mergers; Ethnocentric Human Resource Policy; Expatriate; Geocentric Human Resource Policy; Globalization; Host Country; Multidomestic Structure; Multinational Corporation; Subsidiary.

Bibliography. Julian Birkinshaw and Neil Hood, eds., *Multinational Corporate Evolution and Subsidiary Development* (Macmillan/St. Martin's Press, 1998); David M. Brock and David Barry, "What If Planning Were Really Strategic? Exploring the Strategy-planning Relationship in Multinationals," *International Business Review* (v.12/5, 2003); David Brock, Oded Shenkar, Amir Shoham, and

Ilene Siscovick, "National Culture and Expatriate Deployment," *Journal of International Business Studies* (v.39/5, 2008); Hamid Etemad and Louise Seguin Dulude, *Managing the Multinational Subsidiary: Response to Environmental Change and the Host Nation R and D Policies* (Croom Helm, 1986); Hubert Gatignon and Erin Anderson, "The Multinational Corporation's Degree of Control over Foreign Subsidiaries: An Empirical Test of a Transaction Cost Explanation," *Journal of Law, Economics and Organization* (v.4/2, 1988); Yaping Gong, "Subsidiary Staffing in Multinational Enterprises: Agency, Resources, and Performance," *Academy of Management Journal* (v.46/6, 2003); Lars Otterbeck, ed., *The Management of Headquarters-Subsidiary Relationships in Multinational Corporations* (St. Martin's Press, 1981); Stuart Paterson and David M. Brock, "The Development of Subsidiary Management Research: Review and Theoretical Analysis," *International Business Review* (v.11/2, 2002); Michael A. Witt and Arie Y. Lewin, "Outward Foreign Direct Investment as Escape Response to Home Country Institutional Constraints," *Journal of International Business Studies* (v.38/4, 2007).

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Home Depot, The

The Home Depot, Inc., a large American retailer specializing in home improvement products, claims to be the largest retailer of its type in the world. Their stores offer building materials, home improvement supplies, and lawn and garden products that are sold to do-it-yourself customers, do-it-for-me customers, home improvement contractors, trades people, and building maintenance professionals. The company also operates EXPO Design Center stores that provide products and services primarily related to design and renovation projects. Apart from 1,950 stores in all 50 states and U.S. territories, in mid-2008 The Home Depot had 34 EXPO stores, five Yardbirds stores, and two THD Design Center stores in the United States, as well as 165 stores in Canada, 12 stores in China, and 66 stores in Mexico. In early 2009, The Home Depot announced it would be closing all 34 EXPO stores and five Yardbirds stores. The company, however, expressed its intention to keep open all of its namesake stores.

The company was founded in 1978 and is based in Atlanta, Georgia. The founders' vision is one of one-stop shopping for the do-it-yourselfer. In order to compete with traditional hardware stores, The Home Depot offered a very wide product range and economies of scale. Quality customer service is considered a major strength. Customers lacking in hardware skills and knowledge were helped to select tools, paint, and other materials, and also advised how to approach projects such as laying tile, changing valves, or using a certain power tool. To implement these service standards, staff were given rigorous product-knowledge training. Further, clinics were offered so customers could learn how to use The Home Depot products.

The business model was successful and early growth impressive. It went public on NASDAQ in 1981, moving to the New York Stock Exchange in 1984. Growth was rapid in the 1980s and 1990s, with 1989 marking the celebration of its 100th store opening. The Home Depot entered the Canadian market in 1994 with the acquisition of Aikenhead's home improvement centers, and the Mexican market in 2001 through the acquisition of Total HOME. In 2006 the company extended its reach to China by acquiring Home Way, a 12-store chain. From the start, The Home Depot developed strategic product alliances directly with industry-leading manufacturers. For example, through a combination of national brands and proprietary products like Ryobi tools, Ridgid tools, Behr paint, LG appliances, and Toro and Cub Cadet lawn equipment.

Some key financial indicators at mid-2008 were: revenue, $76.7 billion; total assets, $56.9 billion; total stockholder equity, $27.7 billion; profit margin, 4.8 percent; operating margin, 8.2 percent; return on assets, 7.7 percent; return on equity, 16.7 percent; market capitalization, $42 billion; price/book ration 2.4; stock beta .39; operating cash flow, $5.5 billion; dividend payout ration, 45 percent. The company is profitable and has sustained a good growth rate. However, growth and profitability are both in decline in the past few years, with several analysts forecasting continued decline through 2009.

A strategic case written by Thomas Wheelen depicts The Home Depot as being highly successful in the do-it-yourself/buy-it-yourself market, but struggling to enter the professional contractor market. One crucial set of issues to the case is that the company has several key resources that make it successful

With challenges facing its nearly 2,000 U.S. stores, The Home Depot is increasingly looking to international markets.

in its traditional markets—such as its customer service, range of products, and locations of stores—but that these resources are not necessarily relevant to the professional contractor market, who need to buy in larger quantities, require credit facilities, demand delivery to building sites, and have little use for attractive stores in residential shopping areas.

The Home Depot continues to target the professional contractor market via, inter alia, a division called "contractor services." As further indications of the company's commitment to market development, the corporate internet sites mention export services, including a free exporter's catalogue and an international sales department; and also a welcome to governmental buyers. In fact, recent statements by Chairman Bob Nardelli indicate a continued commitment to these market developments, with over 40 percent of growth coming from the professional market and 25 percent from international do-it-yourself markets.

See Also: Economies of Scale; Market Development.

Bibliography. Ram Charan, "Home Depot's Blueprint for Culture Change," *Harvard Business Review* (v.84/4, 2006); Thomas L. Wheelen, "The Home Depot, Inc.: Growing the Professional Market (Revised)," in *Strategic Management and Business Policy,* 9th ed., by T. L. Wheelen and J. Hungar (Pearson, Prentice Hall, 2004).

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Honda Motor

The growth of the Honda Motor Corporation is inseparable from the explosive surge of the Japanese automotive, truck, and motorcycle manufacturing sector in the aftermath of World War II. That expansion is remarkable. In 1950 the combined total for production of cars, trucks, and buses was around 29,000 units; by 1960 this number had multiplied 15-fold; by 1978 it exceeded 9,260,000 units. Within this massive industry Honda is a second-tier player. A world leader in engine manufacturing (its engineers made a major breakthrough with their development of the water-cooled Compound Vortex Controlled Combustion engine in 1973), its volume of vehicles produced is far overshadowed by other Japanese automobile manufacturers, most notably Toyota and Nissan.

As the industry blossomed, especially during the 1960s and 1970s, its major players developed a two-pronged strategy relying upon domestic sales for their core business, simultaneously pursuing export opportunities especially in the relatively high income per capita American market, eventually building a North American production base. For instance, Honda established its first American factory site near Marysville, Ohio, laying the groundwork for Honda of America Manufacturing during the late 1970s.

These two features of the postwar Japanese automobile industry can be neatly captured in the theory of international trade in manufactures rooted in twin concepts of geographic distance and monopolistic competition within national economies. As the costs of shipping goods fall—in the case of automobile shipments over the seas due to the growing use of specialized roll-on/roll-off ships—consumers seeking variety find they can satisfy this demand by purchasing from a menu of choices including both foreign and domestic manufactures. Since there are strong economies of scale and scope in manufacturing and distributing automobiles—unit costs falling with volumes fabricated and sold—relatively few companies can enter and survive within individual national markets. Those that do so differentiate themselves from one another through branding and advertising. While relatively few automobile producers exist in individual countries, considerable variety of choice exists for consumers in these countries due to international trade.

Honda shares with most of its Japanese rivals—Toyota, Nissan, and Mazda—a cluster of characteristics that help explain the phenomenal growth of the industry: building quality into all of the components of its vehicles; the ability to rapidly and flexibly adjust to changing regulations and consumer tastes; and a fierce commitment to improving productivity. Exemplifying these principles is Honda's BP Program—"best position, best productivity, best product"—perfected in Japan during the 1970s and introduced into its North American operations during the 1990s. One of the principal goals of BP is to induce firms in its supplier network—in the case of Honda of America Manufacturing over 80 percent of its manufacturing parts are sourced from its supplier network—to continually drive down costs and to upgrade component quality, never forgetting that the battle to cut costs and improve quality is best fought at the shop floor plant level.

A second characteristic that Honda shares with companies like Toyota is rapid response to constraints on exports. When the American and Japanese governments negotiated voluntary export restraints (VERs) on the volume of Japanese automotive exports to the United States, both companies diversified into luxury cars—each luxury vehicle containing more value added than their less expensive cousins. Honda introduced the Acura, and Toyota the Lexus.

While Honda shares with companies like Toyota a commitment to drive down costs and enhance quality through a focus on the way components are actually manufactured on the shop floor, its evolution from its birth in 1948 exemplifies features that are idiosyncratic. One is Honda's initial concentration on producing motorcycles. Beginning with motorized bicycles, Honda diversified into standard motorcycles, offering consumers first the Dream and Cub, later on the Super Cub that sported a "step through" design that generated enthusiasm among women. It was only after a full decade in the motorcycle market that Honda moved into the automobile business with its fuel-efficient Civic.

A second aspect of Honda's early evolution setting Honda apart from other Japanese firms is its dependence on the entrepreneurial energy of two radically different individuals, Soichiro Honda and Takeo Fujisawa. Honda was the inventor, attempting to mold Honda Motors into a "paperweight" type structure, granting the title chief engineer or executive engineer to a large number of individuals promoted because of their innovative creativity and drive, not because they were needed as supervisors for other employees, eschewing the "pyramid" style of management favored by most Japanese firms. Fujisawa's genius lay in other fields, notably marketing. He promoted the idea of differentiating dealership networks on the basis of the particular product being sold. For instance, when Honda introduced the Cub it avoided distributing it through dealerships already committed to the Dream who might naturally resist selling the Cub because they already had a backlog inventory of Dream motorcycles on hand. The dynamic duo of Honda and Fujisawa put an indelible stamp on the early history of Honda Motors that sets the company apart from its competitors.

Testimony to Honda's success in both automobiles and motorcycles are the following figures for fiscal year 2007: global automobile sales close to 4 million units (slightly less than half occurring in North America); global motorcycle sales slightly above 9 million units; and an operating profit of around US$8 billion. While Honda is overshadowed by Toyota and Nissan, it is a major player in global vehicle markets, carving out a remarkable trajectory of business success rooting in continuous ongoing innovation in both production and marketing.

See Also: Economies of Scale; Economies of Scope; Japan; Kanban; Nissan Motor; Toyota Motor.

Bibliography. D. Nelson, R. Mayo, and P. Moody, *Powered by Honda: Developing Excellence in the Global Enterprise* (John Wiley & Sons, 1998); J. Rae, *Nissan/Datsun: A History of Nissan Motor Corporation in U.S.A., 1960–1980* (McGraw-Hill, 1982); R. Shook, *Honda: An American Success Story* (Prentice Hall Press, 1988); Alex Taylor, "Inside Honda's Brain," *Fortune* (v.157/5, 2008).

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Hong Kong

Hong Kong is one of two special administrative regions of the People's Republic of China. It is located on the eastern side of the Pearl River Delta. The territory includes Hong Kong Island, Lantau Island, the Kowloon Peninsula, and the New Territories. Its total area is 1,104 sq. km. The population was recorded as 6.99 million in 2006. Over 90 percent of the population are Chinese. The second half of the 20th century saw dramatic growth in Hong Kong's population, beginning with an influx of refugees from the mainland following the communist victory and the founding of the People's Republic of China (PRC). Thus, most Hong Kong residents are first- or second-generation immigrants. Hong Kong is one of the world's leading financial centers and was said to be the most economically free in the world from 1995 to 2008 according to the Heritage Foundation's Index of Economic Freedom.

Hong Kong was a small fishing community early in the 19th century. Its development began when it became a British colony following the signing of the Treaty of Nanking on August 29, 1842, when Hong Kong Island was ceded to Britain "in perpetuity." In 1860, after China's defeat in the second Opium War, Britain claimed the areas south of Boundary Street on the Kowloon Peninsula and Stonecutter's Island. These were ceded to Britain under the Convention of Peking. On June 9, 1898, the New Territories, including part of Kowloon and over 200 islands, were leased to Britain for 99 years. Hong Kong's administration followed the pattern for a British colony, with a governor nominated by Whitehall. In the late 19th century, Hong Kong was a major trading port of the British Empire in Asia. The Hong Kong and China Gas Company developed in 1861, the Peak Tram in 1885, and the Hong Kong Electric Company in 1889; China Light and Power followed in 1903, the electric tramways in 1904, and the Kowloon-Canton Railway in 1910.

Hong Kong's population suffered under Japanese occupation during World War II, but recovered quickly as mainland immigrants, fearing communist reprisals, sought refuge in the colony following the capitulation of the Nationalist forces and the establishment of the PRC in 1949. Many companies in Shanghai and Guangzhou shifted their operations to Hong Kong. Thus, the textile and other manufacturing industries grew and Hong Kong's population dramatically increased in the 1950s as people flocked to Hong Kong for jobs and security. Thousands of immigrants lived in squatter areas all over the colony, the most infamous of which became Shek Kip Mei. The Christmas Day fire of 1953 left 53,000 people homeless and galvanized the British rulers into developing Hong Kong's first public housing program. From its very humble beginnings, this program has developed to include general public housing (rent only) and home ownership schemes covering a wide range of salaries and needs in a territory where home purchase is out of financial reach of the majority.

During the 1960s, the textile industry made up about half of Hong Kong's domestic exports in value. From the 1960s to the 1980s, the manufacturing sector gradually moved from simple labor-intensive products to high–value added products. At that time, secondary production included manufacturing and construction, which made a significant contribution to the gross domestic product (GDP), while primary production became insignificant. The open door policy and economic reforms adopted by China in the 1980s provided (and continue to provide) Hong Kong's industrialists with cheaper labor and land. Using the cheaper supply of land and labor in the Pearl River Delta, industrialists gradually expanded their production bases across the border into mainland China while retaining their offices in Hong Kong. This operation mode enables the continuous economic development in Hong Kong.

In addition, Hong Kong's economy has become increasingly service-oriented since the 1980s. The share of the tertiary services sector in GDP rose from 71 percent in 1985 to 91 percent in 2005. The wholesale, retail, and import/export trades and hotels is the largest services sector and accounted for 29 percent of GDP in the services sector, followed by finance, insurance, real estate, and commercial services, which account for 22 percent; financial services, 13 percent; professional services, 11 percent; logistics, 10 percent; and tourism 3 percent. Hong Kong's total services trade amounted to US$13.8 billion in 2006, which is the world's 16th largest trading entity in value.

The largest share of total imports is electrical machinery, apparatus, and appliances, which was in total US$80.7 billion in 2006. This is followed by telecommunication equipment (US$43.0 billion) and office machines (US$36.5 billion). China, Japan, and

Taiwan are Hong Kong's major suppliers. Export figures in 2006 were US$17.2 billion, mainly from clothing and office machines. China, the United States, and the Netherlands are Hong Kong's largest markets. Re-exports are the most important trade for Hong Kong. The main origin primary re-export countries are China and the United States. Re-exports increased by 11.6 percent to US$333.3 billion in 2006. Electrical machinery, apparatus, and appliances are the main items. The Chinese mainland has long been Hong Kong's largest trading partner, accounting for about half of Hong Kong's total trade. Almost all re-export trade is related to mainland China.

Hong Kong's per capita GDP was US$27,680 in 2006, one of the highest in Asia. Hong Kong has a well-established and efficient infrastructure. It operates one of the busiest container ports and airports in the world. Hong Kong is the sixth-largest foreign exchange market in terms of turnover in the world and second-largest stock market in Asia in terms of market capitalization. Total market capitalization was US$1,710 billion at the end of 2006.

The Hong Kong stock market is an important fund-raising platform for mainland China companies. There are 367 China enterprises listed on the Stock Exchange of Hong Kong. In 2006 equity funds raised by China enterprises totaled US$49.3 billion. About US$39 billion were raised in initial public offerings (IPO) on the stock exchange, which constitutes 91 percent of total equity funds raised in IPOs. The total annual trading turnover of China enterprises accounted for 60 percent of the total annual trading turnover of the whole Hong Kong stock market. Moreover, Hong Kong's financial markets are operated in line with international standards, and ease of entry for professionals from outside contributes to the development of financial markets.

The Hong Kong government continues to improve Hong Kong's transport system to strengthen its competitive advantage in the city, especially the railway system. Rail travel constitutes about 35 percent of the total daily public transport volume. Hong Kong's Mass Transit Railway (MTR) has been in operation since 1979. The Light Rail system started operation in 1988 in the northwestern New Territories. A new international airport has been in operation at Chek Lap Kok since 1998. The Tseung Kwan O MTR line has been in operation since 2002, and the Disneyland Resort Line began operation in 2005. The Ma On Shan rail link between Tai Wai and Ma On Shan in the New Territories was opened in 2004, providing rail transport to the population in the eastern New Territories. The Sheung Shui to Lok Ma Chau line opened in 2007 to relieve the congestion at Lo Wu and shorten the travel time between Hong Kong and Shenzhen, one of the special economic zones in China and the closest to Hong Kong.

The tourism industry is one of Hong Kong's major sources of income. Tourist hot spots include Hong Kong Disneyland, Ocean Park, Hong Kong's Wetland Park, the Ngon Ping 360 cable car ride on Lantau Island, and the Peak Tram and Victoria Peak Tower. Over 25 million tourists visited Hong Kong in 2006 and the number of arrivals has continued growing steadily. Mainland China tourists account for over half of Hong Kong's visitors due to the opening and simplification of policies in certain cities in China on travel applications to Hong Kong. In addition, Hong Kong is recognized as providing some of the world's best convention and exhibition facilities. In 2006 there were over 200 international conventions and nearly 100 exhibitions, in turn attracting nearly one million attendees.

See Also: Asia; Asian Tigers; China; Trade Balance.

Bibliography. *Hong Kong Year Book, 2007*, www.yearbook.gov.hk (cited March 2009); Janet Ng, *Paradigm City: Space, Culture, and Capitalism in Hong Kong* (State University of New York Press, 2009); Catherine R. Schenk, *Hong Kong SAR's Monetary and Exchange Rate Challenges: Historical Perspectives* (Palgrave Macmillan, 2009); Ming Sing, *Politics and Government in Hong Kong: Crisis under Chinese Sovereignty* (Routledge, 2009).

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Hospitality Sector

The hospitality sector of the economy comprises two distinct but related industries, the hotel industry and the restaurant industry. The term is also often used to describe a larger system of companies that are interrelated conceptually or operationally in the food, beverage, travel, tourism, transportation, cruise, casino, theme park, leisure, and real estate industries. Globally this larger travel system employs more than 75 million people and represents almost 4 percent of aggregate gross domestic product.

The traditional value proposition for the hospitality sector is the provision of temporary lodging and prepared food away from home, but this has gradually expanded to include a variety of service and entertainment offerings. The term *hospitality* refers to the relationship between companies and consumers, which serves as a substitute for the rapport between hosts and guests in private homes.

The business of hospitality can be traced to early recorded history, for example, the *tabernae* (taverns or inns) of ancient Rome. Until recently, the hospitality sector was highly fragmented and lacked sophisticated management systems. However, as the demand for hotel and restaurant services expanded during the 20th century, several hospitality companies developed significant scale and scope, and the principles of managerial capitalism were gradually institutionalized. The multi-unit "chain" concept became increasingly dominant, and franchising was widely adopted as an expansion and financing technique. The late 20th century was characterized by the increasing segmentation of the industry, by the entry of chain operators into upscale segments, and by significant acquisition and consolidation activity. Notable moments include the listing by Sheraton on the New York Stock Exchange in 1947, and the inclusion of McDonald's in the Dow Jones Industrial Average in 1985.

Worldwide, 75 million people work in hospitality, and there are over four million guest rooms in the United States alone.

The hotel (or lodging) industry provides accommodations for travelers and related services such as onsite restaurants and spas. In the United States, the hotel industry generates annual revenues of more than US$125 billion and comprises more than 47,000 separate locations or "properties" with more than four million guest rooms. The industry is segmented vertically by price and amenity level (from "luxury" to "economy") and horizontally by usage patterns (such as "transient" or "extended stay").

The largest global hotel companies include Accor, Best Western, Carlson, Choice, Hilton, Hyatt, InterContinental, Marriott, Starwood, and Wyndham. With the exception of Best Western, each of these is a holding company with a portfolio of subsidiary brands. Examples include Marriott (which owns brands such as Ritz-Carlton and Courtyard) and Starwood (which owns brands such as Sheraton and Westin).

The restaurant (or foodservice) industry offers prepared food and beverage products away from home. In the United States, the restaurant industry generates annual revenues of more than US$500 billion and comprises more than 945,000 separate locations or "units." The industry is segmented vertically by price and amenity level (from "fine dining" to "quick service") and horizontally by style of cuisine (such as "French" or "barbecue").

The largest global restaurant companies include Brinker, Darden, McDonald's, OSI, Wendy's, and Yum. Several of these are holding companies with portfolios of subsidiary brands. Examples include Darden (which owns brands such as Olive Garden and Red Lobster) and Yum (which owns brands such as Kentucky Fried

Chicken and Pizza Hut). The restaurant industry also includes specialty food retailers (such as Starbucks) and contract foodservice operators (such as Aramark, Compass, and Sodexho). Restaurants within hotels are considered part of both industries, and therefore are doubled-counted in many industry statistics.

A Complex Industry

The structure of the hospitality industry is complex, with five distinct components. The first component is the ownership of the business itself. "Independents" are single-unit companies owned by independent entrepreneurs. "Chains" are multi-unit companies that often have a mixed ownership structure, with both "company-owned" locations and "franchised' locations in the same system.

The second component is the brand or name that appears on signage at each location, which is also called a "flag" in the hotel industry. For independents, the brand is owned by the independent business associated with each location. For chains, the brand is owned by a central corporate entity and loaned to each location for a specific period under a franchise or licensing agreement.

The third component is the daily operation of the hotel or restaurant. Independent locations are either self-managed by owners or managed under contract by an independent management company. Company-owned chain locations are usually managed by employees of the chain. Franchised chain locations may be self-managed by the local franchisee, managed under contract by a "third-party" management company, or managed by employees of the franchisor under a "management contract" arrangement.

The fourth component is the underlying real estate for each location, including both land and building. In the restaurant industry, leasing is more common than owning and many restaurants are located within retail space. In the hotel industry, most companies emphasize branding and operating activities, and rarely hold significant ownership interests in the real estate underlying their hotels. Most hotels are owned by the real estate developers who originally initiated the hotel projects, or by real estate investors and syndicates (such as "real estate investment trusts" or REITs).

The fifth component is the distribution system used to connect supply and demand within the marketplace. In the restaurant industry, this function is disorganized and informal. In the hotel industry, the distribution system is quite complex and sophisticated. Independent hotels typically operate their own reservations activities, but may also engage independent reservations services or join independent marketing consortia. Chain properties rely on the central corporate entity to provide distribution through its "central reservation system" (CRS) or proprietary Web site. Separate companies known as "global distribution systems" (GDS) provide interconnectivity between the various hotel reservations systems, travel agents, airline reservations systems, and internet travel sites.

Management and Measures

Professional management is now standard in many parts of the hospitality industry, especially within upscale segments and chain companies. Managers are recruited from undergraduate business schools, specialized hospitality management schools (such as the Cornell Hotel School), or culinary management programs (such as the Culinary Institute of America). Principles of management, control, and finance are similar to those used in other industrial sectors with four notable exceptions.

First, although hospitality offerings represent a hybrid of both intangible services and tangible products, elements of service and experience tend to dominate the value proposition, especially in upscale segments. As a result, the principles of service management (including human resource management and the design of service delivery systems) are critical to the success of any hospitality venture.

Second, regardless of the exact nature of ownership, real estate is embedded within the hotel industry. Hotel properties are capital intensive and purpose-built, meaning they cannot be converted easily for other uses. As such, real estate finance expertise is critical for corporate executives, asset managers, and senior operational managers in the hotel industry. Real estate finance expertise is less important in the restaurant industry.

Third, the hotel industry is characterized by constant supply (over the short term) and variable demand (due to factors such as seasonality), making synchronization of supply and demand difficult. As a result, the hotel industry has adopted variable pricing or "yield management" systems from the airline industry. This has evolved into an integrated system of forecasting, capacity analysis, variable pricing, and promotional marketing known as "revenue management." Variable pricing is less important in the restaurant industry.

Fourth, the hospitality sector has several specialized performance measures. These include capacity utilization calculations (such as "occupancy" percentage in the hotel industry and "turns" ratio in the restaurant industry), revenue per transaction calculations (such as "average daily rate" or ADR in the hotel industry and "average check" in the restaurant industry), and calculations that compare revenue to capacity (such as "revenue per available room" or REVPAR in the hotel industry and "revenue per available seat" or REVPAS in the restaurant industry).

See Also: Branding; Franchising; Pricing; Service Expectations; Service Level.

Bibliography. American Hotel & Lodging Association, *2007 Lodging Industry Profile*, www.ahla.com (cited March 2009); "A Century of Investing," *Wall Street Journal* (May 28, 1996); Clayton W. Barrows and Thomas F. Powers, *Introduction to Management in the Hospitality Industry* (John Wiley & Sons, 2009); Florence Berger and Judi Brownell, *Organizational Behavior for the Hospitality Industry* (Pearson Prentice Hall, 2009); Conrad Lashley, Paul Lynch, and Alison J. Morrison, *Hospitality: A Social Lens* (Elsevier, 2007); Alan J. Liddle, "Top 100," *Nation's Restaurant News* (June 25, 2007); National Restaurant Association, *Restaurant Industry Facts 2008*, www.restaurant.org (cited March 2009); Andrew K. Sandoval-Strausz, *Hotel: An American History* (Yale University Press, 2007); Karyn Strauss, "Hotels 325," *Hotels* (v.41/7, 2007); John R. Walker, *Introduction to Hospitality*, 4th ed. (Prentice Hall, 2006); World Travel & Tourism Council, *World: 2007 Travel & Tourism Economic Research*, www.wttc.org (cited March 2009).

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Host Country

International business is a scientific discipline that is rapidly evolving in parallel with the efforts of most firms to engage themselves in foreign operations. It researches business activity in an international context at the country, firm, or consumer levels. In particular, the international activity of firms presupposes the transfer of production mechanisms and/or market practices from one country to another. Local corporations that eventually go international may build a manufacturing plant or assembly lines in a foreign country, they may be supplied with raw materials and resources, or they may establish an office of business associates who are responsible for the successful marketing of products in their respective countries of operation. These foreign countries that host production, sourcing, or market activities of internationalizing firms are referred to as "host countries" in the international business literature.

Especially, countries with high rates of unemployment or less developed countries (LDCs) compete intensively to make their national contexts a more promising ground for foreign direct investments (FDI) by international firms. Means through which prospective host countries compete to attract FDI include tax incentives, fair competition, skilled labor, or the elimination of bureaucracy. Thus, governance structures and regulatory schemes in both the private and public sectors must be aligned in such a way as to offer transparency and equal treatment within host countries.

Apart from LDCs, almost all countries in the world try to achieve a certain status of hosting international firms' activities. This is because the benefits for local economies' welfare and societies' well-being are well documented and have a lasting effect. The most apparent and much-wanted implication for a host country is the generation of employment through the creation of local marketing subsidiaries or opening of factories. Equally important are the increased cash flows to the host country through tax payments by foreign firms.

Another major advantage is the transfer of technical and managerial know-how from the home to the host country. Firms that choose to operate in a host country often collaborate with local corporations for such reasons as becoming acquainted with the local market's specificities or granting access to valuable resources and raw materials. As a result of this collaboration, firms learn from each other and have access to bits of knowledge, which would otherwise be impossible to get. In particular, Japan and Korea benefited greatly as host countries from such exchanges of technological know-how between local companies and Western counterparts; part of the last century's Japanese miracle is attributed to such fruitful collaborations.

Increasing competition between host and home firms also increases learning potential and the competitive stance of the host country. Local firms must increase their learning capacity and become even more proactive and competitive against an often more sophisticated foreign firm. Such an increase in local firms' competitiveness results in better servicing and needs-fulfilling products for the local population. A closed local market that does not encourage foreign competition may not provide the environmental inducements for economic growth and corporate sophistication.

Moreover, firms that want to invest in a host country are sometimes legally obliged to collaborate with a local business or they cannot assume a majority of ownership. Such collaborations also increase learning benefits for local firms that do not possess the resources to acquire knowledge elsewhere. An example of such a positive implication for the host country is the case of the Philippines. Major shipping firms that invest in that country for reasons of crew recruitment for their ships must collaborate with a Philippine business if they want to establish a branch there. In this way, local firms of the host country have been greatly advantaged through increased cash flows and managerial know-how.

Apart from the aforementioned benefits (corporate growth, seats of employment, financial inflows, and knowledge generation), international operations also generate disadvantages that may inhibit societal welfare in the host country. For example, many resource-seeking firms exploit local raw materials for their own benefit and, thus, significant natural resources become extinct without apparent benefits for the host country. The depletion of the rain forest in the Amazon basin is a characteristic example of unilateral foreign investment in a host country. Foreign timber or oil corporations have largely benefited while the turnover for the local economy is disproportional.

Additional drawbacks of FDI for the host country include the worsening of the balance of payments due to the repatriation of profits or the competitive pressures on local firms. Host country's business units may not afford to compete with often larger, market-seeking foreign corporations. As a result, an increasing number of local businesses cease to exist due to their inherent inability to compete against a multinational giant. Hyper-retailers, in particular, have been rightfully or not accused of destroying local retailing structures and are held accountable for the closure of many local small and medium enterprises (SMEs).

Summarizing, we can claim that a significant body of the international business literature suggests that governments should strive to make their countries host countries for FDI. However, benefits are not generated without establishing a proper platform of policies for hosting international activities. Knowledge sharing and dialogue with experienced host countries must be facilitated if countries want to alleviate poverty or reap aforementioned benefits as host countries. Otherwise, the drawbacks of being a host country will prevail and national competitiveness and well-being may be in jeopardy.

See Also: Foreign Direct Investment, Horizontal and Vertical; Globalization; Home Country; Locational Advantages; Market-Seeking Investment; Multidomestic Structure; Multinational Corporation; Subsidiary.

Bibliography. Arjun Bhardwaj, Joerg Dietz, and Paul W. Beamish, "Host Country Cultural Influences on Foreign Direct Investment," *Management International Review* (v.47/1, 2007); J. E. Haskel, S. C. Pereira, and M. J. Slaughter, "Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms?" *Review of Economics and Statistics* (v.89/3, 2007); G. Holger and D. Greenaway, "Much Ado About Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment?" *World Bank Research Observer* (v.19/2, 2004); Arijit Mukherjee and Kullapat Suetrong, *Privatisation, Strategic Foreign Direct Investment and the Host Country Welfare* (University of Nottingham, 2007); Jasjit Singh, "Asymmetry of Knowledge Spillovers Between MNCs and Host Country Firms," *Journal of International Business Studies* (v.38/5, 2007); UNCTAD Secretariat, *The Emerging Landscape of Foreign Direct Investment: Some Salient Issues: Note* (United Nations, 2007).

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Hostile Takeovers

A hostile takeover is a corporate acquisition that is forcefully resisted by the target firm's top management and board of directors. Although they constitute less than 3 percent of all merger and acquisition (M&A) activity, hostile takeovers have long garnered a disproportionately large share of attention from the news media, the general public, and business scholars for many reasons. Compared to so-called friendly M&As, which are generally planned and negotiated in relative secrecy, hostile takeovers tend to unfold in a more public arena, where representatives of both the acquirer (popularly called a "raider") and target firm vie for the favor of shareholders, regulators, and other influential parties. Sociologists note how the intensity and ritualized nature of these contests has contributed to the unusually colorful terminology used to describe hostile takeovers. More than virtually any other corporate activity, hostile takeovers bring about abrupt and dramatic changes to a firm's strategy, structure, and leadership.

Hostile takeovers have remained a highly controversial practice since their inception in the United States during the early 1950s. While proponents argue that hostile takeovers serve an important corporate governance function that helps maximize shareholder value, critics emphasize their potentially damaging effect to such stakeholders as workers, the local community, and managers of the target firm.

Tender Offers and Proxy Contests

Within the United States, hostile takeovers are most frequently attempted through a financial and legal mechanism known as a tender offer (i.e., a public solicitation to purchase shares of the target company at a fixed price, within a given time period, and usually contingent upon shareholders tendering sufficient shares for the bidder to gain control of the firm). To convince shareholders to sell their shares, the tender offer price is usually set at a significant premium over the current market price (frequently 50 percent or more). Prior to announcing a tender offer, a raider will often purchase shares in the open stock market at prevailing market prices. Such purchases enable the raider to minimize the cost of a successful acquisition, and to sell these shares (often at a significant profit) if the hostile takeover attempt is not completed. Once accumulating more than 5 percent of a voting class of a company's equity, however, the acquirer is required by United States law to file a Schedule 13D (beneficial ownership report) within 10 days. Since the acquirer must disclose the purpose for the share purchase within Schedule 13D, the filing of this report often marks the beginning of the takeover battle.

With the extensive reporting requirements defined by federal law, particularly the Securities Exchange (1934) and Williams (1968) Acts, it would be very difficult in the United States for a party, or group of parties acting together, to gain control of a company solely by accumulating shares gradually in the open market (a practice known as a "creeping tender offer"). Some international business experts suggest that this approach may become an increasingly frequent and less costly alternative to traditional tender offers in countries with less stringent reporting requirements. At present, however, tender offers continue by far to be the most common hostile takeover mechanism worldwide.

Raiders may also initiate a proxy contest, an attempt to convince target firm shareholders to replace existing board members with a new group that will approve the acquisition. While tender offers and proxy contests can be used in tandem, they are often regarded as alternative mechanisms for accomplishing hostile takeovers. Empirical evidence suggests that proxy contests are more prevalent when there is greater evidence of managerial ineffectiveness, as measured by stock market performance and return on assets. Tender offers are used more frequently when the target is highly leveraged.

Anti-Takeover Measures

Companies can take several precautionary steps to curb the threat of a hostile takeover. The most famous anti-takeover measure is the "poison pill," which was first conceived by the attorney Martin Lipton in the 1980s. While there are many variations, the basic poison pill grants shareholders the option to purchase additional shares at a significant discount in the event of a hostile takeover bid, thus diluting the raider's ownership and making the acquisition more costly. Firms can also implement a "staggered board" in which directors serve multiyear terms with only a portion of members coming up for election each year. Another popular anti-takeover practice involves amending the corporate charter so that a "supermajority" of shareholders (often two-thirds or more) is needed to approve major strategic changes, including mergers. All of the anti-takeover practices highlighted above face rigorous opposition by shareholder rights activists.

Somewhat less controversially, a firm may include a provision in its charter that authorizes its directors to consider the well-being of stakeholders other than just shareholders when evaluating major strategic decisions. Once a hostile bid has been announced, the target firm may take on additional debt or sell off a valuable asset ("the crown jewels") to make itself less attractive. In a practice known as "greenmail," the target might buy back its shares from the raider at a premium. Thus, a failed hostile takeover could easily leave the target firm weaker, both competitively and financially, than prior to the bid. The target firm might also enlist a third party "white knight" to acquire sufficient shares to block the hostile takeover, or to initiate a friendly acquisition. Many target firms begin to pursue the types of practices most commonly associated with hostile acquirers, such as laying off workers, outsourcing, rationalizing operations through facility closures, and refocusing on core markets. Target firms will also commonly lobby governmental regulators and legislators to oppose the acquisition.

Effects

The use of hostile takeovers as a means for achieving good corporate governance was originally outlined by Henry Manne in 1965. According to his theoretical premise of a market for corporate control, stock prices are not only efficient but they also provide a critical indicator of managerial effectiveness. When a company's share price falls relative to the overall market, it signals that the firm's managers are underperforming. This, in turn, provides an incentive for an outside party to gain control of the company and implement changes that will increase shareholder value. Advocates of a market-based corporate governance system find this theoretical framework particularly appealing since monitoring managers directly is considered very costly and frequently ineffective. Regardless of whether managers are underperforming due to incompetence or self-interested behavior, the market for corporate control promises that the fault will become readily apparent via the firm's share price. Conversely, critics of hostile takeovers argue that the practice forces managers to focus too narrowly on short-term stock performance to the detriment of long-run shareholder value.

Another important debate involves whether the benefits of hostile takeovers are sufficient to offset their harmful effects. Hostile takeovers tend to lead to workforce reductions in both the target and acquiring organization that are even greater in magnitude than those of friendly acquisitions. The negative impact of facility closures on a local economy can be profound and enduring. Hostile takeovers have also been argued to reduce average wage levels by shifting employment away from older, longer-tenured workers.

Empirical findings support the contention that weak stock market and accounting performance increases a firm's likelihood of becoming a hostile takeover target. Shareholders of target firms generally experience substantial financial gains from hostile takeovers, as they also do from friendly acquisitions. While some studies suggest that the performance of the target generally improves after a hostile takeover, it is not clear that the acquirer benefits financially from these gains after accounting for the purchase premium.

Prevalence

The level of hostile takeover activity differs dramatically across countries. According to a 2004 study by William Schneper and Mauro Guillén, there were 478 hostile takeover attempts in the United States from 1988 to 2003, compared to 273 in the United Kingdom, 19 each in France and Sweden, seven in Germany, three each in Japan and Malaysia, and one in China. Hostile takeovers are relatively less common in countries characterized by high ownership concentration and where state ownership of firms is commonplace. While the corporate cross-ownership of shares has traditionally stifled the hostile takeover market in Japan, the unraveling of these arrangements during recent years has been accompanied by an increase in predatory activity.

From a more sociological perspective, hostile takeovers have been found to be more frequent in countries with strongly individualistic national cultures and where the corporate legal code privileges shareholder rights. Hostile takeovers are less common in countries where workers and commercial banks receive a stronger degree of legal protection. Despite the German system of codetermination, which guarantees workers a significant role in the control of firms, the recent movement toward *Unternehmenswertsteigerung* (increasing shareholder value) appears to have been accompanied by a nascent, but still growing, hostile takeover market. The hostile bid of €124 billion ($128 billion) for Germany's Mannesmann by the UK firm Vodafone in 1999 was the world's largest hostile takeover attempt to date. The deal was later completed as an amicable merger in 2000.

During 1993, China's first hostile bid resulted in Shanghai Bao gaining a 20 percent share of the Yanzhong Industrial Company. Whether hostile takeover activity will continue to spread in these and other countries remains an open question. Regardless of the answer, hostile takeovers will remain an important topic of discussion and spirited debate for the foreseeable future.

See Also: Acquisitions, Takeovers, and Mergers; Board of Directors; Corporate Governance; Shareholder Activism; Stock Exchanges.

Bibliography. Alan J. Auerbach, ed., *Corporate Takeovers: Causes and Consequences* (University of Chicago Press, 1991); Dennis J. Block, *Contests for Corporate Control 2008: Current Offensive & Defensive Strategies in M & A Transactions* (Practicing Law Institute, 2008); John Raymond Boatright, *Ethics in Finance* (Blackwell, 2008); Enrico Colcera, *The Market for Corporate Control in Japan: M&As, Hostile Takeovers and Regulatory Framework* (Springer, 2007); Patrick A. Gaughan, *Mergers, Acquisitions and Corporate Restructurings*, 4th ed. (Wiley, 2007); Paul M. Healy, Krishna G. Palepu, and Richard S. Ruback, "Which Takeovers Are Profitable? Strategic or Financial?" *Sloan Management Review* (v.38/4, 1997); Paul M. Hirsch, "From Ambushes to Golden Parachutes: Corporate Takeovers as an Instance of Cultural Framing and Institutional Integration," *American Journal of Sociology* (v.91/4, 1986); Henry G. Manne, "Mergers and the Market for Corporate Control," *Journal of Political Economy* (v.73/4, 1965); William D. Schneper and Mauro F. Guillén, "Stakeholder Rights and Corporate Governance: A Cross-National Study of Hostile Takeovers," *Administrative Science Quarterly* (v.49, 2004).

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Housing Allowance

Typically an allowance paid to expatriates on long-term international assignments, a housing allowance is a financial benefit included in an expatriate's remuneration package to cover the costs of housing in a new location. With the possible exception of foreign taxes and school fees, housing is usually the most expensive portion of an expatriate's international assignment costs. The cost of renting overseas is usually higher than in one's home country because in many popular expatriate destinations, the presence of foreigners drives up rental costs for housing likely to be chosen by expatriates. Temporary rentals on a two-to-three-year lease also tend to be more expensive than permanent housing in one's home country.

A housing allowance is usually included in an expatriate's remuneration package to ensure that expatriates pay no more for housing while abroad than they would have paid had they stayed at home. This is commonly referred to as the "balance sheet" approach. However, inherent in the concept is the expectation that expatriates should still contribute a portion of their salary toward foreign housing costs, just as they would for housing in their home country. To determine the amount of housing allowance to be paid, most organizations base their decision on knowledge of a location's rental market, experience in that market with other expatriates, and advice from external data sources (e.g., housing guidelines from consulting firms). Seniority, salary, and family size may also influence the amount of housing allowance paid or offered. Housing allowances are then set either at a fixed amount per month/year or using rental cost guidelines that allow for some flexibility if a specific need exists.

In addition to the above, other approaches to housing allowances may also be adopted. For example, some organizations share the cost of housing with expatriates by paying an approved amount and permitting an expatriate to pay the extra portion if he/she wishes to live in more expensive accommodations. Many organizations also prefer to hold the lease in the company's name for tax purposes, as most countries consider cash payments for rent to expatriates (through remuneration) as taxable. When the organization holds the lease, it is treated as a business expense, which can substantially reduce the amount of tax due. There are also some locations where rental property owners require that a lease be held in a company's name to ensure that if the expatriate moves out before the lease has expired, the rental income can still be obtained. In these locations, rental-property owners prefer to enter into a contract based on the security of a company's continued presence in that location rather than risk leasing their property to nonpermanent expatriates. In some cases, particularly in remote locations, a company may provide accommodation in residences owned by the organization. This typically occurs in locations where a company may have a long-term presence, but it is more cost-effective to own homes or apartments for expatriates' use.

Utility costs may or may not be included in a housing allowance. Since rental charges do not include utilities, it has become common practice in some locations (particularly in locations where utility charges are high) for organizations to pay all utility costs or a fixed monthly utility allowance. Utilities can include electricity, gas, wood, heating oil, water, septic tank or sewage connection, garbage collection, and cable television. If utility charges exceed a fixed monthly allowance, the expatriate is expected to pay the difference. If utility charges do not exceed a fixed monthly allowance, expatriates typically are not entitled to receive the shortfall.

The issue of maintaining an expatriate's primary home-country residence is also of interest in calculating a housing allowance. As most organizations discourage expatriates from selling their home-country residence (due to the temporary nature of most assignments; expatriates will likely return to their home-country after two or three years), expatriates during an assignment will therefore continue to incur costs associated with their primary residence that may or may not be compensated via their housing allowance (especially if a housing allowance is shared between expatriate and employer). This additional cost can be of concern to expatriates. Most organizations overcome this problem by encouraging expatriates to rent out their primary residence during their absence overseas at a cost that will cover all or much of the mortgage payment. Where a shortfall exists, organizations often subsidize the interest payment of a mortgage, with the knowledge that full replacement of these payments is not necessary given that mortgage payments contribute toward a family's overall equity position.

When rental of the home-country residence is not practical or advisable, organizations may adjust a housing allowance if the expatriate can present legitimate reasons. These reasons can include that the expatriate is required to leave his family at home due to the nature of the assignment (e.g., the children must remain in school), or that the assignee is unable to rent their primary residence and will thereby incur additional costs beyond their control. In these situations, organizations might not adjust a housing allowance but instead might increase an expatriate's salary.

See Also: Cost of Living Allowance; Education Allowance; Expatriate; Home Country; International Compensation; Salaries and Wages.

Bibliography. Organization Resources Counselors, Inc., *International Assignments: Strategies for Compensation and Pay Administration* (2007).

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HSBC Holdings

Promoting its slogan "the world's local bank," HSBC is one of the largest banking and financial services organizations in the world. While HSBC Holdings plc is incorporated in England and headquartered in London (although only from 1993; it was previously based in Hong Kong), it has operations throughout Europe (pre-tax profits in France alone exceeded US$1 billion for the first time in 2007), the Asia-Pacific region, the Americas, the Middle East, and Africa. Indeed, the company's emerging markets of Asia, the Middle East, and Latin America now contribute more than 60 percent of group pre-tax profits. There are around 10,000 offices located in 82 countries and territories; 312,000 employees worldwide; and 125 million customers (35 million of whom are registered for internet banking). This is, therefore, a significant undertaking by any measure.

HSBC Holdings is listed on the stock exchanges of London, Hong Kong, New York, Paris, and Bermuda.

There are over 200,000 shareholders spread across 100 countries and territories.

Not surprisingly for a banking colossus, HSBC's growth has been both organic and via numerous acquisitions. The bank's origins can be traced back to 1865 with the establishment in that year of the Hongkong and Shanghai Banking Corporation Limited, which even though founded in Hong Kong, very early on had offices in both Shanghai and London, as well as an agency in San Francisco. Numerous acquisitions followed over the years, although in the European case these were principally those of the grossly mismanaged Midland Bank plc (now HSBC Bank plc) in the United Kingdom (whose shares were acquired over many years, and the remaining equity purchased in 1992); and, in France, one of that country's largest banks, CCF (now HSBC France) in 2000. Other acquisitions over the last half-century have taken HSBC into the Middle East (1959) in general and Saudi Arabia in particular (1978), the United States (initially in 1980, although more acquisitions followed), Germany (1980), Canada (1981), Egypt (1982), Australia (1986), Malaysia (1994), Brazil and Argentina (1997), Luxembourg and Malta (1999), Turkey (2001), Mexico (2002), China (2003), Bermuda (2004), and Central America (2006).

As would be expected in the case of a major force in the world's banking industry, HSBC offers products in many domains, including personal financial services (including consumer finance); commercial banking; corporate and investment banking; and private banking (for individuals with high net worth).

As with many other "household name" businesses, HSBC has proven itself anxious to establish its corporate social responsibility credentials, which it has attempted along a number of dimensions. As an illustration, the company has established the HSBC Climate Partnership, which is a five-year agreement between itself, the Climate Group, the Earthwatch Institute, the Smithsonian Tropical Institute, and the World Wide Fund for Nature. At US$100 million, HSBC's investment (the largest ever to each of the specified environmental charities) aims to combat climate change, through all of the activities of individuals, businesses, and governments, on a worldwide scale.

HSBC additionally supports the local communities in which it operates through both financial donations and via the various involvements of its employees, with the principal objectives being education (particularly of the young) and the environment. In fact, three-quarters of HSBC's charitable giving is directed toward just these two specified areas.

Commitment to the environment (particularly climate change) is evidenced by HSBC's intention to become "the first major bank to go carbon neutral" (although it has to be said that becoming "less of a carbon contributor" might be a more realistic objective for which to aim. Hence the "offsetting" of any "remaining" [i.e., after energy efficiency and green electricity initiatives have been pushed to the limit] carbon dioxide emissions using carbon "allowances" or "credits" would not appear per se to represent much of a "solution" to the carbon emission problem).

Elsewhere, HSBC has been concerned to develop a "sustainable approach to banking" that includes such things as the adoption of the Ecuador Principles (a set of voluntary guidelines that addresses the environmental and social issues that arise in project financing), and the avoidance of certain types of business (such as financing weapons manufacture, dealing with countries the subject of international sanctions, or the laundering of earnings from crime or tax evasion).

As HSBC has maintained, the group's "goal is not, and never has been, profit at any cost" because it is aware that tomorrow's success depends upon the trust it builds today. HSBC Holdings plc fared better than most banks in the 2008 banking crisis.

See Also: Company Profiles: East Asia; HBOS; Hong Kong; United Kingdom.

Bibliography. Bloomberg News, "HSBC Seen Faring Better than Most in Banking Storm," *Sydney Morning Herald* (cited March 2009); HSBC Holdings, *Annual Report and Accounts* (2008); HSBC Holdings, *Annual Review* (2007).

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Hudson's Bay Company

North America's oldest continuously operating commercial enterprise, the Hudson's Bay Company (HBC), officially known as The Governor and Company of Adventurers of England trading into Hudson's Bay, was founded on May 2, 1670, to trade with aboriginals in Canada, mostly for furs. At one time the HBC was the world's largest landowner, controlling the massive drainage area around the Hudson's Bay known as Rupert's Land. The company's head, styled a Governor, was, in essence, in control of most of what is now northern Canada, chiefly through overseeing aspects of trade with the aboriginal peoples. Today the company is a retail entity in Canada.

Granted a charter by King Charles II of England in 1670, the company set up its first trading post in what is now northern Manitoba. Competing with the French-controlled fur trade out of Montreal, the HBC focused on using its access through the bay to establish links with the interior, and to build forts that allowed it to control as much of the fur trade as possible. By the end of the 18th century, the HBC had a string of forts called factories, managed by "factors" (the head of each factory), and acted as the de facto authority of state, notwithstanding the constant fighting between the HBC and French traders and French imperial forces.

The French were eventually defeated in North America, ceding all of Canada to Great Britain in 1763. However, Montreal fur trading interests persisted, establishing the North West Company in 1779. In 1821, following decades of conflict between the two entities, the HBC and the North West Company merged, giving the HBC a monopoly on the entire fur trade for northern North America. This period was overseen by George Simpson, who ran the company from 1821 to 1860. During this time, the company issued its own currency and played a key role in the administration of affairs over much of western Canada and the northwestern United States. Its traders and administrators were responsible for charting and settling much of the region.

Eventually, aboriginals and other traders protested and challenged the HBC's monopoly over all trade in the North West. By the 1860s, the monopoly was no longer enforceable, and in 1869 the company sold Rupert's Land for £300,000 to the young Canadian government, which had itself only been established in 1867. The handover took place in 1870, following an uprising in the Red River Colony by the Métis, the mixed aboriginal and European offspring of the original fur traders. The Métis and their charismatic leader Louis Riel challenged the transaction and forced the creation of the province of Manitoba. Donald Smith, later known as Lord Strathcona, a leading figure in Canadian business and politics, who worked for the HBC for 75 years from 1838 to 1914, negotiated the transfer. This marked the end of the HBC's role as the de facto government of the North West, though its influence remained through its real estate holdings and stores.

The Hudson's Bay Company's activity is now primarily retail—and included this The Bay department store in Toronto in 2007.

By the 20th century, the company had become essentially a retail operation, known as "The Bay." It ended its involvement with northern stores, sold most of its real estate holdings, and largely cut its ties with the fur trade. Its first department store had opened in Winnipeg, Manitoba, in 1881, and the company developed a chain across the country. In 1970, on the company's 300th anniversary, the HBC's headquarters were transferred from London, England, to Winnipeg. In 1979 Canadian Ken Thomson brought the firm into Canadian control by purchasing it for $641 million. Until that time, it had been controlled by British investors. In 2006 the company was purchased by American Jerry Zucker, who became the first U.S. citizen to become governor of the company. In 2008 the company was again sold, this time to U.S. firm NRDC Equity Partners, which owns U.S. retailer Lord and Taylor. In recent years the company has faced difficulties in the very competitive Canadian retail sector, especially against newer entrants such as Wal-Mart.

Because of its age and its place in Canadian history, the Hudson's Bay Company retains significant corporate and emotional symbolism as North America's oldest company, and the last major Canadian-based (but not Canadian-owned) retailer and department store. While many Canadians were unhappy to see the company purchased by an American, they recognized that this may have been its only choice if it wished to continue as an entity.

See Also: Canada; Company Profiles: North America.

Bibliography. William Cornwallis King and Mary Weekes, *Trader King* (Fifth House, 2007); Robert Montgomery Martin, *The Hudson's Bay Territories and Vancouver's Island: With an Exposition of the Chartered Rights, Conduct, and Policy of the Honble Hudson's Bay Corporation* (Kessinger Publishing, 2007); Peter C. Newman, *Caesars of the Wilderness* (Viking, 1987); Peter C. Newman, *The Company of Adventurers* (Viking, 1985;) Peter C. Newman, *Merchant Princes* (Viking, 1991); James Raffan, *Emperor of the North: Sir George Simpson and the Remarkable Story of the Hudson's Bay Company* (HarperCollins, 2007); Deidre Simmons, *Keepers of the Record: The History of the Hudson's Bay Company Archives* (McGill-Queen's University Press, 2007); Gary Spraakman, "The Impact of Institutions on Management Accounting Changes at the Hudson's Bay Company, 1670 to 2005," *Journal of Accounting and Organizational Change* (v.2/2, 2006).

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Hungary

Hungary is a small, landlocked, central European country, capital Budapest, with a population of 10 million. Although its international economic reputation suffered in the first decade of the new century, it has established a positive image as a progressive post-communist state. The modern Hungarian state is a product of the defeat in World War I of the Austro-Hungarian Empire. Although Hungarian nationalists saw themselves as victims of Vienna, the creation of a dual monarchy in 1867 gave Budapest considerable power. It was not used wisely. Many other peoples within the larger Hungarian kingdom saw themselves as oppressed. The Treaty of Trianon much reduced the size of the new Hungary. The largest loss was the transfer of Transylvania to Romania. Inter-war Hungarian politics were reactionary and embittered, especially after the failure of the revolution in 1919. Hungary supported the Nazis during World War II. The country was liberated by the Red Army, and it became a communist state in 1948–49.

In 1956 a revolution, led as much by workers as by intellectuals, broke out. It was suppressed by Soviet forces. After several years of repression, the communist leadership under Janos Kadar made an attempt to compromise. Market-style "socialism" was created and the basis laid for more positive social provision and a more tolerant political atmosphere. This gave Hungary a special place in the communist bloc, which augured well for the country when the communist system collapsed in 1989–90.

Today the idea of restoring a greater Hungary is restricted to the fringes. But claims to a special Hungarian distinctiveness, whether in terms of the assertion that the state's history goes back to the crowning of King Steven in 1000 A.D. or speculation about the uniqueness of the language, or other peculiarities remain, even if some scholars remain skeptical. Conflicts with Hungary's neighbors have been removed, but a major issue remains with Slovakia over Hungarian opposition to a major hydroelectric dam project that is of enormous symbolic significance in Hungarian politics.

In the 1990s, Hungary was a relative success story. It had the highest per capita foreign direct investment (FDI) in the transition bloc and at one stage received around one-third of the FDI in the whole region. It still holds a prominent FDI position today. Budapest gained a reputation as a welcoming and modern European capital. Privatization was undertaken relatively rapidly.

Today agriculture plays a small part in the Hungarian economy, providing only 3 percent of output. Industry produces around 32 percent and services 66 percent of output. The leading industries are telecommunications equipment and electrical and other kinds of machinery. Hungarian trade was quickly refocused on the West in the 1990s, and today Germany, within the EU, is the dominant trading partner, with some 30 percent of imports and exports. However, Hungary still depends on energy imports from Russia.

But beneath the surface there were many difficulties. A black economy continues to be important, and Hungary has one of the lowest labor-force participation rates in the former Soviet bloc. There are serious regional inequalities, with a rust belt of decaying iron and steel, machinery, and ex-mining towns, while the local wealthy and foreigners have second homes on the shores of Lake Balaton in the west of the country. The country is 65 percent urban, with more prosperous Budapest looming disproportionately large.

Hungary quickly joined Western organizations, including NATO in 1999. The key focus, however, was European Union accession. This was gained in 2004, although the accession referendum produced an 84 percent yes vote on the basis of a turnout of only 46 percent. Hungary's leaders have also looked to develop links with Washington. Hungary, along with Poland and the Czech Republic, gave prominent support, despite opposition at home, to the U.S. invasion of Iraq.

In recent years, Hungary's reputation has suffered as its previously ailing neighbors like Slovakia began to recover. Gross domestic product growth has been less impressive and there have been concerns about both the current account deficit and the budget deficit. The government eventually responded to the latter by austerity measures that cut subsidies and raised taxes.

There is a tradition of political opposition and change. While some commentators attack Hungary's relatively high corporate, income, and social security taxes, Hungarians tend to value the higher spending that results. So do many leading foreign companies. The higher level of productivity and style of life continues to be attractive. This includes the facility with English that marks the most educated (although it can be a misleading guide to the wider population). This reduces the tendency of FDI to relocate further east.

See Also: Capitalism; Communism; European Union.

Bibliography. I. Berend, *Central and Eastern Europe, 1944–1993: Detour from the Periphery to the Periphery* (Cambridge, 1999); Hungarian National Statistics Office, portal.ksh.hu (cited March 2009); "Hungary's Economy: In a Mess," *Economist* (n.8573, 2008); P. Kenney, *The Burdens of Freedom: Eastern Europe Since 1989* (Fernwood, 2006); Organisation for Economic Co-operation and Development, *Reforms for Stability and Sustainable Growth: An OECD Perspective on Hungary* (Organisation for Economic Co-operation and Development, 2008); Organización para la Cooperación y Desarrollo Económicos, *Reforms for Stability and Sustainable Growth: An OECD Perspective on Hungary* (Organisation for Economic Co-operation and Development, 2008); I. Romsics, *Hungary in the Twentieth Century* (Corvina Osiris, 1999); Beate Sissenich, *Building States Without Society: European Union Enlargement and the Transfer of EU Social Policy to Poland and Hungary* (Lexington Books, 2007); István P. Székely and David M. G. Newbery, *Hungary: An Economy in Transition* (Cambridge University Press, 2008).

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Hyundai Motor

Hyundai was founded by Chung Ju-yung and became one of largest conglomerate companies in South Korea. As a family-run Korean business group (chaebol), the most well-known Hyundai organization is the Hyundai Motor Company, the world's fifth-largest automaker. Hyundai Heavy Industries is the world's largest shipbuilder, and Hynix is a top semiconductor producer

The Hyundai Group was established in 1947 with the initial construction company, named Hyundai Togun. After the Korean War, the company displayed spectacular growth and rapid expansion as a result of the postwar government-led reconstruction programs. Since its founding, it also expanded rapidly into car manufacturing, construction, shipbuilding, electronics, and financial services. The company was involved in the early stages of the country's recovery following World War II. After the Korean War, development intensified, and Hyundai was quick to take on a key role, working on civil and industrial projects as well as housing programs. Consequently, Hyundai worked with the government in rebuilding the economy and formed an integral part of Korea's economic strategy.

One of the most significant moves was made in 1975, when the group began constructing an integrated car factory. It was the foundation of South Korea's largest auto company, one that was to dominate Korea's home and export markets. The vehicle was launched in 1975. By the following year, Hyundai was producing 30,000 cars, and by 1979 the total had risen to 110,000.

Hyundai kept expanding its business activities into more various areas. It created Dongsu Industrial Company, a construction-material manufacturer in 1975, and Seohan Development Company, a welding and electrode carbide maker in 1976. For trading arms of these companies, the group also set up Hyundai Corporation. At the same time, it created Hyundai Merchant Marine Company, which concentrated on cargo services, chartering, brokerage, and related services, and Koryeo Industrial Development Company and Hyundai Housing and Industrial Development Company, whose operations included construction design and property development. Hyundai also expanded into the business of precision industry, timber, and heavy and chemical industries, including iron and steel manufacturing.

Hyundai's influence stretched far beyond the Korean peninsula as the company won contracts to build an expressway in Thailand and a major port in Saudi Arabia. Hyundai dominated the Korean market and quickly became a major player on the international scene. By the 1970s, Hyundai began to build vessels as well as shipyards and by 1986, Hyundai produced its first vehicle made entirely from Korean components. From the 1980s, Hyundai added additional specialties including the building of semiconductors and magnetic levitation trains.

Following the creation in 1983 of Hyundai Electronics, Hyundai stepped up its presence in the electronics field and produced semiconductors, telecommunication equipment, and industrial electronic systems. The group as a whole had proven itself capable of taking diverse markets and was determined to maintain and expand its markets by stepping up research-and-development spending focusing on technology.

The South Korean economy took a turn for the worse during the late 1990s. In order to restore the nation's financial health, President Kim Dae Jung, who took office in 1998, launched a series of restructuring programs designed to reform the chaebols, many of which had become heavily debt-burdened. His reforms aimed at dismantling large, often corrupt, chaebols and included changing the ownership, business, and financial structures of the region's large conglomerates. By this time, the Hyundai Group was responsible for approximately 20 percent of Korea's gross domestic product. As such, its financial health was directly related to South Korea's overall economic condition.

As a result of government pressures, Hyundai and other South Korean chaebols set plans in motion to sell off many of their businesses in order to pay down debt and shore up profits. Upon Chung Ju-yung's death in 2001, much of the Hyundai Group was dismantled. In August 2001 nine core Hyundai companies, including Hyundai Engineering & Construction and Hynix Semiconductor, Inc. (formerly known as Hyundai Electronics Industries), left the chaebol. Hyundai Motor Co. was prospering as Korea's largest car maker, but officially separated from the Hyundai Group in September 2000. After the separation, Hyundai Group focused on elevators, container services, and tourism to Mount Kumgang located in North Korea.

See Also: Chaebol; Korea, South.

Bibliography. Fundinguniverse.com, "Hyundai Group," www.fundinguniverse.com (cited March 2009); Hyundaigroup.com, "History," www.hyundaigroup.com (cited March 2009); Matthew C. Keegan, "The History of Hyundai," ezinearticles.com/?The-History-of-Hyundai&id=88548 (cited March 2009); Russell D. Lansbury, Chung-sŏk Sŏ and Sŭng-ho Kwŏn, *The Global Korean Motor Industry: The Hyundai Motor Company's Global Strategy* (Routledge, 2007).

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Iceland

Iceland is an island in the North Atlantic, divided into eight regions by geographical orientation and/or geographical characteristic, e.g., the Southwest Peninsula, all of which add up to an area of approximately 102,819 sq. km (39,698 sq. mi.). Its capital is Reykjavik (pronounced “rake-a-vik”). The climate is a cool temperate oceanic, but it is changeable and mild because of the Gulf Stream and southwest winds. The present constitution came into force on June 17, 1994, and has been amended four times since, with the most recent amendment on June 24, 1999. The parliament (Alpingi) is elected in accordance with the electoral law of 1999, which provides an Alpingi of 63 members. The current president (a largely ceremonial office) is Olafur Rafnar Grimsson, who was reelected in 2004 by a direct popular vote.

The current prime minister is Geir Hilmar Haarde, who promised to reduce inflation, confirmed Iceland’s contribution to peacekeeping forces in Afghanistan, and reasserted the aim to secure a seat on the United Nations Security Council in 2008. However, Iceland possesses no armed forces, since under NATO, U.S. forces were stationed in Iceland as the Iceland Defense Force until an agreement was signed in September 2006, withdrawing all U.S. forces from the island.

Iceland is a member of over 10 organizations such as the World Trade Organization, the Council of Europe, and the European Free Trade Association. The economy has grown since the mid-1990s as a result of privatization and deregulation. Per capita income has doubled over the last two decades, and in 2005, gross domestic product per capita was US$54,427. The growing economy spurred Iceland’s aim to become the world’s first “hydrogen economy,” which it initiated by converting its buses into fuel cell–powered vehicles in 2003. Iceland intends to run all its transport and fishing fleet on hydrogen produced on the island.

Fishing is vital to Iceland’s economy. The per capita consumption of fish and fishery products is the second highest in the world, after the Maldives. Iceland’s main imports in 2005 were industrial supplies, transport equipment, fuels and lubricants, and food and beverages. Its main exports in the same year were fish, crustaceans, mollusks, mineral and chemical products, health care and toilet articles, and transport equipment.

Corruption is very limited in Iceland; it is generally considered one of the least corrupt nations in the world. There are three levels of courts in Iceland: district, appellate, and the supreme court, which has eight judges. The justices elect the chief justice for a period

A salmon fishery in Iceland, where fish, crustaceans, and mollusks are three of the top exports.

of two years. The penal population in September 2005 was 40 per 100,000 of the national population.

Primary education is compulsory and free from 6 to 15 years of age. Optional secondary education from 16 to 19 is also free. The adult literacy rate is at least 99 percent. Iceland has one of the lowest alcohol consumption rates in Europe. The national church is the Evangelical Lutheran, which is endowed by the state. There is one World Heritage Site in Pingvellir National Park, located on an active volcano. The Reykjavik Arts Festival is held every May–June, which features international artists and performers. Iceland publishes more books per person than any other country in the world. There were 258,000 internet users in 2005, or 88 percent of the total population, which is the highest percentage in the world.

Overall, literacy, longevity, income, and social cohesion are on par with world standards. In fact, Iceland is rated number one on high human development by the United Nations Development Programme and life expectancy is third in the world at 81.5 years.

Iceland became independent on June 17, 1944. Long before independence, Iceland was settled in 874 by Ingólfir Arnarson, who came from Norway to where Reykjavik is today. Most of the 400 migrants who followed him arrived from other Nordic countries and from Norse settlements located in the British Isles. In 930, the first-ever democratic national assembly, the Alpingi, was established. In 1000, Christianity was adopted as the island's official religion. Iceland's only indigenous wood, birch wood, which was in abundance, was valuable in making charcoal. However, in the 14th century birch wood became depleted and this, combined with soil erosion, led to a halt in crop growth. In the 15th century, the Black Death expanded to Iceland on two occasions, killing half the population. Iceland was independent for over 300 years before it was ruled by Norway and Denmark. In 1875, the Askja volcano erupted and damaged the Icelandic economy to the point of widespread famine. Shortly after, 20 percent of the island's population emigrated, mostly to Canada and the United States.

Economic Crisis

Iceland was an early victim of the global financial crisis as its currency plunged and its financial system all but collapsed in October 2008. This was mainly caused by the billions of dollars of foreign debts incurred by its banks. Iceland's banking system had collapsed as a culmination of a series of decisions the banks made that left them highly exposed to disruptions in financial markets. The top three commercial banks were ultimately nationalized.

On November 19, 2008, Iceland and the International Monetary Fund (IMF) finalized an agreement on a $6 billion economic stabilization program supported by a $2.1 billion loan from the IMF. Following the IMF decision, Denmark, Finland, Norway, and Sweden agreed to provide an additional $2.5 billion. New laws have been passed and restructuring of the financial system implemented to prevent a recurrence.

The economic meltdown had a devastating effect on the Icelandic economy. External debt increased threefold from being one of the lowest in the world and unemployment and inflation are affecting people's lives. The government feels, however, that the foundation of Iceland's economy remains strong and its clean energy, marine resources, strong infrastructure, and well-educated workforce provide a firm basis to overcome these severe economic difficulties.

See Also: Denmark; ING Group; International Monetary Fund; Mortgage Credit Crisis of 2008; Norway.

Bibliography. CIA, "Iceland," *World Factbook*, www.cia.gov (cited March 2009); *Doing Business and Investing in Iceland Guide* (International Business Publications USA, 2007); *The Europa World Year Book 2008* (Routledge, 2006); Olafur Th. Hardarson and Gunnar Helgi Kristinsson, "Iceland," *European Journal of Political Research* (v.46/7–8, 2007); Robert Tchaidze, Anthony Annett, and Li Lian Ong, *Iceland: Selected Issues* (International Monetary Fund, 2007); Barry Turner, ed., *The Statesman's Yearbook 2008* (Palgrave Macmillan, 2008); Kevin Watkins, *Human Development Report 2007/2008* (United Nations Human Development Programme, 2007).

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Impact Financial Statements

Impact financial statements, financial impact statements, or fiscal impact statements are documents prepared to analyze and summarize the financial impact of an event or decision. They are prepared not only by corporations, but by governments contemplating the foreseeable financial effects of a policy decision.

Financial statements called for by the Generally Accepted Accounting Principles can include balance sheets, which summarize a business's current financial position; profit and loss, or income, statements, which report the income and outgo over a specified period of time; retained earnings statements, which calculate changes to the business's retained earnings (the amount of income kept by the corporation instead of being paid out in dividends); and cash flow statements. Federal governmental financial statements are governed by the 1990 Chief Financial Officers Act, part of an effort to reform federal fiscal management, and the Federal Accounting Standards Advisory Board.

Impact financial statements focus this information specifically on the consequences of a determination that needs to be made by the organization. There may be some speculative element involved, such as if a corporation is considering a reduced price for its product in anticipation of an increase in demand and total profits.

Fiscal impact statements are especially associated with government ballot measures. Such statements estimate the cost to a state or municipal treasury of implementing a proposed measure; interested voters and other parties can then have a sense of the effect on their taxes or other government spending areas of this measure. Depending on the measure, this can of course be a highly politicized matter. Some states have adopted formal procedures for the preparation of impact statements related to ballot initiatives. Alaska requires that simplified impact statements be included in initiative petitions, so that those petitioning to get a measure included on the ballot have been informed of the cost. The attorneys general of California and Montana evaluate each proposed measure to determine if it will have a fiscal impact; if it does, they order an analysis prepared by a state government body. In California's case, this is the executive branch's Department of Finance and the legislature's Joint Legislative Budget Committee. Montana gives the matter to the state budget director, who works in conjunction with the state agencies affected by the ballot measure.

Florida has a state commission, the Financial Impact Estimating Conference, that produces impact statements within 45 days of a measure's final revision, submitting the statements to the attorney general and secretary of state. The conference includes a member from the governor's office and representatives from the Senate, House of Representatives, and the Office of Economic and Demographic Research. Meetings are open to the public.

See Also: Corporate Accounting; Financial Reporting; Financial Statement Analysis.

Bibliography. James Bandler, *How To Use Financial Statements* (McGraw-Hill, 1994); Thomas R. Ittelson, *Financial Statements* (Career Press, 1998).

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Import

It has been argued that importing is simply the opposite of exporting. An organization or an individual in one country purchases goods and services from a seller in another country with the aim of making a profit in the transaction. There are certain aspects of importing that are unique. For example, tariffs and import quotas are only relevant for the importers. The basics of importing involve customs brokers, import restrictions, terms of sale, foreign commercial payments, foreign trade zones, and customs bonded warehouses.

Customs Brokers

A customs broker is often a private company that operates as a middleman between the department of customs in a country and the importing public. Such a relationship will continue to proliferate as long as there are legal requirements regarding the movement of merchandise between countries. Just like a freight forwarder, the customs broker is a private service company licensed to assist importers in the movement of their goods.

Worldwide, billions of dollars in duty collections are filed each year with the customs departments of numerous countries, and they are all predominantly filed and prepared by customs brokers on behalf of importers. Some brokers are sole proprietors with a single office at one port of entry; others are multinational corporations with branches in many ports throughout the world. Customs brokers may be required to be licensed and regulated, for example, in Australia.

The customs broker is employed as an agent by the importer and is often the only point of contact the importer has with the Department of Customs in the respective countries. It is not necessary for an importer to employ a broker to enter goods on its own behalf; however, a bond is required if the importer chooses to handle entry. Most importers who have been in the business for a long time usually engage the services of customs brokers because of the additional services they offer and provide. These include satisfaction in the knowledge that an organization that knows what needs doing with respect to legislation and government bureaucracy is dealing with those issues for you and can provide the answers to many technical questions. Additionally, the importer's time is more valuable and better spent in managing their organization than dealing with the paperwork involved for the product to gain entry into a country.

A customs broker's duties include advising on the technical requirements of importing, preparing and filing entry documents, obtaining the necessary bonds, securing the release of products, arranging delivery to the importer's premises or warehouse, and obtaining drawback refunds.

Drawback involves refunding import duties that have been paid on imported goods if those goods end up being exported out of the country. For example, re-exporting goods that were originally imported; exporting items that contain imported merchandise; or, exporting items that contain wholly imported components. For each of these different scenarios, an importer could be eligible to claim a drawback of the original tariffs paid when first imported. The key to this opportunity is good inventory management and being able to track and keep a record of the movement of inventory. The broker often consults with customs officials to ascertain the correct rate of duty. If the broker is dissatisfied with the rate, the broker will pursue the appropriate remedy on behalf of the importer.

Import Restrictions

When an importer plans a sale to a foreign buyer, it is necessary to examine the import restrictions and regulations of the importing country as well as the export restrictions of the home country. Although the responsibility of import restrictions rests with the importer, the exporter does not want to ship goods until it is certain that all import regulations have been met. Goods without proper documentation will be denied entry. Some of the import restrictions imposed by foreign countries include tariffs, import quotas, exchange control, and invisible tariffs to name but a few.

A tariff is a tax on products imported from other countries. The tax may be levied on the quantity, such as $.10 per kilogram, liter or meter, or on the value of the imported goods, such as 10 or 20 percent ad valorem. A tariff levied on quantity is called a specific duty and is used especially for primary commodities. Ad valorem duties are generally levied on manufactured products.

Governments have two purposes in imposing tariffs: They may wish to earn revenue and/or make foreign goods more expensive in order to protect national producers. Tariffs affect pricing, product, and distribution policies of the international marketer as well as foreign investment decisions. If the firm is supplying a market by exports, the tariff increases the price of its product and reduces its competitiveness in that market. This necessitates a price structure that minimizes the tariff barrier. The product may be modified or stripped down to lower the price or to get a more favorable tariff classification. For example, watches could be taxed either as time pieces at one rate or as jewelry at a higher rate. The manufacturer might be able to adapt its product to meet the lower tariff.

Another way the manufacturer can minimize the tariff burden is to ship the products completely knocked down (CKD) for assembly in the local market. The tariff on unassembled products or ingredients is usually lower than that on completely finished goods. The importing country employs a tariff differential to promote local employment.

Quantitative restrictions, or import quotas, are barriers to imports. They set absolute limits on the amount of goods that may enter the country. An import quota can be a more serious restriction than a tariff because the firm has less flexibility in responding to it. Price or product modifications do not get around quotas the way they might get around tariffs. The government's goal in establishing quotas on imports is obviously not revenue. It gets none. Its goal instead is the conservation of scarce foreign exchange and/or the protection of local production in the product lines affected. About the only response a firm can make to a quota is to assure itself a share of the quota or to set up local production if the market size warrants it. Since the latter is in accord with the wishes of the government, the firm might be regarded favorably for taking such action.

The most complete tool for the regulation of foreign exchange is exchange control, a government monopoly of all dealings in foreign exchange. Exchange control means that foreign exchange is scarce and that the government is rationing it according to its own priorities. A national company earning foreign exchange from its exports must sell this foreign exchange to the control agency, usually the central bank. In turn, a company wishing to buy goods from abroad must buy its foreign exchange from the control agency.

Firms in the country have to be on the government's favored list to get exchange for imported supplies. Alternatively, they may try to develop local suppliers, running the risk of higher costs and indifferent quality control. The firms exporting to that nation must also be on the government's favored list. Otherwise, they will lose their market if importers can get no foreign exchange to pay them. Generally, exchange-control countries favor the import of capital goods and necessary consumer goods, but not luxuries. While the definition of "luxuries" varies from country to country, it usually includes cars, appliances, and cosmetics. If the exporter does lose its market through exchange control, about the only option is to produce within the country if the market is large enough for this to be profitable.

There are other government barriers to international trade that are hard to classify, for example, administrative protection, the invisible tariff, or non-tariff barriers. As traditional trade barriers have declined since World War II, the non-tariff barriers have taken on added significance. They include such things as customs documentation requirements, marks of origin, food and drug laws, labeling laws, anti-dumping laws, "buy-national" policies, and so on.

Terms of Sale

International terms of sale indicate how the importer and exporter divide risks and obligations and, therefore, the costs associated with specific international transactions. When quoting prices, it is important to make them meaningful. The most commonly used international trade terms include the following:

- Currency of Settlement: Some exporters always set their prices in U.S. dollars, which results in the importer bearing the foreign exchange risk arising from the transaction.
- Shipping Terms: It is essential that both the exporter and the importer are clear as to exactly what is included in the price quotation. There are five primary alternatives with regard to shipping terms. These are (a) Delivered Duty Paid: the export price quoted includes the costs of delivery to the importers' premises; (b) Cost, Insurance, Freight (CIF): the exporter quotes a price that includes coverage of transport and insurance charges to a named overseas point of disembarkation; (c) Free on Board (FOB): the exporter's price quote includes coverage of all charges up to the point when the goods have been loaded onto the designated transport vehicle; (d) Free Alongside Ship (FAS): the exporter's price quote includes coverage of all charges up to delivery of the goods alongside the vessel at the named port of shipment; and (e) Ex-Works: the price quoted by the exporter applies at a specific point of origin, usually the factory, warehouse, mine,

or plantation, and the buyer is responsible for all charges from this point.

Foreign Commercial Payments

The sale of goods in foreign countries is complicated by the risks encountered when dealing with foreign customers. There are risks from inadequate credit reports on customers; problems of currency exchange controls, distance, and different legal systems; and the cost and difficulty of collecting bad debts that a require a different emphasis on payment systems. When conducting transactions in the domestic market the typical payment procedure for established customers is an open account. However, the most frequently used term of payment in foreign commercial transactions for both export and import sales is the letter of credit. The five basic payment options for both importers and exporters in decreasing order of attractiveness for foreign commercial transactions are as follows:

1. Cash in Advance: The exporter receives payment before the shipment of goods. This minimizes the exporter's risk and financial exposure since there is no collection risk and no interest cost on accounts receivable. However, importers will rarely agree to these terms since it ties up their capital and the goods may not be received.
2. Letter of Credit: These are widely used in international trade since they minimize the risk for both exporter and importer. A letter of credit is a document issued by the importer's bank guaranteeing to pay the exporter so long as conditions relating to the sale, which are specified in the letter of credit, have been met. An irrevocable letter of credit, where cancellation or modification of the original terms is not possible without the mutual agreement of both importer and exporter, is usual and best. Confirmed letters of credit, which are supported by not only a foreign bank but also a bank in the exporter's country, are often used. With a confirmed letter of credit, the exporter is guaranteed payment even if the foreign bank does not honor its commitments.
3. Draft: This is an order, addressed to the importer by the exporter, specifying when a given sum of money is due from the importer or its agent. Sight drafts are payable immediately upon presentation to the importer or its agent, for example, a bank. Time drafts are payable at a specified future date. Because of the lag between acceptance and payment, they are a useful financing device.
4. Open Account: The exporter ships the goods first and bills the importer later in accordance with the agreed credit terms. Since evidence of the importer's obligations is not as well specified as with other instruments of payment, payment is often difficult to collect if the importer defaults.
5. Consignment: The exporter retains title to the goods until the importer has sold them. It is a highly risky method of payment, usually restricted to dealing with affiliated companies. These terms are only offered to very trustworthy importers.

Foreign Trade Zones

The number of countries with foreign trade zones (FTZs) has increased as trade liberalization has spread throughout the developed and developing world. Most FTZs function in a similar manner regardless of the host country.

In the United States, FTZs extend their services to thousands of firms engaged in a multitude of international trade-related activities. More than 150 FTZs are located throughout the United States. Goods subject to U.S. customs duties and quota restrictions can be landed in these zones for storage or such processing as repackaging, cleaning, and grading before being brought into the United States or re-exported to another country. Merchandise can be held in an FTZ even if it is subject to U.S. quota restrictions. When a particular quota opens up, the merchandise may then be immediately shipped into the United States. Merchandise subject to quotas may also be substantially transformed within an FTZ into articles that are not covered by quotas, and then shipped into the United States free of quota restrictions.

In cases where goods are imported into the United States to be combined with locally made goods for re-export, the importer can avoid payment of U.S. import duties of the foreign portion and eliminate the complications of applying for "duty drawback," as discussed earlier, that is, a request for a refund from the government of the duties paid on imports that are later re-exported.

Other benefits for companies using FTZs includes lower insurance costs due to greater security required in FTZs; more working capital, since duties are deferred until the goods leave the FTZ; the opportunity to stockpile products when quotas are filled; significant savings on goods or materials rejected, damaged, or scrapped for which no duties are assessed; and, exemption from paying duties on labor and overhead costs incurred in an FTZ which are excluded in determining the value of the goods.

Customs Bonded Warehouse

A customs bonded warehouse is a secure area within a customs territory where dutiable foreign merchandise may be placed for a period of up to five years without payment of duty. Only cleaning, repacking, and sorting may take place. The owner of the bonded warehouse incurs liability and must place a bond with the local customs department and abide by those regulations pertaining to control and declaration of tariffs for goods on departure. The liability is cancelled when the goods are removed.

See Also: Ad Valorem Duties; Bonded Warehouse; Customs Broker; Export; Freight Forwarder; International Commercial Terms; Letter of Credit; Tariff.

Bibliography. Philip R. Cateora, Mary C. Gilly, and John L. Graham, *International Marketing* (McGraw-Hill Irwin, 2009); U. C. Mathur, *International Marketing Management* (Sage, 2009); C. A. Nelson, *Import/Export: How to Get Started in International Trade*, 3rd ed. (McGraw-Hill, 2000); Sak Onkvisit and John J. Shaw, *International Marketing* (Routledge, 2009); Jan Ramberg, *Guide to Export-Import Basics: Vital Knowledge for Trading Internationally* (ICC, 2008); V. Terpstra and R. Sarathy, *International Marketing*, 8th ed. (Dryden Press, 2000).

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Import Substitution

Import substitution was a strategy for economic development that was popular in the 1950s and 1960s. Advocates of import substitution development strategies believed that industrialization was the key to economic development and looked for policies that would encourage domestic industries to grow. Although it is now largely discredited as an economic development strategy, it has been resuscitated in recent years by antiglobalization and environmental activists as an alternative to free trade not because it can bring about economic development but because of a preference for locally produced goods.

To use import substitution as an economic development strategy, a country would erect tariff and other trade barriers to raise the cost of goods and services imported from elsewhere. The trade barriers would provide a sheltered market in which a domestic company could learn the business without competition. For example, a country lacking a domestic automobile industry might place a high tariff on imports of automobiles. A domestic auto manufacturer would then be established and, protected by the tariffs from international competition, could compete for domestic market share despite its higher costs. In practice, import substitution policies proved largely ineffective at fostering economic development. India aggressively pursued an import substitution strategy during the 1950s through the 1970s and as a result developed a locally based industrial sector, but did not significantly raise living standards until it began to dismantle trade barriers in the 1980s and 1990s.

In practice, import substitution strategies were difficult to implement. In theory, once the local industry had developed, the tariff barriers could be lowered and the domestic company would then compete with the foreign companies both domestically and internationally. In practice, a flaw in the import substitution policy was that the protected industries rarely agreed that they were ready to face international competition and lobbied fiercely to maintain the trade barriers. India's example demonstrates this as well. Import substitution strategies produced what some economists have termed near-autarky by the mid-1970s, with ever-tightening controls. Only when the inability to import domestically unavailable machinery and other supplies began to hamper Indian business generally did the business community begin to support reducing the protective trade barriers.

An additional problem with import substitution as a development strategy was that the sheltered firms were not competitive internationally. As a result, to the extent countries diverted resources into industries producing substitutes for imports, they harmed their competitive position in export industries. This effect can be seen in the stagnation of Brazilian exports at the end of the 20th century. Brazil's economic program for much of the 1970s and 1980s was built around import substitution. During that same period, Brazilian exports remained at roughly 7 percent of gross domestic product.

A final problem with import substitution strategies is that they introduced significant rigidities into economies where they were pursued. This made the economies less able to respond quickly to economic change. For example, Latin American economies recovered much more slowly from the 1970s oil price shock than did many east Asian economies, in part because Latin American economies were burdened more heavily with debt relative to their exports than were east Asian economies, with the extra debt from investment in uncompetitive industries as part of import substitution strategies.

Today, import substitution is largely promoted by organizations seeking to produce local development rather than economic growth. Rather than focusing on increasing economic growth through trade, the modern proponents of import substitution take a mercantilist view of economies and look to retain resources within the local economy. By providing local substitutes for imported goods, import substitution theorists argue, local economies will prevent money from leaving the local economy. Because their goals are different, the modern proponents argue that import substitution strategies' historical record is not relevant to evaluating the merits of the policy today.

See Also: Antiglobalization Movement; Comparative Advantage; Economic Development; Export-Oriented Development; Free Trade; Trade Liberalization.

Bibliography. Richard Grabowski, Sharmistha Self, and Michael P. Shields, *Economic Development: A Regional, Institutional, and Historical Approach* (M.E. Sharpe, 2007); Michael J. Kinsley, *Economic Renewal Guide: A Collaborative Process for Sustainable Community Development* (Rocky Mountain Institute, 1997); Anne O. Krueger, *Trade Policies and Developing Nations* (Brookings Institution, 1995); Jeffrey D. Sachs and John Williamson, "External Debt and Macroeconomic Performance in Latin America and East Asia," *Brookings Papers on Economic Activity* (v.1985/2, 1985).

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India

One of the fastest growing of the world's major economies, India witnessed rapid transformation from a socialist economy of the post-independence era to a globalized one from the 1990s. With a population of about 1.1 billion (July 2006 estimate), it is the second most populous nation of the world, and the seventh largest nation in land area, covering 3,287,590 sq. km, stretching from the Bay of Bengal in the east to the Arabian Sea in the west.

It was Prime Minister Jawaharlal Nehru (1889–1964) who formulated most of India's post-independence policy. A planning commission was set up in 1950 with him as chairperson to modernize large sectors of economy. Increase in agricultural productivity and industrialization within the framework of a socialist pattern of society was emphasized. The mixed pattern of economy saw private ownership of agriculture and industrial firms. Manufacturing, railways, aviation, electricity, communication, infrastructural activities and more were under state control. About four decades of a socialist economy with centralized planning brought about economic woes in various sectors.

The Nehru model slowed down the economy and hampered business acumen due to the prevailing License Raj, or control system. There were innumerable hurdles for private enterprise, and foreign direct investment (FDI) was abhorred by Indian think tanks. In the three decades after independence, the annual economic growth was about 1 percent per capita. The growth of industry was 4.5 percent a year. The centralized planning put a damper on productivity and profitability of industries. The trade deficits increased. Import was not encouraged with all the tariffs and controls. India played a negligible role in world trade. It was high time for Indian policy makers to abandon the decades-old centralized planning model and join the mainstream of globalization with a market-driven economy.

Reform

During the premiership of Rajiv Gandhi (1944–1991), India moved toward economic reforms with far-reaching results pertaining to India's economy and business. During the congress ministry of P. V. Narasimha Rao (1921–2004) with the present premier Manmohan Singh (1932–) in charge of finances, economic reforms accelerated. These formed a watershed in the history of independent India, and their impact was felt in politics, society, and the economy. Privatization encouraged business. Private enterprise, both indigenous and foreign, began to play an important role. State control and public sectors ceased to be important actors in Indian business. A liberalization policy did away with the rigid license system, making starting a business comparatively easier. Import substitution was not emphasized and exports were encouraged. Multinational corporations (MNCs) began to invest in the Indian market.

India shifted to a market-driven economy from its decades-old centralized planning model and joined the mainstream of globalization at the international level. India marched ahead with business process outsourcing (BPO), and Indian technical personnel were sought after in information technology (IT) globally. Indian companies went on a corporation-buying spree on a worldwide basis.

India surged ahead in the Human Development Index (HDI) as a country in the category of medium human development. Per the report of the United Nations Development Programme for 2007–08, its rank was 128, with an HDI value of 0.619 in 2005. The HDI value was only 0.419 in 1975. With a population of more than 1.1 billion, India is expected to take its place in the global economy in the future. Despite 29 percent of its people living below the poverty line, India has become the world's fifth-largest economy in terms of purchasing parity. India became the world's fourth-largest foreign currency holder in January 2008 with a $285 billion reserve. With a gross national product (GNP) of $450 billion, the country has become a leading player in the global economy. The gross domestic product (GDP) in 2006 was $911.8 billion, with growth of 9.2 percent.

India has attracted private investment in various sectors of Indian economy. This along with BPO to the Indian labor market resulted in economic growth. Indian industry benefited immensely from the availability of skilled labor. The emergence of a nouveau riche class generated demand for consumer goods. Earlier, access to imported goods was difficult. But trade liberalization has witnessed import of high-quality consumer items from foreign countries. The sale of these items, which were earlier prohibited in the open market, was possible in malls and various outlets. Indian companies have not lagged behind. They are endeavoring to produce quality goods that will compete on an equal footing with imported goods. An economic expansion in various sectors has put India in the forefront of international economics.

Foreign Trade

The foreign trade regime of India changed dramatically in the last few years after the onset of the liberalization process. A beginning was made in the 1970s, but its impact was not significant. From the 1990s, the trade scenario of India changed a great deal. Exports accelerated in relation to GDP and world trade. Within a decade after 1991–92, it increased from US$18 billion in 1991–92 to $44 billion in 2000–02. India had total export earnings of $43.1 billion in 2000. It created a record of $80 billion in 2004–05. Indian exports had tripled between 2001–02 and 2006–07.

The composition of India's exports was transformed as emphasis was given to diversification of exports as well as manufactured goods. There was a perceptible fall in agricultural products, ores, and minerals, whereas manufactured items like pharmaceuticals, chemicals, leather goods, paints, enamels,

Trimming woven mats by hand in India. Indian exports reached $125 billion in 2007–08 and are growing more sophisticated.

plastic, glass, rubber, textiles, engineering equipment, jewelry, and computer software were on the rise.

Industrial policy changed a great deal with virtual abolition of licenses and the earlier practice of getting permission under different acts was not required. With competition from internal as well as external players, Indian businesses produced quality goods in domestic and foreign markets. Indian business became competitive worldwide; consumers were offered quality products and exports surged ahead.

The government of India did not remain complacent. It wanted a twofold increase in the country's share of global trade and took further steps in August 2004 to cover five years. This Foreign Trade Policy (FTP) had two motives: doubling India's share in world merchandise trade and giving emphasis to employment-generating industries. With a target of average annual growth rate of 16 percent in merchandise trade, the government established an Inter State Trade Council, Export Promotion Capital Goods Scheme, duty-free import of jewelry samples, advance licensing scheme, and bank guarantees, and worked toward procedural simplification. A target of $150 billion was set at the end of the FTP, which was within reach as the figure was $125 billion in 2007–08, notwithstanding an appreciating rupee ($111 billion in April–December 2007). The value of exports had been increasing continuously after the start of the free trade policy. The growth rate of India's share in the world market was increasing, although it lagged behind China, Thailand, and Brazil.

Economic Growth

With the growth of the Indian economy, free trade, and World Trade Organization (WTO) commitments for lowering trade barriers, import demand for consumer goods, raw materials, capital goods, edible oils, petroleum and its products, fertilizers, cereals, and precious stones had increased. The quantitative restrictions had become a historical relic of the socialist path of development. Quotas, tariffs, and import duties had been significantly slashed in Indian trade and commerce so as to keep pace with globalization. The five-year Export Import (EXIM) Policy for 1992–97 took substantial measures in these directions. Imports were free, but subject to a Negative List of imports, which was removed in the EXIM policy of 1999–2002. The country witnessed an increase in merchandise imports to the tune of 24 percent with a value of $185.7 billion in 2006–07. There was a rise in share of capital goods imports of about 4.9 percent in 2006–07; it was 3.7 percent in 2000–01.

Concomitant with the information highway's development worldwide, it became easier to access different services. With a growth rate of 29 percent in import services in 2006, India commanded the top position, closely followed by Saudi Arabia's 27 percent. Commercial services had reached $44.4 billion in 2006–07, having a growth rate of 28.7 percent. Business services had a phenomenal growth rate of 120.6 percent in 2006–07. India surged ahead in import of services like transportation, travel, finance, and software. Total imports that amounted to about $60.8 billion in 2002–03 increased to $168 billion in 2007–08.

Foreign Investment

The development and growth of India's business also can be measured by other indicators like capital inflow, investment, and industrial growth. The net foreign investment in India had remained a steady part of capital inflows. After the 1990s, the FDI as a part of globalization had helped in the growth of GNP, balance of payments, and employment. From 1991, the government of India introduced the Structural Adjustment Prrogram (SAP), changing a great many regulatory policies. Public sector areas were thrown open, registration requirements became easier, the ceiling of 40 percent of foreign-held equity was abolished, and tax rates were reduced.

Foreign companies were no longer required to obtain prior approval of the Reserve Bank of India. It became common for foreign investors in mutual funds, pension funds, and investment trusts and asset management companies to invest in the Indian stock market. Foreign capital flowed into the stock markets of India. The Indian economy was gradually being integrated into the global economy. Net capital flows increased from $25 billion in 2005–06 to $46.4 billion in 2006–07—a growth of 85.8 percent. FDI in India was $6.2 billion in 2001–02, but ballooned to $23 billion in 2006–07. It was spread over various sectors like manufacturing, banking, information technology, finance, and construction. This was the result of a vibrant economy. Nonresident Indians (NRI) also contributed a lot.

It was not only foreign companies that invested in India. Indian companies were turning to international markets. Indian business magnates undertook trans-border operations—investing abroad, buying companies, and starting joint collaborations. Tata Motors took over the luxury brands Jaguar and Land Rover from Ford for about $2.3 billion. Tata Tea purchased Tetley, Britain's largest tea company, and thus became the second-largest tea manufacturer globally. Reliance Communications discussed mergers with the MTN group of South Africa. L. N. Mittal (1950–), the London-based Indian steel magnate and the fourth-richest person in the world, brought his company to the forefront. The juggernaut of Mittal Steel acquired companies all over the world, one after another, the latest being European steel giant Arcelor SA. Four Indians had made it into the *Forbes* list of world's 10 richest persons. In the *Forbes* Global 2000 List, 48 Indian firms were named. India had placed second after Brazil as far as growth of the world's largest public companies was concerned.

Indian business was shining in every respect inside the country as well as outside. But there were also dark clouds in the otherwise rosy picture in Indian business. There remained many hurdles to doing business in India. Its ranking in "ease of doing business" was 120 out of 178 economies of the world in 2008, well behind neighboring Pakistan's 78th rank. Corruption, bureaucratic impediments, and difficult entry procedures were to be removed. There had been enormous amassing of wealth, with different groups controlling resources of the country. The per capita consumption of about 836 million persons was less than a dollar per day. With an HDI ranking of 128 and 29 percent of the people living below the poverty line, India has to do much more to alleviate the living conditions of its people as a whole. Policy makers need to both increase the pace of reforms and provide India's citizens the basic amenities of life.

See Also: Bangladesh; BSE Sensex Index (Bombay Stock Exchange); Company Profiles; South Asia; Globalization; Green Revolution; Indian Oil; Mittal Steel; Pakistan; Tata Group.

Bibliography. P. K. Bhattacharya, *Business History of India* (Gyan Books, 2006); Anthony P. D'Costa, *The Long March to Capitalism: Embourgeoisment, Internationalization, and Industrial Transformation in India* (Palgrave Macmillan, 2005); Peter Enderwick, *Understanding Emerging Markets: China and India* (Routledge, 2007); Rajesh Kumar and Murali Patibandla, *Institutional Dynamics and the Evolution of the Indian Economy* (Palgrave Macmillan, 2009); Neela Mukherjee and Amitava Mukherjee, *India's Foreign Trade by Regions, 1950–1986* (Indus, 1988); Kamal Nath, *India's Century: The Age of Entrepreneurship in the World's Biggest Democracy* (McGraw-Hill Professional, 2007); Amar Nayak, *Multinationals in India: FDI and Complementation Strategy in a Developing Country* (Palgrave Macmillan, 2008); Arvind Panagariya, *INDIA—The Emerging Giant* (Oxford University Press, 2008); Vinay Rai and William L. Simon, *Think India: The Rise of the World's Next Superpower and What It Means for Every American* (Dutton, 2007); Dwijendra Tripathi and Jyoti Jumani, *The Concise Oxford History of Indian Business* (Oxford University Press, 2007); United Nations Development Programme, *Human Development Report 2007/2008* (Palgrave Macmillan, 2007).

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Indian Oil

The Indian Oil Corporation is India's largest corporation, the 18th largest petroleum company in the world, and was ranked 116 on *Fortune* magazine's 2008 Global 500. It is a *public sector undertaking*: an Indian term for a publicly traded company in which a majority share of the stock is government-owned (at any or all levels of government). Shares are traded on the two major stock exchanges of India: the Bombay Stock Exchange and the National Stock Exchange. A great many of the PSUs in India deal with energy or public transport. Like Indian Oil, its two main competitors are also PSUs: Bharat Petroleum and Hindustan Petroleum. The government's controlling interest in oil companies limits the circumstances in which and extent to which they can raise the price of fuel, which is compensated with subsidies.

Indian Oil products cover the spectrum of petroleum products: gasoline and diesel fuel, aviation fuel, lubricants, naphtha, bitumen, and kerosene, all under a variety of brand names and formulations. It also supplies liquefied natural gas to homes, and operates about 18,000 fueling stations throughout India. Indian Oil employs about 36,000 workers directly.

Subsidiaries and Refineries

Subsidiaries include the recently begun Indian Oil Technologies Limited (IOTL), a marketing firm that works with Indian Oil's Research and Development Center (IOR&D), based on a similar initiative at BP. IOTL and IOR&D share a headquarters in Faridabad. Lanka IOC is Indian Oil's Sri Lankan operation, offering many of the same services there that Indian Oil offers in India, with a recent history of friction with the Sri Lankan government (with whom Lanka IOC is a joint venture) over the issue of subsidy payments. The Chennai Petroleum Corporation and Bongaigoan Refiner and Petrochemicals Limited are similar joint ventures. Indian Oil has participated in several joint exploration ventures with other PSUs.

Indian Oil's refineries include Digboi Refinery, India's oldest refinery and the world's oldest continuously producing oilfield. Oil was discovered at Digboi, in northeastern Assam, in 1889 by the Assam Railway and Trading Company (ARTC), 30 years after the drilling of the world's first oil well, a result of the extensive worldwide search for black gold. Previous exploration of Assam had discovered the presence of oil below the surface, but the Digboi discovery led to the first commercial derrick, in the midst of the wilderness.

The ARTC began a separate company to carry out the drilling at Digboi, which soon became the Assam Oil Company. At the time, such enterprises were still operated and managed by the British, with native labor and middle-management. It may have been the British experience with delegation, at the height of their imperial presence in the world, that led the London-based ARTC to spin off its oil concerns into a separate company, devoted to oil instead of making it one of many multilateral pursuits; at the time, the Assam Oil Company was not unique in its focus but was uncommon.

The Digboi success led to intensified exploration of India, as the potential for reward had been proven. In the coming decades, Royal Dutch Shell and the Anglo-Iranian Oil Company (ancestor of BP) applied for licenses to search for and exploit petroleum resources in India, and the country now has many oil companies, both PSUs and in the private sector. The Assam Oil Company was acquired by Indian Oil in 1981, and is now operated as a division of the larger company; Digboi remains one of the company's most important refineries.

See Also: BSE Sensex Index (Bombay Stock Exchange); Company Profiles: South Asia; India; Royal Dutch Shell; Sri Lanka.

Bibliography. P. K. Bhattacharya, *Business History of India* (Gyan Books, 2006); Sugata Bose and Ayesha Jalal, *Modern South Asia: History, Culture, Political Economy* (Taylor and Francis, 2007); Ben Crow, *Markets, Class, and Social Change: Trading Networks and Poverty in Rural South Asia* (Palgrave Macmillan, 2001); Meghnad Desai, *Development and Nationhood: Essays in the Political Economy of South Asia* (Oxford University Press, 2006); Barbara Harriss-White, *India Working: Essays on Society and Economy* (Cambridge University Press, 2002); Rajesh Kumar and Murali Patibandla, *Institutional Dynamics and the Evolution of the Indian Economy* (Palgrave Macmillan, 2009); Jyoti Prikh, Pallav Purohit, and Pallavi Maltra, "Demand Projections of Petroleum Products and Natural Gas in India," *Energy* (v.32/10, 2007).

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Indirect Export

Exporting to foreign markets takes two forms. Direct exporting means setting up expensive subsidiaries or establishing contractual relationship with foreign companies. Direct exporting does give greater control over sales channels and intellectual property protection, but the entry costs, time to market, and ongoing costs are higher.

The other type is indirect exporting, which means selling goods to foreign buyers through third parties such as export agents, export merchants, or buying houses. This is an especially good mode of entry for the novice exporter or for a manufacturer who lacks country knowledge.

China is a good example. Many exporters do not have the expertise to enter the Chinese market successfully. But when they use indirect exporting, they offer their products through intermediaries who take the product directly to the markets. This way time to entry in the Chinese market is shorter and more flexible. Exporters can receive payment earlier and risks are minimized, particularly volatile foreign exchange markets and credit risks.

One of the greatest benefits is the ability to obtain export know-how and personal contacts through the export merchant or agent. The exporter can possibly realize greater sales volumes since the foreign export agent often represents several different related products or product lines and thus can deliver on economies of scale. Also, exporters find it easier to ascertain whether their products will sell well in a foreign market without the effort, financial investment, or risk. They do not have to worry about all the complexities; they merely give instructions to the agent about packing, labeling, and transportation, and so forth.

However, there are quite a few disadvantages. Perhaps the biggest is that the indirect exporter has very little contact with the foreign agents or distributors, let alone with end users and customers. That means it is more difficult for them to acquire the needed experience in entry into the foreign market. Indirect exporters, especially from smaller firms and smaller countries, may find it difficult to get an export trading house to take on the products without a great deal of paid promotion and advertising. What is worse, the exporter may lose control of pricing and marketing, and even of intellectual property. In addition, the exporter receives a smaller profit margin than through direct exporting.

There are several basic channels for indirect exporting.

1. The export merchant buys the local firm's product outright and assumes the risk of being able to resell it profitably abroad. The type of company typically has expertise in a particular product line and/or in a special geographical market.
2. The export agent usually represents several non-competing manufacturers and receives a commission. The agent does not take title of the goods directly and so does not assume the risk of not being able to sell them abroad. The function of the export agent is to appraise the export potential of the local manufacturer's products, advertise them abroad, look for foreign buyers, obtain export orders, and advise on or arrange for the documentation, shipping, and insurance once a sale has been made
3. The export management company, also known as a trading house, is a private firm that serves as an export department for several manufacturers. This company solicits and transacts export business on behalf of its clients in return for a commission, salary, or retainer plus commission. In addition, some export management companies will purchase the product and sell it themselves to foreign customers. Export management companies can facilitate the export process by handling all of the details—from making the shipping arrangements to locating the customers.
4. Foreign distributors have similarities with the trading house. The distributor takes title to the goods and has to resell them down the distribution chain. The big difference is that transaction (transfer of ownership) may take place in the home country of the distributor. This means that the producer must do the packaging and delivery and assume more risk, but is in a better position to capture more value from the transaction.
5. Foreign agents require the exporter to retain title until the goods are delivered to the buyer or even to the consumer. The agent merely "represents" the producer but never takes ownership of the goods. Motivated agents like to work on a commission basis because they capture an agreed-upon percentage of every transaction, often even with an escalator clause for great sales. That gives them the incentive to maximize sales volumes.

See Also: Agents; Direct Export; Export; Export Trading Company.

Bibliography. Daniel C. Bello and Nicholas C. Williamson, "Contractual Arrangements and Marketing Practices in the Indirect Export Channel," *Journal of International Business* (v.16/2, 1985); Michael R. Czinkota, Ilkka A. Ronkainen, and Marta Ortiz-Buonfina, *The Export Marketing Imperative* (South-Western, 2004).

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Indirect Foreign Direct Investment

Indirect foreign direct investments (indirect FDI) are foreign direct investments of a multinational enterprise (MNE) that are carried by a foreign subsidiary located in a third country. The MNE obtains a lasting interest in a foreign market, being the ultimate owner of the investment made, but the actual investment operation is carried out by a subsidiary located in a country that is different from its original country.

According to the Organisation for Economic Co-operation and Development–published benchmark definition, foreign direct investment (FDI) is defined on the basis of the objective of an entity that is resident in an economy of establishing lasting interests in an enterprise that is resident in a foreign economy, implying a long-term relationship between them. FDI can be direct, made up by the entity in the target market directly, or indirect, when a third country is involved.

The *Balance of Payments and International Investment Position Manual* of the International Monetary Fund (the IMF Manual), in its 6th edition, states that

> indirect direct investment relationships arise through owning of voting power in one direct investment enterprise that owns voting power in another enterprise or enterprises, that is, an entity is able to exercise indirect control or influence.

Three different countries are involved in an indirect FDI relationship. One is the origin country, where the parental company is located. Another is the destiny country, where the investment is made. There is a third country, in which the parental company owns an entity, and the latter is the one that actually makes the investment in the destiny country. The key difference between direct and indirect investment is that, in the first type, the operation is straight from the origin to the destiny and, in the second type, there is the intermediate country. It is noteworthy that indirect FDI may be viewed as part of two direct FDI flows: one from the origin to the intermediate, where the parental company sets up an interest in the intermediate country; and another from the intermediate county to the destiny.

For data recording, a threshold of 10 percent of ownership is generally taken as the minimum evidence of a long-lasting FDI relationship. Such threshold refers to both direct and indirect ownership. Therefore, if data on foreign direct investment were to follow the ownership criterion, there should be included both the direct and indirect interests of the parental MNE. However, balance of payments statistics usually take into account the location of the origin and destiny enterprises so that countries may not be able to trace back the actual ownership of the companies. Countries may require companies to detail their entire worldwide consolidated accounts.

The most typical motives for indirect FDI include public policies and corporate strategy. Public policies that may induce or discourage indirect FDI include the different national patterns of taxation, which may stimulate or discourage some forms of corporate property and control. In addition, countries vary in terms of their specific forms for treatment of foreign investments. There are other public policies that may affect incentives to use a direct investing company located in a country that is different than the original investing group. Embargoes on investments may also play a role in inducing indirect FDI, so that the interested investor may overcome the restriction by investing through a base country not affected by the embargo.

Corporate strategy may induce indirect FDI. One of the typical situations may include the decentralization of the investment decisions of a company with international presence, by empowering a specific subsidiary for doing the investments in a particular region or group of countries, on behalf of the parental MNE. In certain types of corporate networks, one subsidiary may gain autonomy for prospecting regional opportunities and deciding on the target markets that will be chosen in a region. In such case, the subsidiary benefits from its advantages in geographical and cultural proximity, including the costs for moving executives, more detailed market knowledge and information availability, and several other advantages. The strategy may include the formation of regional hubs for investments, which may be responsible for identifying and exploiting potential business opportunities in the vicinity countries. Other corporate strategies may also require the formation of decentralized investing companies, leading to indirect FDI.

One of the consequences of the existence of indirect foreign direct investment is that outward FDI figures for a given country may not accurately reflect the country's actual investment, but may rather include figures for investment of affiliate enterprises, which ultimately belong to another foreign-based company. In that situation, those figures will be overestimated in relation to the actual outflows, but may also come to be underestimated as long as the nonresident affiliates of the country's companies may also have their own investment abroad channeled through subsidiaries. In the latter case, national statistics may not be able to fully register the amount of direct investments of the resident companies that were carried out through non-resident affiliates.

Therefore, indirect foreign direct investment may bring difficulties for an assessment of the consolidated stock of direct investments of a specific country. One may face difficulties in evaluating the actual stock of a county's foreign direct investment, when only direct FDI is accounted for.

The growing importance of global corporate networks together with the increasing sophistication of direct investment forms and vehicles are reasons behind the boost in importance of indirect FDI.

See Also: Foreign Direct Investment, Horizontal and Vertical; Multinational Corporation.

Bibliography. Steven Brakman and Harry Garretsen, *Foreign Direct Investment and the Multinational Enterprise* (MIT Press, 2008); Susan M. Collins, *Foreign Direct Investment,* Brookings Trade Forum, 2007 (Brookings Institution, 2008); IMF, *Draft Balance of Payments and International Investment Position Manual—March 2008,* www.imf.org (cited March 2009); OECD, *Benchmark Definition of Foreign Direct Investment*, 4th ed. (2008); Carin Persson and Dumitru Slonovschi, "New Patterns of Foreign Direct Investments Indirect Internationalisations of MNCs Using Platform Countries," Master's Thesis, School of Economics and Commercial Law, Gothenburg University (Elanders Novum, 2003); Torsten Wezel, "Have Structural Factors Influenced German FDI in Latin America? A Panel Econometric Analysis for the 1990s," *Revista de Economía y Estadística—Cuarta época* (v.XXXIX-XLI, 2001–03).

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Individualism/Collectivism

"Individualism/Collectivism" is one of the five cultural dimensions identified by Geert Hofstede in his book *Cultures and Organisations: Software of the Mind*, where he presents the results of research on cultural variability or national cultural differences using survey data collected from IBM in 50 countries. In a similar categorization, Fons Trompenaars and Charles Hampden-Turner classified cultures based on a combination of patterns of behavior and values; one of these categories is communitarianism/individualism value orientation, which is very similar to Hofstede's individualism/collectivism. This dimension relates to the degree of integration of individuals within groups by focusing on the role of the individual versus the role of the group. The main assumption underlying this dimension is that there is cultural variability on the degree of emphasis given to individuality/uniqueness or conformity/interdependence in societies. As such, societies where the interests of the individual prevail over group interests are individualist, and those where the interests of the group prevail over individual interests are collectivist.

Hofstede argues that individualism "pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family" while collectivism "pertains to societies in which people from birth onwards are integrated into strong, cohesive ingroups, which throughout people's lifetime continue to protect them for unquestioning loyalty." Therefore, at the core of this dimension is the assumption that culture impacts the mindsets of individuals in society. Hofstede defines culture as "the collective programming of the mind which distinguishes the members of one human group from another." As such, culture impacts both individuals and groups by defining (un)acceptable and (un)desirable behaviors and attitudes; it establishes categories of importance and levels of acceptability toward individualism and collectivism. Consequently, dynamics that prioritize the individual or group are identified based on how culture defines these categories and levels.

In line with the previous, the dimension opposes "I" (individualism) to "we" (collectivism), where highly individualist cultures would have characteristics such as emphasis on individual achievement, self-orientation, and focus and decisions based on individual needs. Highly collectivist cultures, on the other hand, have a group orientation and prioritize aspects such as group dependency, loyalty, belonging, and generally the well-being of the social system. In Hofstede's work, this dimension was measured using an Individualism index (IDV).

Hofstede's Evidence

Using an Individualism Index (IDV) based on measurement of work goal items such as personal time, freedom, challenge, training, physical conditions, and use of skills, participants in 50 countries were asked to think about factors that would be important to them in their ideal job (regardless whether these factors were present at their actual job). The rationale for using these items was the perceived dichotomous spectrum they show by illustrating employees' independence from the organization versus employees' dependence on the organization.

The score results represent the importance attached to these factors. Along the lines of the distinction previously made regarding individualist and collectivist characteristics, responses that prioritized personal time, freedom, and challenge were considered to reflect individualism, whereas responses that prioritized training, physical conditions, and use of skills were considered to reflect collectivism. The index used a range between zero and 100, where zero represented the highest form score of collectivism and indicated high importance of training and low importance of freedom. Conversely, lower importance of training and high importance of freedom increased the score, hence higher individualism. Factor scores for each country were calculated using a statistical procedure where each score was multiplied by 25 and a constant number of 50 points was added.

Findings suggested that the country with the highest IDV was the United States with a score of 91; this was closely followed by Australia with a score of 90 and Great Britain with a score of 89. The country with the lowest MAS was Guatemala, with a score of 6. A list of developing countries dominates the main lowest scores; for example, Ecuador (8), Panama (11), Venezuela (12), Colombia (13), and Indonesia (14). Hofstede's score results suggest that developing countries move within notable collectivism, while industrialized countries move within notable individualism, which sustains his argument that there is a strong relationship between national wealth and the degree of individualism.

In countries with high IDV (or high individualism) scores, such as the United States, Great Britain, Canada, and the Netherlands, individuality is of core importance and there is an ideology of individual freedom, with principles of society that prioritize individual rights; for example, everyone has the right to privacy and everyone is expected to have a private opinion. On the other hand, in countries with low IDV (or high collectivism) scores, such as Guatemala, Venezuela, Pakistan, South Korea, and Thailand, while ideologies of equality sustain societal dynamics, actions and decisions are influenced by interest groups and group membership. For instance, political power is sustained by interest groups and opinions are predetermined by group membership. In that sense, group interests are prioritized over individuals. In view of the general patterns of individualism/collectivism orientation, Hofstede deduces how dynamics operate in the workplace, within occupations, in the family, and at school.

Trompenaars and Hampden-Turner's Work

As mentioned above, Trompenaars and Hampden-Turner categorized cultures based on a combination of patterns of behavior and values. The dimension of individualism/communitarianism is the equivalent of Hofstede's individualism/collectivism, and it poses the question of whether it is more important to focus on the enhancement of each individual or rather the advancement of the corporation. However, the focus in Trompenaars and Hampden-Turner's work is set on the individual and the organization as a community, particularly looking at how culture impacts business. As such, it is fair to say that it builds on Hofstede's work, yet aims to highlight that an organization's adequate functioning depends on the degree of compromise between individualism of different actors, such as stakeholders, employees, and clients, and communitarianism of the larger organizational system.

To measure the degree of individualism versus communitarianism, Trompenaars and Hampden-Turner asked participants (a total of 30,000 managers completed the question) to choose one from two possible options to a scenario that addressed improvement of quality of life, which was included as part of a wider cross-cultural questionnaire. One answer

(a) proposed individual freedom and opportunity to develop, while the other answer (b) proposed taking care of the group and reaching group well-being even if sacrificing individual freedom and opportunity. Findings indicated that the highest individualist were Israelis with a score of 89 percent. Others following this score were Romania (81 percent), Nigeria (74 percent), Canada (71 percent), and the United States (69 percent). The lowest-scoring countries (highest communitarianist) were Egypt (30 percent), Nepal (31 percent), Mexico (32 percent), India (37 percent), and Japan (37 percent).

Aside from differences both in scoring and aims measurement, there are some noticeable differences in response distribution between Hofstede's results and Trompenaars and Hampden-Turner's. Whereas Hofstede's asserted that national wealth was associated with individualism; these assertion cannot be conclusively made in the case of Trompenaars and Hampden-Turner's findings. For instance, while it is the case that there is an observable distribution that somehow resembles Hofstede's findings, Nigeria, a developing country, is the second-highest individualistic value orientation country in Trompenaars and Hampden-Turner's scale while France, an industrialized country, is located in the scale alongside developing and transitional economies such as such China, Brazil, Singapore, and Bahrain, which are culturally, socially, and politically different.

See Also: Cultural Norms and Scripts; Culture-Specific Values; Gannon's Cultural Metaphors; Hofstede's Five Dimensions of Culture; Power Distance.

Bibliography. C. Hampden-Turner and F. Trompenaars, *The Seven Cultures of Capitalism* (Judy Piatkus Publishers, 1994); G. Hofstede, *Culture's Consequences: International Differences in Work-Related Values* (Sage, 1984); G. Hofstede, *Cultures and Organisations: Software of the Mind* (HarperCollins, 1994); G. J. Hofstede, P. B. Pedersen, and G. Hofstede, *Exploring Culture: Exercises, Stories and Synthetic Cultures* (Nicholas Brealy Publishing, 2002); F. Trompenaars and C. Hampden-Turner, *Riding the Waves of Culture: Understanding Cultural Diversity in Business* (Nicholas Brealey Publishing, 1998).

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Indonesia

Indonesia is made up of 17,507 islands, 6,000 of which are inhabited, covering about 730,030 sq. mi. Indonesia, with its capital at Jakarta, has the fourth-largest population in the world, estimated at 223 million people in 2005 (after China, India, and the United States). The political system is based on *pancasila*, in which deliberations lead to a consensus. The constitution was amended in 2002 to allow for direct elections for both the president and the vice president. Indonesia is a member of the United Nations, World Trade Organization (WTO), Islamic Development Bank, Organization of the Islamic Conference (OIC), Asian Development Bank, Asia-Pacific Economic Cooperation (APEC), Association of Southeast Asian Nations (ASEAN), Mekong Group, Colombo Plan, and Organization of Petroleum Exporting Countries (OPEC).

Indonesia's 2008 gross domestic product (GDP) can be broken down as follows: agriculture, 13.5 percent; industry, 45.6 percent; services, 40.8 percent. Indonesia was the country worst hit by the Asian financial crisis that commenced in 1997. The banking and foreign exchange crisis caused real GDP to shrink by over 13 percent in 1998. However, in 1999 the economy stabilized, and in 2000 it managed to resume growth at a solid pace. On the other hand, its recent growth performance does not match the high single-digit percentage growth it once experienced.

The currency is the rupiah, and since 1992 foreigners have been permitted to hold 100 percent of the equity of new companies in Indonesia with more than US$50 million capital. Indonesia is the world's largest Muslim country, with 185.1 million Muslims, but religious freedom is granted to all denominations. Indonesia is also the world's largest archipelago state. There are seven UNESCO sites in Indonesia, with the first four being inscribed in 1991. Independence from the Dutch is celebrated on August 17 with cultural events, and military parades on Armed Forces day, which is October 5. Women are celebrated on Kartini Day, in memory of Raden Ajeng Kartini, a symbol of female emancipation.

The Dutch began colonizing the islands in the 17th century, but the islands were occupied by Japan from 1942 until 1945; shortly after the Japanese surrendered, Indonesia declared independence. However, it was not until four years later, after negotiations and

UN mediation, that the Netherlands gave up its stake in the islands and recognized Indonesia.

The official language is Bahasa Indonesia, a form of Malay, and there are an estimated 583 other languages and dialects spoken in the nation. Pancasila is a five-point state philosophy (belief in a supreme being, humanitarianism, national unity, democracy by consensus, and social justice). Education is under the control of the Ministry of National Education, but the Ministry of Religious Affairs is in charge of Islamic religious schools at the primary level. President Susilo Bombang Yudhoyono took office in 2004, promising an agenda close to his predecessor's, assuring actions such as curbing corruption, combating terrorism, and promoting economic growth.

Economy

The disparity in income has been widening, regardless of extraordinary world prices for petroleum. In 2005 and 2006, the annual rate of inflation exceeded 10 percent, and the unemployment rate continued to stay high. A Corruption Eradication Commission (Komisi Pemberantasan Korupsi—KPK) was established by the government to promote investment. According to critics, KPK was too apprehensive in its approach to major cases. Indonesia's stock market has been one of the best three performers in the world in 2006 and 2007. The government recently introduced tax and customs reforms, introduced Treasury bills, and increased capital market supervision in order to reduce risk. Indonesia passed a new investment law in March 2007 that addressed some of the concerns of foreign and domestic investors alike.

Tsunami relief projects such as this USAID-supported road repair in 2005 have helped Indonesia's economy rebound.

Indonesia still has the challenges of poverty and unemployment to overcome. Also, there is inadequate infrastructure, an intricate and complicated regulatory environment, and corruption, and resources are distributed unequally among the 30 regions. Over 100 state-owned enterprises have been slowly privatized, and several of those enterprises have monopolies in key sectors. Pension funds and insurance services remain weak as a result of underdeveloped capital markets. The rising price of oil in 2007 affected Indonesia by driving up the cost of domestic fuel and electricity subsidies. These rising costs are also contributing to concerns about higher food prices, a concern the whole world currently shares.

Foreign Relations

Although avoiding taking positions in quarrels among major powers, Indonesia has wanted to be prominent in Asian affairs. However, due to President Sukarno's assertion between the "old established forces" and the "new emerging forces" that a basic world conflict existed, he tried to project Indonesia to the forefront. While Indonesia was independent in foreign affairs, President Sukarno's regime became close with the People's Republic of China and the Soviet Union. Indonesia had also attained the capitulation of West New Guinea (Irian Jaya/West Papua), and enforced a "confrontation" policy against the new state of Malaysia. Only after diplomatic relations with Malaysia and Singapore were asserted in 1966 did the "confrontation" with Malaysia conclude.

As a tool of regional cooperation, Indonesia took the lead in forming ASEAN. In 1966 Indonesia's membership in the United Nations, as well as other related agencies, resumed. But, in the commotion leading to the resignation of Suharto, relations with China suffered due to attacks against the Chinese. Later in 1999, President Habibie issued an order outlawing ethnic discrimination. At the same time, he terminated the ban against teaching or using Mandarin Chinese.

A security cooperation agreement was signed by Indonesia and Australia in December 1995. Mutual notification in case of emergency was provided for within this agreement. By 1997, they established a treaty for mutual maritime boundaries. In 2001–02, there was criticism from the government of Prime Minister John Howard about how Jakarta had failed to discourage a stream of boats transporting asylum-seekers to Australia's outer territories. Jakarta's actions have caused conflict in relations with Australia. Reluctance to recognize the presence of Jemaah Islamiah (a terrorist organization) until October 2002 led to the bombing of a Bali tourist resort, which took 202 lives; 88 of those lives were Australian.

Australia's $1 billion pledge of relief for the December 26, 2004, earthquake and tsunami disaster was acknowledged in 2005 by President Yudhoyono. The worst-hit area of the country was Aceh, and more than 220,000 people were killed or are missing in Indonesia. The earthquake originated off the coast of Sumatra. A framework partnership agreement was signed by the two countries, which included stipulation of closer military cooperation. Since Indonesia is located in the Pacific "Ring of Fire," it continues to remain vulnerable to natural disasters. The rebuilding of Aceh after the December 2004 tsunami has been progressively successful; there is now more economic growth in the region than before the tsunami struck.

Indonesia suffered new disasters in 2006 and early 2007. In 2006 there was a major earthquake near Yogyakarta, and in 2007 there was an industrial accident in Sidoarjo, East Java, that created a "mud volcano," major flooding in Jakarta, and a tsunami in South Java. These disasters caused additional damages in the billions of dollars to an already hard-hit region. Indonesia is receiving assistance with its disaster mitigation and early warning efforts from the international community. Also, in early 2007, more than one-third of all Avian influenza (bird flu) (H5N1) cases were in Indonesia.

Throughout the 1980s, relations between the United States and Indonesia were strengthened, partly because President Ronald Reagan viewed Indonesia as a powerful counterweight to the spread of communism in the region. However, in 1991, the U.S. Congress cut off direct military funding. Similarly, President George W. Bush has described Indonesia as a key ally in the global war on terror. By 2005 full military links had been restored by Washington. That same year, Indonesia made peace with Muslim separatists in Aceh (partly as a result of the 2004 tsunami) and democratic elections were held in 2006.

Law

The Indonesian press was restricted under the Sukarno regime, and had relative freedom under President Suharto until 1974 when riots in Jakarta prompted a strict government crackdown on freedom of press. As a result, more than 200 newspapers and periodicals were shut down or ordered not to report in accordance with the Ministry of Information. In 1999 President Abdurrahman Wahid abolished the Ministry of Information and replaced it with the State Information Dissemination Bureau. However, in 2002, the Indonesian legislature passed a restrictive media law that established a regulatory body to oversee regulation of media.

The Supreme Court is part of the judiciary of the state and is complemented by the legislative and executive branches, but it is free and independent from government intervention. The justices are appointed by the president from a list of candidates selected by the legislature. In 1989 the Muslim sharia courts were given jurisdiction over civil matters. There are 30 provinces in Indonesia, with two special regions and one special capital city district (Jakarta Raya). Its law is based on Roman-Dutch law, but it has been modified by indigenous concepts and by new criminal procedures and election codes. Indonesia has not accepted compulsory International Court of Justice (ICJ) jurisdiction. Indonesia is a temporary member of the United Nations Security Council.

See Also: Asia; Asian Financial Crisis; Association of Southeast Asian Nations.

Bibliography. Arthur S. Banks, Thomas C. Muller, and William R. Overstreet, eds., *Political Handbook of the World 2008* (CQ Press, 2008); Christian Chua, *Chinese Big Business in Indonesia: The State of Capital* (Routledge, 2008); CIA, "Indonesia," *World Factbook*, www.cia.gov (cited March 2009); *The Europa World Year Book 2006* (Routledge, 2006); "Indonesia," *The Petroleum Economist* (v.74/8, 2007); *The International Year Book and Statesmen's Who's Who* (Martinus Nijhoff Publishers, 2006); Barry Turner, ed., *The Statesman's Yearbook 2008* (Palgrave Macmillan, 2008).

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Industrial and Commercial Bank of China

The Industrial and Commercial Bank of China was founded on January 1, 1984, as the result of a major banking system reform in China. It inherited the industrial and commercial credits and savings businesses from People's Bank of China and developed into one of the four major state-owned commercial banks in China (the other three being the Bank of China, Agricultural Bank of China, and China Construction Bank). On October 28, 2005, the Industrial and Commercial Bank of China was restructured into a joint-stock limited company and officially changed its name to Industrial and Commercial Bank of China Ltd. (ICBC). On October 27, 2006, ICBC was listed on both the Shanghai Stock Exchange and the Stock Exchange of Hong Kong Limited, making it an international public shareholding company. In 2007 ICBC had 81.99 billion yuan (RMB) after-tax profits; total market value rose to US$338.934 billion, making it the largest bank in the world.

ICBC provides diversified financial services that include, structurally, Corporate Finance Business, Personal Finance Business, Bank Card Business, Funds Business, and Internet Bank Business. The Corporate Finance Business of ICBC served 2.72 million corporate customers by the end of 2007. Its domestic corporate loans balance amounted to 2.914993 trillion yuan (an increase of 15.2 percent from the previous year), and domestic corporate deposits balance amounted to 3.402683 trillion yuan (an increase of 20.1 percent).

ICBC also provides financing services covering international and domestic trading financing procedures for customers, and works out international settlement and trade financing centralized operation schemes. In 2007, trading finance from domestic branches accumulated to 223.646 billion yuan, an increase of 132.9 percent; accumulatively transacting international settlement business 593.3 billion dollars, an increase of 48.5 percent. The Personal Finance Business of ICBC served 170 million individual customers through 1,112 financing centers, 95,588 telephone banking, internet bank, and other electronic channels by the end of 2007. Its domestic deposit balance amounted to 3,244.074 billion yuan and domestic personal loans balance amounted to 752.113 billion yuan. The Bank Card Business of ICBC issues euro credit card, Peony Express Business Card, Peony UnionPay Card, Peony Sports Card, and new Peony Traffic Card. By the end of 2007, the overdraft balance of credit cards amounted to 8.241 billion yuan, with an increase of 59.5 percent. The issuing volume of debit cards amounted to 187 million, an increase of 8.58 million, and the yearly consumption reached 454.3 billion yuan, with an increase of 71.4 percent. The Funds Business of ICBC operates domestic and foreign currency in various financial markets. In 2007 domestic institutions had financed RMB inwardly and outwardly 6,096.7 billion yuan, an increase of 27.6 percent. The trade volume of foreign currency market amounted to US$868.2 billion, an increase of 43.5 percent.

The success of ICBC should be largely attributed to the growing economy in China, its strategic focus on sustainable market growth, and a relatively stable management team. Specifically, the optimized deposit structure has enabled the bank to keep the growth of deposits at a low cost in the cycle of rising market interest rates. With an optimized credit structure, the bank has managed to increase credit revenue while complying with macroeconomic policies and maintaining moderate credit growth. Improvement in the investment structure and comprehensive development of the financial market business have brought about substantial increase in income from treasury operation. The rapid development of the intermediary business has further diversified the drivers of growth in income.

In 2007 ICBC successfully acquired 79.9333 percent of Seng Heng Bank, the largest local bank in Macau, and 20 percent of Standard Bank of South Africa, the largest commercial bank in Africa. The bank also entered into new markets in Russia and Indonesia. With 112 overseas institutions, it has formed a global service network covering major international financial centers and the main regions trading with China. The inter-market and global businesses have created synergies and are becoming new drivers for its growth in profit.

ICBC's operation performance has been consistently acknowledged by domestic and foreign banking industry. In 2007 it was awarded "Best Bank in China," "Best Trading in the World," and "Best Management Company in China" by the Bankers, Global Finance, The Assets, Finance Asia, and was appraised by Economic Observer as the "Most Honored Corporation in China." The international professional certificating institutions have raised the ranks of ICBC continuously, among which Moody's raised its long-term credit rank to "A1," and Standard & Poor's raised it to "A-." Relatively unscathed by the banking crisis of 2008, ICBC initiated a new branch in New York and also opened its first bank in the Middle East (in Dubai) that same year.

See Also: Bank of China; China; Global Capital Market.

Bibliography. James T. Areddy, "The Financial Crisis: Global Fallout: China Seeks to Lift Market by Raising Stake in Major Banks," *Wall Street Journal* (September 19, 2008); ICBC, www.icbc.com.cn (cited March 2009); Weiye Li and Louis Putterman, "Reforming China's SOEs: An Overview," *Comparative Economic Studies* (v.50/3, 2008); Stephen Timewell, "Global Shifts as China Looks Overseas," *The Banker* (v.157, 2007).

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Industrial Espionage

Industrial espionage (IE) is defined as the illegal acquisition of secrets from business competitors. It is an enigmatic phenomenon in business practice. IE is distinguished from all legal activities of competitive intelligence and scanning of the organizational informational environment. In addition to the distinction between legal and illegal activities, industrial espionage differs from environmental scanning with respect to the focus of the activities. The latter ones are systematized by three methods of managerial information gathering: (1) discovery: gathering of new information, at best largely unguided by the given a priori knowledge and predispositions; (2) expansion: incorporating well-defined information needs and being, thus, more focused on particular aspects that are considered to be worth investigating in further detail; and (3) monitoring: shifting from detection to a permanent observation of relevant developments.

With respect to this scheme, IE activities fit into the category of expansion. Because the spying organization usually has prior knowledge of the rival firm, it uses IE activities to complement this prior knowledge. Therefore, IE is unlikely to reveal "new" developments in the competitive arena, as proposed by the mass media.

Several historical examples clarify the importance of the IE problem: For instance, the Russian supersonic airplane TU-144 is suspected to have been constructed on the basis of the Anglo-French Concorde project. More recently, Oracle took SAP to court because of the illegal download of internal documents. Another prominent case is the 2007 "unauthorized intrusion" into computer systems of the TJX Companies, where 45.7 million credit and debit card numbers were hacked, along with 455,000 merchandise return records containing customers' driver's license numbers, Military ID numbers, or Social Security numbers. Apart from the sheer number of customers affected, this case is remarkable because even after disclosing the fraud, the company was unable to stop the intrusion immediately.

Besides machinery construction and software engineering, the pharmaceutical and the chemical industries are frequently the targets of espionage attacks. The Economic Crime Survey, conducted in 2007, summarizes data from 5,400 companies located in 40 countries. More than 43 percent of these companies admitted that they had been a victim of one or more significant economic crimes during the previous two years, although not all the frauds were IE-related. According to these data, China, Russia, India, Indonesia, Brazil, Mexico, and Turkey are high-risk countries because they harbor many aggressive IE offenders. Notably, in some nations, IE activities are supported or even initiated by governmental administrations. According to the U.S. National Counterintelligence Center, a total of 109 nations were identified as having conducted IE activities in order to steal U.S. corporate intellectual property in 2005. Thus, the distinction between IE and national security activities does not hold for business practice. Proceedings, methods, and technologies are similar; only the legalization differs.

Targeted Information

Secrets acquired by IE are typically divided into three data qualities: (1) customer data, particularly transactional details like prices, discounts and order volumes, credit card details, purchase histories, preferences, etc.; (2) technical data, such as formulas, manufacturing process details, etc.; and (3) strategic information, for instance plans for new product introductions, entries into foreign markets, negotiation results on alliances, cost calculations, etc.

According to these data qualities, companies face different IE threats. With respect to strategic information, internal threats arising from negligent employees and related business partners are critical. For instance, employees frequently pass on information about their company to Wikipedia or publish their daily work in Web blogs. The *Chronology of Data Breaches* provided by the *Privacy Rights Clearinghouse* is peppered with entries of lost laptops, backup tapes, and external hard disks. Exploiting this weakness is common practice in IE. Additionally, former or malicious employees are frequently willing to provide the desired information to rival companies.

In order to support private organizations in protecting their data in the United States, the Economic Espionage Act (EEA) was passed in 1996. Under this act, trade secrets are broadly defined as tangible or intangible information that is subject to reasonable measures to preserve its confidentiality and derives independent economic value from not being generally known to or ascertainable by the public. Measures to protect strategic information include the following:

- Establishing and enforcing clear policies about the handling of confidential information.
- Systematically informing employees and all business partners regarding the proprietary information.
- Requiring employees and all business partners to sign confidentiality and nondisclosure agreements.
- Limiting physical and virtual access to storage of trade secrets.
- Restricting the number of copies of critical data sets (e.g., documents or calculation schemes) and numbering these copies.
- Using encryption algorithms for the protection of digital data.

Technical data are frequently subject to IE by tapping e-mail correspondence, voice phone exchanges, or taking photos of production or engineering facilities. Built-in cameras of cellular phones enable almost anybody with physical access to critical areas or documents to take photos and transmit them immediately worldwide. Customer transaction data can be obtained by infiltrating spyware, particularly by e-mail in the digital information processing systems of an organization. These codes are transmitted via e-mail, gadgets from the Web, or digital advertisements.

Various approaches have been used to profile typical internal spies. This is indeed a challenge as the phenomenon is embedded in the organizational context of a company and its complexities. Furthermore, the fact that the interest in secrets comes from competing or partnering organizations adds to the complexity. Consequently, the phenomenon is not captured by simple descriptive or linear statistical methods. A researcher group from Carnegie Mellon University conducted extensive simulations using a dynamic mathematical model specification. With respect to IE, the following results were obtained:

- Stressful events and organizational sanctions increase the likelihood of espionage.
- Espionage is often “pre-announced” by the spies’ behavior.
- Technical actions by insiders hint at malicious acts, such as IE.
- Companies frequently ignore fraud or fail to detect rule violations.
- A lack of access controls facilitates IE.
- Spies have common personal predispositions, particularly in the taking of risks.

The latter result is in line with an empirical investigation of incidences in German companies that revealed that the typical spy in Germany is male (87 percent), between 30 and 50 years of age (70 percent), with at least six or more years working within or affiliated to the organization.

Industrial Spies

Beyond these quantitative results on internal spies, two prototypes of external spies are characterized in the literature: the social engineer and the high-tech digital thief. Basically, the social engineer takes advantage of employees’ ingenuousness through telephone calls. By feigned telephone calls, he pretends to be a supplier, a customer, or service technician and asks for details on his subject of investigation. Using telephone calls is merely a historical part of this description. Nowadays, the smoker-meetings outside the office buildings, after-work happy hours, etc., provide external spies with a variety of opportunities to establish contacts with insiders. The art of this type of external IE is the manner of establishing an intimate interaction, which will not trigger formal identity checks. The attacker first establishes small talk and then distracts the victims with technical jargon and irrelevant details. To worsen the situation, the employees are frequently less concerned about access to draft documents, which embrace the same information as the final documents or put a massive set of carbon copy recipients in their e-mails. As a consequence, additional employees become valuable victims of this type of attacks.

An impersonal extension of this IE strategy is sending *phishing* (short for *password fishing*) e-mails in order to obtain user names, passwords, PINs, etc. The pattern is similar to the feigned telephone calls, but because of the increasing number of phishing attacks in the individual's private life (mostly targeting bank account details and transaction data), an increasing number of employees are aware of the danger, and as a result, this type of IE is about to lose its impact. The term *pharming* refers to the manipulation of the Domain Name System retrieval of Web browsers (DNS-Spoofing). An employee will not recognize that this is passing his or her data not to the organization's information system, but to a different system. Even the Transport Layer Security protocol or the widespread Secure Sockets Layer give the impression of safe data transfer, but offer no confidential protection against pharming.

The high-tech spy does not aim to establish a pretended trustful interaction with employees, but attacks the information processing systems of the target organization. A sophisticated variant is called Van-Eck-Phreaking, which enables eavesdropping of computer monitors up to 100 meters away. Conventional Yagi antennas have been found to provide a good recording of the amplitudes broadcast by monitors, if the broadcasting frequencies are within a narrow range. Otherwise, special broadband antennas are needed, which might disclose the spy attack. The contents, displayed on cathode-ray-tube computer monitors, are clearly read at longer distances or in neighboring buildings. Flat-panel displays can pose an even larger emission security risk than cathode-ray-tube monitors. The eavesdropping is simplified by low illumination of the environment or under office-light conditions by direct line of sight. Office partition walls or windows do not hamper the recoding of the electromagnetic signals.

The increasing spread of LAN networks, wireless phones, and Bluetooth connections in office life provides the spies with additional entries into organizations' information processing systems. Noticeably, many music publishers and movie producers add rootkits to their digital products, even in cases where the products are bought legally. These become effective with the next boot of the system and enable control over the system, including the readout of data. Thus, companies should not allow any entertainment applications in their information processing infrastructure, including laptops, palms, and cellular phones. However, in addition to all these digital attacks on companies' information systems, there are conventional attacks. In particular, "dumpster diving" is still common practice. For instance, Unilever's hair-care business unit fell victim to dumpster diving by Procter & Gamble in 2001. The spies gathered piles of unshredded documents revealing Unilever's plans for this segment.

Using Stolen Information

Another critical question is the alignment of information gathered in espionage to the companies' strategy. As outlined previously, espionage actions occur usually in the expansion modus. Here, the spying organization already has vested solid knowledge on the topic of interest. The use of this additional information in business strategy development can be systematized by Michael E. Porter's five forces framework.

1. Potential entrants: This is the domain of IE that gains most attention by the mass media, if the IE is uncovered and the offender is taken to court. Actually, the amount of loss caused by these activities is difficult to quantify, because the information by itself would have become public in the course of time anyway. This argument holds for the reverse case of declining markets as well.
2. Customers: With respect to the customers, three qualities of information have to be sepa-

rated: first, the transactional details (credit card numbers, etc.,) which damage the reputation of the companies as well as the relationship commitment of the affected customers. Specialized metrics have been developed to quantify both. Second, the fact that a customer buys products and services from a particular company and what prices a customer pays. This weakens the position for future negotiations because the offender is likely to offer a better deal to the customer. Third, knowledge about customers' preferences, perceptions, etc. Here, two scenarios are relevant: The knowledge might be obtainable in market research activities. Then, the damage equals the price of such market research activities. In the other scenario, the stolen information is unique. In this case, the total change of operational profits has to be taken into account.

3. Substitute products and services: Here, the stealing of chemical formulas or details of the production process and information frauds that support product plagiarism becomes relevant. In addition to the loss in sales, the decrease of quality perception, and exclusivity of products, all efforts of product development have to be taken into account to quantify the damage.
4. Suppliers: If information on suppliers is disclosed, the offender might try to bulkhead the organization from indispensable deliveries, or try to take advantage of the suppliers' innovativeness. Moreover, if the supplier is the offender, he might strengthen his position in further negotiations.
5. Industry competitors: Here, the intended actions and reaction plans on competitive threads are relevant. If these are known to the competitors, it might be easy to outsmart the victim in the competitive arena. However, game-theoretic results suggest that this intuitive idea does not generally hold. On the other hand, plans obtained by IE activities are likely to be taken as fact in their strategy development. Consequently, the offender is not coequal in his strategy development. Linking these game-theoretic results with empirical evidence by econometric model-fitting to overcome the limitations of anecdotal evidence is the focus of the New Empirical Industrial Organization, but in this field, much research is pending. Thus, quantification of IE damage in this domain is doubtful.

The latter point foreshadows the power of counterintelligence activities. These are all means of preventing IE actions against one's own company and all measures of feeding fake data into the offender business's intelligence systems. Since a high credibility is likely to be assigned to these data, an identified but not disclosed IE attack can be used to remote control both the offender's tactical maneuvers and the offender's strategic planning. However, this procedure puts the victim on the same level of unethical behavior as the offending organization.

See Also: Corruption; Intellectual Property Theft; Patents; Plagiarism.

Bibliography. S. R. Band et al., *Comparing Insider IT Sabotage and Espionage: A Model-Based Analysis*, Technical Report, Software Engineering Institute (Carnegie Mellon University, 2006); A. Crane, "In the Company of Spies: When Competitive Intelligence Gathering Becomes Industrial Espionage," *Business Horizons* (2005); R. Decker, R. Wagner, and S. Scholz, "An Internet-Based Approach to Environmental Scanning in Marketing Planning," *Marketing Intelligence and Planning* (2005); Jurg Gerber and Eric L. Jensen, *Encyclopedia of White-Collar Crime* (Greenwood Press, 2007); International Business Risk Consulting, *Wirtschaftskriminalität durch Informationsabflüsse* (2005); A. Jaquith, *Security Metrics: Replacing Fear, Uncertainty, and Doubt* (Addison-Wesley, 2007); Andrew Jones, "Industrial Espionage in a Hi-Tech World," *Computer Fraud and Security* (v.2008/1, 2008); V. Kadiyali, K. Sudhir, and V. R. Rao, "Structural Analysis of Competitive Behavior: New Empirical Industrial Organization Methods in Marketing," *International Journal of Research in Marketing* (2001); M. G. Kuhn, "Compromising Emanations: Eavesdropping Risks of Computer Displays," *Technical Report UCAM-CL-TR-577*, University of Cambridge (2003); M. E. Porter, *Competitive Strategy* (Free Press, 1980); Privacy Rights Clearinghouse, "A Chronology of Data Breaches" (2008); B. Rothke, "Corporate Espionage and What Can Be Done to Prevent It," *Information Systems Security* (2001); F. W. Rustmann, "*CIA, INC.: Espionage and the Craft of Business Intelligence*" (Potomac Books, 2002); A. C. Samli and L. Jacobs, "Counteracting Global Industrial Espionage: A Damage Control Strategy," *Business and Society Review* (2003); S.

W. Scholz and R. Wagner, "Autonomous Environmental Scanning in the World Wide Web," in *IT-enabled Strategic Management: Increasing Returns for the Organization,* B. A. Walters and Z. Tang, eds. (Idea Publishing, 2006); U.S. National Counterintelligence Center, *Annual Report to Congress on Foreign Economic Collection and Industrial Espionage* (2005); I. Winkler, *Corporate Espionage: What It Is, Why It Is Happening in Your Company, What You Must Do About It* (Prima Lifestyles, 1997).

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Industrialized Countries

Understanding what constitutes an industrialized country is predicated on both knowing a given nation's level of industrialization as well as understanding the process by which industrialization occurs. A nation's level of industrialization concerns the extent to which its economy is based on manufacturing, construction, and other industrial activity. The process of industrialization most typically entails the transition from a low-tech, small-scale agricultural economy—wherein the majority of persons are engaged in self-sustaining farming activity in rural areas—to one in which high numbers of persons are employed by large-scale, heavily mechanized, and highly efficient goods and/or services manufacturing organizations located in urban areas. An industrialized country is thus one (1) that has undergone the process of industrialization, and (2) that has an economy based heavily on manufacturing, construction, and other industrial activity.

An industrialized country could, at least in theory, be self-sufficient and not heavily involved in trade with other nations. However, given both the fact that any one country is unlikely to possess all resources needed to be self-sufficient as well as the increasingly interconnected and interdependent nature of today's global economic system, the most industrialized nations—for example, Japan, Canada, Germany, the United Kingdom (UK), and the United States—are typically also heavily involved in importing, exporting, and other aspects of international commerce. In fact, it is these highly industrialized nations that comprise what is known as the core of the global economic system—from which emanates the majority of global economic activity.

There are at least three basic reasons why knowing whether or not a country is industrialized is of critical importance. First, level of industrialization is typically closely related to a nation's level of economic development. The relationship is most generally thought to be linear and positive—the higher the level of industrialization the higher the level of economic development. Although it cannot be said with absolute certainty that industrialization causes development it does appear that industrialization is one of several key factors leading to economic growth characterized by: (1) a significant increase in average per-capita gross domestic product, (2) an increasingly widespread and even distribution of income and wealth, and (3) significant increases in consumer demand. In fact, industrialization is typically considered to be both a prerequisite for economic development and the primary driving force behind the recent rise of nations such as Brazil, Mexico, South Korea, India, China, Taiwan, and other newly industrialized countries (NICs) up the ladder of development and toward a place of greater prominence in the global economic system.

A second reason why knowing whether or not a country is industrialized is important is that level of industrialization is the primary factor in the widely used classification scheme devised by the United Nations to group the nations of the world into "more-developed," "less-developed," and "least-developed countries." Finally, and arguably of greatest relative importance, knowing whether or not a given nation is industrialized tells you a lot about the basic character of that nation. If, for example, a country is industrialized one can be fairly certain that the country in question: (1) possesses an economy based on manufacturing, construction, and other industrial activity; (2) is heavily involved in international trade (and the global economic system); and (3) has, as manifest in the United Nations categorization system, at least a relatively high level of economic development.

It should be noted, however, that the nature and consequences of industrialization are not as simple as perhaps suggested above. For example, although the term *Industrial Revolution* is commonly used to describe the industrialization of both the United States and what is today known as the UK beginning the mid-late 18th century, it is appropriate to consider the tumultuous changes that began at that time as but the first of several industrialization-driven revolutions that have significantly altered the economic and social character of many nations over the course of the last 250 years. In addition, the fact that recent and/or ongoing industrialization-driven development of NICs often differs dramatically from that of nations such as the United States and the UK suggests that the process is not as homogeneous as many have long thought. Further, industrialization does not, in and of itself, necessarily lead to rapid widespread prosperity for a nation and its people. Finally, there are typically serious negative consequences associated with the industrialization process that should not be ignored.

Overall, the process of industrialization should be viewed as being highly complex in nature. The consequences of this process should likewise be seen as intricate and, thus, difficult to accurately predict. Perhaps most importantly, it should be understood that neither industrialization nor its development-related (and other) consequences occur overnight—it can take well over a century for the process and its outcomes to be fully realized in any given country. The traditional view of industrialization is based on the process as manifest in both the United States and the UK. This is in contrast to the ongoing industrialization-driven development of China and other NICs.

The United States and the United Kingdom

The first of as many as three periods of industrial revolution—typically referred to as The Industrial Revolution—began initially in what is today the UK and then in the United States in the mid-late 18th century (with 1760 often being considered as the "start date" of the process in the UK). In both nations, the process of industrialization involved (and was fueled by) both the creation and implementation of machinery for the highly efficient mass production of goods as well as dramatic expansions of transportation infrastructures (mainly railroad). Just as importantly, the Industrial Revolution—and the resultant industrialization of both the United States and the UK—involved the mass migration of hundreds of thousands of persons from self-sufficient agrarian existences in rural areas into burgeoning urban environments where they ran the new machines of the new mass production driving industrialization.

The rural/farming-to-urban/mechanized goods production transformation wrought by the original Industrial Revolution was so significant that it is often said that the modern form of capitalism serving as the backbone of today's global economic system began with the start of this revolution. Adequately describing the overall magnitude of the change involved is difficult. However, consider the case of the textile industry in the UK as being exemplary of two key consequences of the Industrial Revolution in that country—the transformation of both (1) the manner in work is done and (2) the way goods are produced. Before the onset of the Industrial Revolution, the majority of clothing was self-produced in homes. This process was tedious and highly inefficient. Think, in this regard, what it would be like today if most people produced their own clothing. Think, for example, about the time and effort involved in finding and acquiring the right raw materials (e.g., raw cotton and wool) and then processing these materials—thread by tedious thread—into the clothing you wear by hand. Now think about this being done in almost every household in the UK. The gross inefficiencies involved in such a scenario should be obvious.

The character of clothing production in what is today the UK changed dramatically in the mid-1760s with the development of the "jenny." This mechanized device allowed the operator to simultaneously work with dozens of threads—and produce a finished piece of clothing in a fraction of the time that could be achieved by an individual working by hand. By the late 1780s, nearly 20,000 "jennys" were in use in factories across the UK. Gone were the days of inefficient domestic production. Highly efficient clothing factories—along with factories in scores of other developing industries—spread across the country. People moved in mass from rural areas to the cities to work in the factories where they could make far more money and live, in at least material terms, better lives.

Suggested above is the fact that industrialization changes both the basis of national economies and the manner in which people in industrialized nations most commonly work (i.e., from self-subsistence agricultural and domestic work in rural areas toward mechanized, third-party manufacturing in urban locales). Quantifying the magnitude of this shift in both the UK and the United States is challenging. Consider, however, that it is estimated that in the United States in 1810 nearly 85 percent of the workforce was engaged in agricultural activities, with only three percent involved in manufacturing. By 1960 only 8 percent of the workforce in the by then nearly fully industrialized United States was engaged in agriculture, with the share for manufacturing rising to almost 25 percent. By 2006 the percentage of U.S. workers involved in agricultural activities had shrunk to under 2 percent—down from 85 percent shortly after the start of the Industrial Revolution.

Needless to say, the transformation involved in the original Industrial Revolution includes major change not only in the way that most people worked, but also in the way they lived. Prior to industrialization, most people in the United States lived in rural areas and produced needed goods and services themselves—and large portions of their time were spent in their homes and immediate communities engaged in this (grossly inefficient) self-production. With industrialization came the onset of urban masses engaged in highly efficient, mechanized manufacturing—and factory work and the means to acquire these third-party–produced goods. In addition, along with the use of machinery in factories all across the United States and the UK came significant increases in demand for and consumption of such factors of production as coal, iron, and transportation—and large industries built around each factor.

The most widely discussed outcomes of the Industrial Revolution for the United States and the UK are great increases in (1) both worker productivity and manufacturing efficiency and (2) national and per-capita income, gross domestic product (GDP), and other measures of material wealth. With regard to the latter, it is often noted that the United States and the UK are today and have for decades been among the wealthiest nations in the world—and that this is an outcome of having been industrialized for a relatively long period of time. Consider, for example, that although only about 5 percent of the world's population resides in the United States, this country accounts for (1) over 25 percent of global wealth and (2) nearly 22 percent of the world's GDP. This is commonly attributed largely to the manner in which people work as well as the way in which goods and services are produced—all products, ultimately, of the Industrial Revolution.

Critiques

However, it is important to note that there was also a clear downside to Industrial Revolution–era industrialization as manifest in both the United States and the UK. Throughout more than the first 100 years of the Industrial Revolution, the urban areas in which more and more people lived became overcrowded and heavily polluted while the factories that hundreds of thousands of people flocked to for work were far from what could be called "worker-friendly." Factories of the period were often largely unregulated, with poor ventilation, dangerous levels of noise, and poor lighting. Much of the highly efficient machinery was also often very dangerous to operate. Workers often worked 12- to 14-hour days in these often horrendous conditions. As a result, critics charge that the positive outcomes of the Industrial Revolution were not evenly distributed. They claim, specifically, that the great material wealth generated landed disproportionately in the hands of factory owners and executive managers for manufacturing corporations—while the workers toiled long hours in poor working conditions for relatively little pay.

Another commonly discussed negative outcome of the Industrial Revolution, particularly in the United States, is the ultimate effect of industrialization on the family. Throughout much of the 20th century, it was widely assumed that industrialization had been the key causal factor leading to the virtual destruction of the traditional family structure in the United States. This "destruction" was seen, for example, in increasingly widespread marital disharmony and instability as well as weakened ties with extended family members.

Although the idea of the industrialization-driven destruction of the U.S. family appears to have been exaggerated by many commentators, industrialization does appear to have indeed created dysfunctional strains on the family—and at least the potential for familial disintegration. These strains most typically arose via industrialization driving the migration of many people from agrarian jobs in rural areas to factory and other goods-manufacturing jobs in urban areas. When this movement occurred, the priority of the father/husband is said to have shifted from the family itself to work. Although it can certainly be said that this work was engaged in for the betterment of the family, the new focus on work—and working for

A 15-year-old girl in a U.S. textile mill in 1916. By 2004 only 17 percent of U.S. nonagricultural workers still manufactured goods.

a company rather than family- or community-based work—is theorized to have changed the essential manner in which fathers/husbands interacted with other family members. It has been noted, in this regard, that industrialization was a significant contributing factor to both (1) a lesser amount of parental control being exercised over children (due to not having as much time to spend with them) and (2) the "early maturity" of children (wherein parents encouraged their children to be independent at an earlier age so as to prepare them for relatively earlier entry into industrialized U.S. society as productive workers).

Newly Industrialized Countries

The recent and ongoing industrialization of Brazil, Mexico, South Korea, India, China, Singapore, Taiwan, and other newly industrialized countries (NICs) is similar to the Industrial Revolution–based industrialization of the United States and the UK in several key ways. First, in a most basic sense, NIC industrialization involves: (1) the transition from a low-tech, small-scale, inefficient agricultural-based economy to one relying heavily on large-scale, heavily mechanized, and highly efficient goods and/or services manufacturing, and (2) the mass migration of persons from rural to urban locales. Similar too is the fact that industrialization drives significant increases in demand for and consumption of raw materials and other inputs to large-scale production and infrastructure development inherent in industrialization. Consider, in this regard, that it is estimated that China now consumes approximately one-third of the total global supply of iron, steel, and coal.

Similarities between industrialization manifest both today and in past centuries also exist with respect to the most commonly discussed outcomes of the process (e.g., increases in productivity, efficiency, and economic development). It is noted, for example, that China, for centuries a relatively isolated, inwardly focused peripheral nation in the background of the modern global economic system, has recently experienced significant industrialization-driven development. In this regard, the Chinese economy has not only become very global in nature but has also doubled in size every eight years over the course of the last three decades. In addition, during this same period of time, nearly 400 million Chinese people have emerged from poverty—many of them by personally becoming part of the global economic system as a result of moving from farms in rural areas to goods manufacturing jobs in large cities.

However, the industrialization of the NICs differs in important ways from previous manifestations of the process. As suggested above with the example of China, but also very much the case with NICs such as South Korea, Taiwan, Hong Kong, and Singapore—often referred to as the "Four Tigers" of southeast Asia—recent industrialization (and industrialization-driven development) often occurs at a much faster pace than in the past. This is, as will be subsequently discussed in greater detail, the result of technological advances employed in the focal industrializing country.

Also at variance with past industrialization is the sheer magnitude of the process today. This is particularly true with regard to China and India. The staggering extent of the industrialization processes in these two countries is without question largely attributable to the fact that they are far and away the two largest countries in the world. The magnitude of China's industrialization is also a function of the fact that ruling members of China's centralized government do not need to be so worried about pleasing constituents and getting reelected (relative to their counterparts in democratically ruled nations. In this regard, China's industrialization had, as of the start of 2007, helped establish the nation as the global leader in the production of steel, coal, cement, TV sets, and cotton fabric—it was also then ranked second in power generation, third in sugar production, and fifth in crude oil output. And, while the magnitude of China's industrialization to date is unprecedented, it should be noted that in late 2007 it was announced by the Chinese National Bureau of Statistics that the country's industrialization was then estimated to be only at its halfway point.

Another important difference between "old" and "new" industrialization involves identification of a set of distinctive factors driving the incidence of the process in some NICs. These factors include

- political stability and the creation and maintenance of foreign investor-friendly environments;
- economic and legal reforms aimed at strengthening definition and enforcement of property and other contractual rights;
- encouraging entrepreneurship amongst domestic businesspeople;
- centralized planning featuring observable and measurable development-related objectives tied to specific policies;
- an outward orientation wherein export production priorities are based on differentiation-based positioning against global competitors;
- careful choice of where and how to access factors of production the country does not have a competitive advantage in;
- the targeting of specific industries for growth via incentive programs and other forms of governmental support;
- providing governmental incentives that encourage a high rate of domestic savings;
- infrastructure spending and development (e.g., in transportation, education, training, and housing);
- making their domestic marketplaces open to foreign marketers (e.g., via reduction or elimination of many tariffs on imported goods); and
- the privatization of state-owned and operated industries (which allowed resources previously tied up in these typically inefficiently run enterprises to be invested in targeted industry development and other strategically important initiatives).

These factors facilitating modern NIC industrialization are based most significantly on analysis of the rapid industrialization-driven development success of South Korea, Taiwan, Hong Kong, and Singapore—the "Four Tigers" of southeast Asia. These countries, long lesser-developed nations with high rates of poverty, began their involvement in the global economic system as export production platforms/goods assemblers for companies and consumers residing in affluent, industrialized nations (e.g., Japan and the United States). Each nation was able, through deployment of different combinations of these key factors, to establish itself as a major global player in selected industries—eventually competing successfully against rivals from highly industrialized and developed nations.

A final major variation in "old" and "new" industrialization concerns the fact that the process today is often based far more heavily on advances in information technology (and their creative application). Fully comprehending the importance of this variance requires a brief historical review. Earlier, it was stated that the Industrial Revolution that began first in what is today the UK in the mid-late 18th century can be seen as but the first of as many as the three periods of industrialization-driven transformation that have reoriented the economic and social character of nations—turning them into industrialized countries. The second such revolution, occurring most notably in the United States starting in the 1960s, involved a marked shift within the manufacturing sector established in the original Industrial Revolution. This shift involved transition toward an (intangible) services manufacturing-based economy—and away from the factory-based production of (tangible) goods. Consider, in this regard, that in 1960 approximately 35 percent of the nonagricultural workforce in the United States produced goods, while about 65 percent were employed in services. By 2004 the percentage of

U.S. nonagricultural workers manufacturing goods had fallen to roughly 17, while the percentage for services production had risen to approximately 83. This transition was driven, in part, by the fact that many goods manufacturing jobs in the United States were relocated to other nations with lower-cost labor (and other factors of production). This second industrial revolution led to what is today referred to as the "service economy" in the United States (and many other industrialized nations previously dominated by goods manufacturing).

What can be called "the third industrial revolution" is still in its early-mid stages. It is a distinctly high-technology revolution often referred to as "the information age." This revolution is driven by the increasingly inexpensive and reliable global exchange of information. This in turn creates the possibility, for the first time in history, to readily transfer the production of certain types of services (e.g., telephone-based customer support, clerical work, and computer programming) to foreign (i.e., "offshore") locations. This is particularly relevant for service marketers in already industrialized countries where the cost of labor is high relative to wages in lesser developed nations where (1) the technological infrastructure is capable of facilitating delivery of the focal service, and (2) an adequately sized workforce possessing the skills required to provide the service can be accessed. Thus, while industrialization today continues to involve the shift from self-sufficient agricultural activities in rural areas to the mechanized production of goods in urban areas, another key component of the process for some nations—most notably India—is a move toward building up the technological infrastructure and increasing the number of technically qualified persons so as to be able to provide "offshore outsourced" services to customers in other countries.

It should be noted that something that has evidently not changed with the recent wave of NIC industrialization is the existence of clear signs of the negative impact of the process. Working conditions in some factories in NICs (and many other lesser-developed nations) rival those of the United States and the UK during the early-mid years of the original Industrial Revolution. Much the same can be said with regard to pollution and its negative impact on the environment. In fact, with regard to the latter and perhaps not surprisingly given the unprecedented speed and magnitude of industrialization in recent years, some have voiced concern that levels of industrialization-driven pollution and environmental degradation are likewise unprecedented.

Take, for example, the troubling case of China, where industrial emissions are often at best loosely regulated and the vast majority of the massive supply of energy fueling industrialization comes from relatively, if not very dirty sources—predominantly coal. Listed below are select findings of a late-2007 *New York Times* report addressing the magnitude of the health-related impact of China's soaring pollution problem.

- In 2006 levels of air pollution in Beijing were more than 300 percent above the level considered safe by the European Union.
- In 2007 two leading international environmental agencies concluded that China had by then become the world's leading producer of greenhouse gases.
- It is estimated that only about one percent of the nearly 600 million persons living in urban environments in China breathe air considered safe by the European Union.
- Air and water pollution are now believed to collectively be the root cause of approximately 750,000 deaths each year in China.
- In 2007 the Chinese Minister of Health officially recognized that soaring levels of pollution had established cancer as the nation's leading cause of death.

Contemplation of these and other similar data and estimates suggests that in order for the development-related potential of China's ongoing and already unprecedented industrialization to ever come close to being fully realized, Chinese governmental leaders face as arguably their greatest single challenge the cessation of practices that have led to the nation's alarming industrialization-driven pollution situation. And, it should be noted that China's problem in this regard is so massive that it has spread well beyond its national borders. It is estimated, for instance, that emissions from industrial operations in China are at least partly to blame for (1) increasing levels of acid rain in South Korea and Japan and (2) much of the air pollution in Los Angeles, California. Finally, perhaps most importantly—and potentially the greatest cause for concern of all—it should be remembered, as previously stated, that China is presently at approximately the mid-point of its industrialization.

See Also: Asian Tigers; BRICs (Brazil, Russia, India, China); China; Core; Economic Development; India; Less Industrialized Countries; Modernization Theory; Newly Industrialized Countries; Off-Shoring; Periphery; Underdevelopment; United Kingdom; United States.

Bibliography. Daniel Bell, *The Cultural Contradictions of Capitalism* (Basic Books, 1996 [1976]); Alan Blinder, "Off-shoring: The Next Industrial Revolution?" *Foreign Affairs* (v.85/2, 2006); Philip Cateora and John Graham, *International Marketing,* 13th ed. (McGraw-Hill/Irwin, 2007); *ChinaDaily*, "China in Midway of Industrialization," www.chinadaily.com.cn (cited March 2009); James Davies, Susanna Sandstrom, Anthony Shorrocks, and Edward Wolff, "Estimating the Level and Distribution of Global Household Wealth," www.wider.unu.edu (cited March 2009); Peter Evans and John D. Stephens, "Development and the World Economy," in *Handbook of Sociology*, N. J. Smelser, ed. (Sage, 1988); Frank Furstenberg, "Industrialization and the American Family: A Look Backward," *American Sociological Review* (v.31/3, 1966); Gary Gereffi, "The International Economy and Economic Development," in *The Handbook of Economic Sociology*, N.J. Smelser and R. Swedberg, eds. (Princeton University Press, 1994); G. John Ikenberry, "The Rise of China and the Future of the West," *Foreign Affairs* (v.87/1, 2008); Joseph Kahn and Jim Yardley, "As China Roars, Pollution Reaches Deadly Extremes," *New York Times* (August 26, 2007); Joseph Montagna, "The Industrial Revolution," Yale–New Haven Teachers Institute, www.yale.edu/ynhti (cited March 2009); Fareed Zakaria, *The Post-American World* (W.W. Norton & Company, 2008).

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Industry Information

The significant role information plays in the success of industry and its participants continues to dominate academic debate, with the growing volume of multidisciplinary literature demonstrating the complexity of not only defining but accessing relevant information. No one clear interpretation of the term *industry information* exists with the variables of country, language, sector, purpose, etc., determining the context of what is looked for and where and how it can be located. What is clear, however, is that information has and will continue to be a vital asset among a manager's skills. For the purpose of this entry, *industry information* will reflect, as E. Ozgen and R. A. Baron write, "the idea that *information* plays a crucial role in opportunity recognition … to identify opportunities for viable new ventures, entrepreneurs must somehow perceive, gather, interpret, and apply information about specific industries, technologies, markets, government policies, and other factors."

Traditional sources of industry information represented by company reports, market research, country, and sector analysis have now been usurped by the digital era, with estimates that by 2011 the digital universe will be 10 times the size it was in 2006. For examples from the digital era, a look at United Kingdom–based industry/business information in the form of information products may be useful. A wide range of industry information sources can be accessed through national, regional, academic, and private library holdings. The sources covered are primarily electronic sources and identify a cross-section of industry information sources from the innovation/ideas phase through to development and marketing:

- COBRA (Complete Business Reference Advisor) database: An encyclopedia covering information relating to start-up, running, and management of a small business, together with examples.
- Business-in-a-box Web site: A free start-up business guide covering such areas as staffing, finance, protecting your ideas, etc.
- Business Link Web site: Sponsored by the DTI Small Business Service: supported through local agencies, providing information, advice, guides, and networking.
- National Federation of Enterprise Agencies: Independent, nonprofit service to advise pre-start and small businesses.
- Startups.co.uk: Contains business planning, finance, etc., together with newsletter and networking facilities for start-ups.

The following sample, using the advertising industry as an example, demonstrates only a small cross-section of the range and content of sources available relating to competitors, suppliers, market evaluation, etc. Within each respective industry sector (pharmaceuticals, retailing, etc.) a similar range of targeted resources can be identified.

- Advertisers Annual (Hollis Publishing): Listing of United Kingdom agencies ordered by location, sector, associations, and sources.
- BRAD Monthly Guide to Advertising Media (EMAP Group): Monthly listing of advertising media in the United Kingdom, new and existing media sources, arranged by sector.
- Advertising Statistics Yearbook (World Advertising Research Center): Covers sales and marketing data for print, radio, and television media in the United Kingdom.
- Business Ratio Report: Advertising Agencies (Key Note Publications): United Kingdom industry overview, profiling over 120 companies relating to finance, league tables, employee growth, etc.
- The European Marketing Pocket Book (World Advertising Research Center): Covers 33 countries including demographics, economic indicators, advertising expenditure.
- Ad Forum Web site: Resources relating to worldwide advertising.
- Advertising Association: Federation of trade bodies covering advertising and promotion activities in the United Kingdom.

Another useful category of industry information sources are market research databases such as the following:

- AMADEUS: Approximately 1.5 million company profiles covering 32 European countries. The searches can be made across countries to include key financial and contact information and lists can be created.
- Business Insights: Provides market research and analysis of several key sectors including healthcare, financial services, energy, telecommunications, high technology as well as consumer markets such as food and drink.
- FAME: Detailed financial data for 2.5 million companies in the United Kingdom and Ireland. Expert searching allows for the creation of company lists that can be sorted by turnover, postal code, and other search variables.
- Key Note: Provides full text access to over a 1,000 reports covering 30 industry sectors such as information technology and food and drink.
- Kompass Worldwide: Covers detailed product and service descriptions of over 1.9 million companies in 70 countries. This represents a key source for manufacturers and suppliers.
- Mintel: Coverage relates to a wide range of consumer and lifestyle markets in the United Kingdom.

What is becoming obvious is that today's contemporary manager still needs additional resources to complement such electronic sources as those identified above. E. Ozgen and R. A. Baron discuss the need to recognize peer support and social networking and suggest that three further sources of key industry information can be found in the nonstandard social sources of mentors, information industry networks, and participation in profession forums.

Understanding and using industry information is essential for survival in today's information economy, yet to attempt to be aware of and be able to use all formal and informal, internal and external information sources is unrealistic. L. Orna argues that to understand what you need, you have to establish

> a "meeting place for minds," in the form of an electronic information product shaped by its users, and arrived at through a co-operative investigation of what's really going on.

Sources of industry information are available, dependent on locality and time spent to identify where and how to access them, but to use them effectively, the key is knowing what the individual and their organization want and why.

See Also: Marketing; Market Research.

Bibliography. D. H. Davenport and L. Prusak, *Information Ecology: Master the Information and Knowledge Environment* (Oxford University Press, 1997); J. Diebold, "Information Resources Management (IRM)? New Directions in Management," *Infosystems* (v.26/10), 1979); Li Feng, *The Geography of Business Information* (Wiley, 1995); A. Foster, "Business Information Survey," *Business Information Review* (v.25/13, 2008); J. F. Gantz, "The Drivers and Exploding Digital Universe," IDC White Paper (2008); J. D. Johnson, "Information Seeking: An Organisational Dilemma," *Quorum* (1996); K. C. Laudon and J. P. Laudon, *Information Systems and the Internet. A Problem Solving Approach* (Dryden Press, 1998); L. Orna, "No Business Without Information Products: How They Can Add—and Subtract—Value," *Business Information Review* (v.23, 2006); E. Ozgen and R. A. Baron "Social Sources of Information in Opportunity Recognition: Effects of Mentors, Industry Networks, and Professional Forums," *Journal of Business Venturing* (v.22/2, 2007).

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Infant Industry Argument

The infant industry argument is used by countries as an economic protectionist measure so that industries (primarily manufacturing) can be protected from other countries' industries that can produce goods or services cheaper than the country enacting the measure. The measure was first argued in the United States by Alexander Hamilton, the country's first Treasury secretary. Prior to the American Revolution, Britain had discouraged its colonies from developing their own industry so that Britain could benefit from its own mercantilism. Additionally, strong tariffs would raise capital for the new republic. Friedrich List (1856) used a similar argument in Germany to protect Germany against British industries. John Stuart Mill eventually went on to formalize the argument in economic terms.

The infant industry argument promotes protectionist measures using tariffs (for a predetermined time) on imported goods of the same type as a particular industry in the host country that has just begun producing those goods (hence the term *infant*). Since the industry is in its infancy, it has not had the opportunity to gain a learning curve in its mass production. Therefore, the argument assumes two things. First, the argument assumes that the industry's leaders will gain a learning curve so that it will be able to match the price of incoming goods after a predetermined period of time. Second, inputs of the country using the infant industry argument (labor, materials, etc.) are the same or near the same as the other countries.

Several flaws in modern-day nation-state economic activity make the infant industry argument implausible, or at least unfair. First, the World Trade Organization (WTO) and regional trade agreements have sought to lower tariffs to increase free trade. Therefore, a country that seeks to use an infant industry argument and is a participant in these organizations could face retaliation by several countries and not just the country against which the first country enacted protectionist tariffs.

Next, the principles of comparative advantage are violated. All things being equal, it is not in a nation-state's best interest to divert resources to an industry in which they have less efficiency or opportunity costs. If a nation-state follows comparative advantage principles, the resources that are being used inefficiently in the protected industry would be distributed to efficient industries (what the nation-state does better than other nation-states).

Also, in today's global economic atmosphere, the cost of labor as an input (dollars/hour wages) in western Europe and the United States is not the same as developing nations such as China or India. In the mid to late 19th century, labor costs were comparable. Therefore, presently only less developed countries could ethically use this argument. Besides labor cost disparities, a country may have other resource inputs that are naturally higher than the country that currently produces the good at a lower cost. Once the tariffs are lifted, these inputs have a normal effect of making the product that is protected under the infant industry argument cost prohibitive in terms of opportunity costs.

Next, determining when the initial tariffs should be lifted becomes less an economic issue and more a political one for the country enacting the tariffs. The infant industry argument presupposes that the protective tariffs will be lifted when the industry is on an even footing with other nation-states' industries and can meet domestic demand, as well as export these goods to other countries. When this "even footing" occurs remains open to debate. Also, the infant industry argument presupposes that the protected industry will continue to invest in the industry to keep up with other nation-states in the same industry. If the industry continually changes due to new investment, the protected industry may need tariff protection for many years. Furthermore, the argument is less clear when other entrants want to get into the industry after a few firms have been protected.

Finally, it is ethically unfair when trade does not occur naturally ("the invisible hand") per Adam Smith. Related to comparative advantage and opportunity costs, resources and manufacturing should naturally flow to nation-states that can produce products most cheaply. The consumer should work with normal cycles of supply and demand to obtain a product at its equilibrium price.

See Also: Comparative Advantage; Economic Development; Economies of Scale; Mercantilism; Pricing.

Bibliography. A. O. Kruger and B. Tuncer, "An Empirical Test of the Infant Industrial Argument," *American Economic Review* (1982); Phillip Saure, "Revisiting the Infant Industry Argument," *Journal of Development Economics* (v.84/1, 2007); H. C. Syrett, ed., *The Papers of Alexander Hamilton* (Columbia University Press, 1977); Rüdiger Wolfrum, Peter-Tobias Stoll, and Michael Koebele, *WTO—Trade Remedies* (Martinus Nijhoff Pub, 2008).

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Information Systems

An information system (IS) consists of the people, processes, and data involved in the handling of information in an organization, and as a field, information systems is the study, design, and implementation of such. Nonspecialists often use "information system" to refer specifically to the software used in such systems, likely because that constitutes the bulk of the new information they need to learn if a new IS is implemented in their workplace. But the IS would include, for instance, not simply the new software in use on the store's cash register, but the delegation of authority—who is authorized to issue a refund if a customer asks for one, who counts out the money in the register at the end of a shift or the end of the working day—and the handling of information not accounted for by the software, such as where the receipt from the refund is filed, and where the money from the register is transferred.

In many companies large enough to support the role, the management of information systems falls under the purview of the Chief Information Officer (CIO), the executive in charge of IT-related operations. The CIO typically answers to the chief financial officer, since much of the information systems in use at the company will be devoted to accounting tasks. At tech companies, he or she may answer directly to the CEO. Some companies refer to their CIO as the IT Director, but the CIO title has become preferred because of its parallelism with CEO, CFO, et cetera. Typical CIO qualifications vary greatly according to the company and the nature of their reliance on IT; the CIO may come from a tech field, may be an MBA who picked up IT knowledge on the job, or increasingly may have earned a degree in information systems. With computer expertise no longer as rare a thing as it was in the early 1990s at the dawn of home internet access, nor as niche a field, a great many more CIOs are rising to their positions from the business management part of their industry rather than the IT support side. Duties may or may not include information security; in some organizations, there will be a separate chief information security officer (CISO) who reports to the CIO.

When referring to the software, many people use "information system" to refer to an information *processing* system, a program that turns one kind of information into another. Tax software is a common example most people are familiar with: it takes the user's input (income and certain outgo), processes it according to the algorithms derived from applicable tax law, and outputs the amount of tax owed. These days, computers are flexible enough that when integrated with electronic payment systems and an internet connection, such a system can be used to determine and pay taxes in one fell swoop, and may be used to suggest possible deductions the user may not have considered, thus doing a good deal more than acting as the sophisticated calculator that computers were for so long relegated to.

The three-schema approach was once common in the construction of information systems, though more sophisticated approaches have taken up much of its share as software has become more sophisticated and computer power has increased. A schema—which shares a root with "schematic," "scheme," and "scenario"—is a model consisting of a diagram, usually with both words and images. An obvious example of a schema is the mock blueprints used by schemers in old cartoons, depicting an oblivious mouse in front of a trap, a mouse caught in the trap, and a mouse on a cat's dinner plate, with directional arrows and captions. The three schemas of this particular approach are the external schema that defines how users view the data involved in the system; the internal schema that defines the physical system itself, or storage of the data; and the conceptual schema, which integrates the two.

System Types

Information systems may include transaction processing systems (TPS), which automate the processing of transaction-generated information. Sales and purchases can be handled automatically—such as in online shopping, with systems generating warehouse orders and adjusting inventory, as well as handling the validation of credit card information—with information then recorded, summarized, and stored in appropriate places. The amount of paperwork that can be generated by a TPS has been made infamous by the film *Office Space*'s repeated mention of TPS reports.

Information systems meant to handle especially high-level tasks, such as serving a large corporation, are sometimes called Enterprise Information Systems, extending the modifier from Enterprise software. Enterprise software is that which is intended to be used "at the enterprise level" rather than with a departmental focus. This software is often proprietary, developed specifically for the business (by the IT division or a contracted software developer), or is custom-constructed from a highly customizable software suite. Sun, Adobe, Oracle, and Microsoft all offer Enterprise software and the tools to develop it, but interestingly there is a lot of attention and effort spent on Enterprise software in the Open Source Software community, which not only offers software for free (sometimes charging a fee for tech support or implementation) but puts the code in the public domain so that anyone who wants to can modify it themselves.

The usefulness of the Enterprise software designation is facing diminution, as some vendors push overly complex software suites on businesses too small to benefit from them, while others package relatively ordinary business management software as Enterprise software because of the prestige appeal of the label.

At the information system level, the purpose of an Enterprise Information System is to avoid the conflicts, redundancies, and inconsistencies that can result from using separate segregated information systems in various departments. The entire company's information system is conceived as a whole, with a unified means of handling data and spotting problems. Such systems will usually include a content management system (CMS). A CMS is a software package that handles digital media, including text. Internet and intranet technologies are used to manage content like documents and procedures, structured and unstructured records, and other information, providing interfaces for it to be accessed in-house, by other businesses (vendors, customers, industry agencies), by the general public, and by the government. Often the end-user is unaware of the content management system; it's "middleware," providing infrastructure and a framework that integrates the foundation (content) with the edifice (the interface).

Other subsets of information systems relevant to business are management information systems (MIS), accounting information systems (AIS), and strategic information systems (SIS). Management information systems examine business operations and internal control—the way the business's resources are allocated and recorded. MIS is concerned with making sure that the operations and processes of the business are consistent with achieving the company's objectives and compliant with its standards. Accounting information systems focus on the financial transactions and behavior of the company. Either can include decision support systems, information systems that guide decision making by organizing data in various categories. DSSes can be communication-driven, facilitating the decision-making processes involving multiple people; data-driven, as in the purchasing example; document-driven, when the relevant data is "unstructured" (in the form of customer letters, for instance, as opposed to manipulable numbers in a spreadsheet); knowledge-driven, when procedures or problem-solving are involved; or model-driven, when the current situation can be compared to others.

Executive information systems are subtype of decision support systems, and are specifically designed for executive-level decision making affecting the whole of the company, and focused on the overall goals of the company more than the day to day transactional operations. The needs of these systems vary by the company's industry, but will include significant data about and evaluations of the other parties the company works with—buyers, vendors, contractors, regulatory agencies, and so on—and relevant industry-wide information.

Strategic information systems are similar to executive information systems, but focus specifically on assisting decision making related to the company's competing in the industry. Ideally, an SIS gives the company a competitive edge by enabling them to react quickly to changes in the industry environment—to maintain this edge, the system needs to be updated regularly in order to keep up with those changes.

See Also: Accounting Information Systems; Informational Technology Auditing; Management Information Systems; Operations Management.

Bibliography. Mark W. Huber, Craig Piercy, and Patrick G. McKeown, *Information Systems: Creating Business Value* (Wiley, 2006); Leonard Jessup and Joseph Valacich, *Information Systems Today: Managing in the Digital World* (Prentice Hall, 2007); Keri E. Pearlson and Carol S. Saunders, *Managing and Using Information Systems* (Wiley, 2009); Ralph Stair and George Reynolds, *Fundamentals of Information Systems* (Course Technology, 2008).

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Information Technology Auditing

Information technology (IT) auditing collects and evaluates data pertaining to an IT infrastructure. An IT audit may augment a financial audit, but it is specifically designed to test the IT infrastructure's accuracy, efficiency, and security. Though around since the 1960s, IT audits have become especially important in the 21st century, when so much of a business's activity is conducted or assisted electronically.

The first IT audits were necessitated by the use of electronics in accounting systems. Early computers did little more than that—compute—and the combination of their expense with their extraordinarily narrow focus of applications meant that they were adopted slowly. Though General Electric used a computerized accounting system in 1954, computer use was a highly specialized skill, and early input methods (such as punch cards or paper tape) were tedious to error-check.

With the development of specialized office computers in the 1960s and the shift toward developing computers for people who did not work on them for a living, larger businesses began to integrate computers into some of their accounting procedures, especially data storage (such as to keep track of inventory or reservations) and handling large amounts of complicated information. The first IT audits were therefore electronic data processing (EDP) audits, double-checking the accuracy of the software systems in use at a business and the data entered into and derived from them.

This led to the development of specialized accounting software, and in 1968 the American Institute of Certified Public Accountants helped formalize EDP audits, keeping them at the rigorous standards employed by financial audits. The Electronic Data Processing Auditors Association (EDPAA) was formed shortly thereafter, for the growing number of accountants who specialized in EDP audits. EDPAA has since (in 1994) changed its named to the Information Systems Audit and Control Association, and publishes CobiT—Control Objectives for Information and related Technology, the widely accepted list of standards and objectives in IT audits.

IT auditing became especially prioritized in the aftermath of the Equity Funding Corporation of America scandal of 1973, when former EFCA employee Ronald Secrist and analyst Ray Dirks reported that the Los Angeles company—which sold mutual funds and life insurance—was guilty of widespread and organized accounting fraud. At least 100 employees since 1964 had been guilty of deceiving investors and the government, and that deceit included a computer system devoted to the forgery of insurance policies for fictitious policyholders. Determining the extent of the fraud, of course, meant auditing the computer system, as well as all others in use by the company—a process that took over two years. Similarly, in the wake of the 21st-century accounting scandals, the Sarbanes-Oxley Act of 2002 was passed, establishing stricter standards for public company boards and public accounting firms—with a greater emphasis on IT audits.

There are five categories of IT audits:

- Systems and Applications audits test the input, output, and processing at all levels of the company's systems and applications.
- Information Processing Facilities audits test the control of the processing facility under normal and disruptive conditions.
- Systems Development audits examine the systems under development to make sure that they meet the company's objectives and standards.
- Management of IT and Enterprise Architecture audits examine the organizational structure and procedures in use.
- Client/Server, Telecommunications, Intranets, and Extranets audits focus on networking issues, an area where there is particular concern with staying current in security protocols.

Information technology changes rapidly, as does its position in the process of doing business. IT auditors, though they may be CPAs, are generally more versed in information systems, with a general understanding of accounting principles, because the accounting component of their job is the more static ingredient in the mix, while the ramifications, security concerns, and potential for misuse of technology are always in flux.

See Also: Auditing Standards; Corruption; Electronic Commerce; Sarbanes-Oxley.

Bibliography. Christian Lahti, Roderick Peterson, and Steve Lanza, *Sarbanes-Oxley Compliance Using CobiT and Open Source Tools* (Syngress, 2005); Xenia Ley Parker, *Information Technology Audits* (CCH, 2008); Hugh Taylor, *The Joy of SOX: Why Sarbanes-Oxley and Services Oriented Architecture May Be the Best Thing That Ever Happened to You* (Wiley, 2006).

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Infrastructure

Infrastructure is a wide-ranging term that describes the underlying framework and structural characteristics of a location or activity. Generally it refers to such tangible and physical facilities as buildings, equipment, roads, bridges, harbors, rail networks, airports, communications, gas and electrical power, flood control, healthcare, education, police and fire protection, water, and sanitation, but it can also be used to represent more elusive concepts such as organizational structures, knowledge, monetary exchange, property rights, social customs, and other institutional characteristics. By and large the term *infrastructure* is used to represent those assets that facilitate the production and distribution of goods and services, but it can also be used more generically to describe such things as social and institutional practices, literacy, and the flow of information. In the sense that infrastructure is comprised of the vital materials of everyday life, it is fundamentally allied with the routines of both individuals and institutions, since any or all of these issues and factors can affect relative economic, social, cultural, and political conditions.

In historic terms, infrastructure can even be touted as enabling the very development of civilizations in the sense that most societies necessarily occupy particular locations capable of sustaining and fostering life, and each location requires the provision of core necessities. And even though the scale of any particular community will vary, its residents still need to acquire sufficient quantities of food and water as well as the desirability of disposing of its waste in order to make some effort to curb disease. For example, the impressive growth of the world's great metropolises in the late 19th and early 20th centuries (such as London and New York) can be directly coupled with the development and investment in systems that delivered potable water, disposed of sewage, and offered sustainable food supplies by linking urban areas with hinterland regions and markets. Accordingly, both the pace and the model of modern industrial societies can be tied to the establishment and implementation of infrastructure.

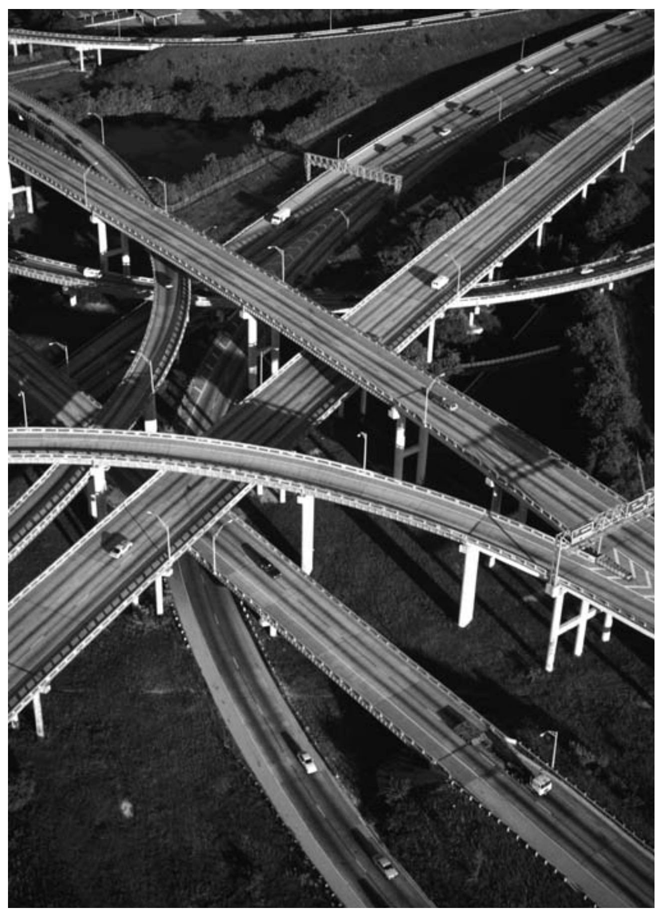
In common application, the term *infrastructure* came into use in the post–World War II era and is sometimes referred to as "social overhead capital." Public capital is also typically not an insignificant proportion of an industrialized nation's entire capital stock. The use of the term *social overhead capital* underscores that many of the more obvious examples of infrastructure (such as roads and bridges) are pervasive assets that are often publicly or socially provided but consumed collectively and individually. They are also social assets that often have substantial initial fixed costs in their creation but relatively low variable costs in their marginal use once provided.

Accordingly, one of the issues around the provision of local public goods such as roads is whether an appropriate amount of the good is being provided relative to its direct and indirect return. The construction of a road will be unambiguously beneficial to the community if it significantly reduces transportation costs and enhances access and exchange. On the other hand, too much or too little of a good is likely to lead to both social and private inefficiencies since both the overproduction and overconsumption of social capital can be inefficient and costly. Unnecessary and duplicative roads are examples of overproduction while traffic congestion is an example of the overconsumption of an existing road network. The availability and relative quality of infrastructure is likely to have significant economic and social impact, not only on many of the costs associated with the production and distribution of any number of goods and services, but it can also define the extent and efficiency of individual markets as well as entire communities.

One of the confounding factors in evaluating the true economic and social influence of infrastructure or social capital is that these are investments that provide benefits across dissimilar industries as well as in diverse time periods. The direct and indirect economic benefits of infrastructure can range from considerable to slight in alternative circumstances and thus may or may not be readily apparent to various consumers and producers that the due influence of social capital on output levels, productivity, and in due course on an area's material standard of living. The social effects of infrastructure, while not necessarily simple to quantify, can likewise range from the obvious to the obscure but all the same can have considerable influence on the manner in which people and institutions subsist and interact. Indeed, communities and individuals are defined and shaped by both the immediate and persistent effects of infrastructure in any number of overt and subtle ways.

Infrastructure and Economic Development

With rising concerns about both the process and the rate of economic development, attention has arisen to explain not only why wealth and poverty are so variable by location and situation but also to identify the probable role of infrastructure in that variation. The notion that infrastructure is directly related to economic development would seem self-evident. Moreover, when you take into account that many of the features most commonly categorized as infrastructure (transportation, communications, and utilities) are organized and function in systems of networks, then the apparent correlation between the availability of infrastructure and economic activity seems fairly straightforward. Nevertheless, economic development is clearly more than a one-dimensional process and consequently any resources, whether publicly or privately invested in the creation of infrastructure, ought to be evaluated



Too much or too little infrastructure can lead to inefficiencies, such as unnecessary or overcrowded roads.

in its appropriate context and relative to alternative investments.

Assuming that some minimal amount of overhead capital is essential for any reasonably sized community to subsist, the development and application of additional appropriate infrastructure is likely to be a necessary condition for further economic growth to occur. To be sure, there may well be some debate about whether or not providing necessary infrastructure would then be sufficient for economic growth to occur, but the notion that social capital can potentially advance the relative economic condition of the community seems reasonable. The adoption of new forms of infrastructure can also be the means by which technological change is diffused through an economy. For example, in both transportation and communications there have been changes not only in the way people move around but also in the means by which they send and receive information. Paved roads permit heavier loads at higher speeds, while fiber-optic cable networks transmit vast quantities of data much more rapidly than did earlier systems. Even though the existence of a technological change does not assure economic growth, most likely the reliance on archaic and inefficient social capital would inevitably engender economic stagnation. On the other hand, if a community's infrastructure were to experience a suitable and sufficient degree of technological change in conjunction with the appropriate institutional responses and policy decisions, then it certainly ought to be an active economy that encourages growth.

While the formation of infrastructure is often associated with public works projects, the production and maintenance of overhead capital does not necessarily involve public financing. Given the diversity of assets and characteristics that are suitably regarded as infrastructure, they can be funded by not only public and private investments but also directly by user fees. With respect to the relative well-being of a community, more pertinent issues include such things as how public capital is utilized in private production and distribution as well as what effect infrastructure ultimately has upon per capita income.

Quantity and Pricing of Infrastructure

Among the concerns of providing social capital goods is choosing an appropriate quantity of the good as well as setting a pricing scheme that efficiently and equitably reflects relative values. Infrastructure reduces costs for both consumers and producers and, as such, there are sufficient incentives on both the demand and supply side of markets to promote the creation and maintenance of infrastructure. Despite these incentives, it is also a potential free-rider problem since it is possible for users to access some of these social capital goods without the necessity of making fair payment. The occurrence of too many free-riders threatens the relative efficiency of providing a local and collectively consumed public good. There are also externalities that mean that potential market failures may well lead to an inefficient provision of social capital.

The relative return on public versus private capital investments is an issue of concern to development economists and policymakers. Private firms clearly have a vested self-interest to pursue private investments that augment their own profitability, but the public nature of infrastructure investments suggests that an equivalent public capital investment would potentially advance overall productivity not only in one product, manufactured by one firm, but simultaneously and consistently across a number of products and industries. Given the pervasiveness of infrastructure, it can be problematical to separate and quantify the real economic value of social capital. For instance, a healthy, literate, and skilled workforce enhances worker productivity, not merely for a particular firm but also across all local industries; accordingly, benefits accrue to employees, employers, and to the entire community.

See Also: Comparative Advantage; Economic Development; Transportation.

Bibliography. Adjo A. Amekudzi and Sue McNeil. *Infrastructure Reporting and Asset Management: Best Practices and Opportunities* (American Society of Civil Engineers, 2008); Patricia Clarke Annez, Gwénaelle Huet and George E. Peterson, *Lessons for the Urban Century: Decentralized Infrastructure Finance in the World Bank* (World Bank, 2008); Marianne Fay and Mary Morrison, *Infrastructure in Latin America and the Caribbean: Recent Developments and Key Challenges* (World Bank, 2007); Alvin Goodman and Makarand Hastak, *Infrastructure Planning Handbook* (McGraw-Hill, 2006); Sameer Kochhar, *Infrastructure & Governance* (Academic Foundation in association with Skoch Consultancy Services, 2008); Alicia Munnell, "Policy Watch: Infrastructure Investment and Economic Growth," *Journal of Economic Perspectives* (Fall 1992); National Council of Applied Economic Research, *India Rural Infrastructure Report* (Sage, 2007); Organisation for Economic Co-operation and Development, *Infrastructure to 2030. Volume 2, Mapping Policy for Electricity, Water and Transport* (OECD, 2007); Martin Rodriguez Pardina, Richard Schlirf Rapti and Eric Groom, *Accounting for Infrastructure Regulation: An Introduction* (World Bank, 2008); Urban Land Institute and Ernst & Young, *Infrastructure 2008: A Competitive Advantage* (Urban Land Institute, 2008).

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ING Group

ING Group (Internationale Nederlanden Groep) is a financial services company that provides savings, banking, investments, life insurance, and retirement services to people and companies in over 50 countries. It is a Dutch company with headquarters in the ING House in Amsterdam, the Netherlands. However, it has subsidiaries in nearby Great Britain and in 50 countries and employs over 130,000 people.

The business model that ING uses focuses on accumulating retail savings and pensions, and then investing them in well-diversified assets that have been selected after careful risk management assessments. For its retail customers, the goal is to see that ING's banking, investments, life insurance, and retirement services grow capital while minimizing risk. The mission of ING is to be the standard-setting leader in helping customers to manage their financial futures. Consequently, the strategy of ING is to create value (or wealth) for its customers at a higher rate of return on investments than its competitors over the long term and not just in short-term profits.

ING was created by the 1991 merger of Nationale-Nederlanden and NMB Postbank Group. Both Nationale-Nederlanden and NMB Postbank Group had a long corporate lineage stretching back before the 1800s to the Kooger Doodenbos business begun in Koog, Noord Holland, which was founded in 1743. The group has been involved in business activities such as fire insurance and providing financial security for widows, orphans, and those impoverishment by illness.

The religio-social divisions of Dutch society have played a part in the development of the predecessors of ING, lasting into the formation of ING itself. Catholics, Socialist/Liberals, and Protestants have historically formed subcultures in Dutch society, with separate banks and insurance companies being a consequence. ING inherited these divisions but has sought to overcome them in its subordinate units.

In the early 1990s, regulatory reforms in the Netherlands removed legal restrictions on mergers between insurance companies and banks. Since 1991, ING has become a multinational corporation with a very wide range of international activities. It is no longer simply a Dutch company with an international business.

Since the mid-1990s, ING has engaged in a series of buyouts. Some were acquisitions that sought to increase profits by reselling parts of the buyout after some restructuring. Other acquisitions were intended to increase the size of ING or its presence in a new market. The 1995 acquisition of Barings Bank followed its financial collapse due to the unauthorized speculative trading of Nick Leeson, a trader in Barings's Singapore office who lost $1.4 billion, rendering Barings insolvent. The purchase made ING globally recognized. Some Barings units were integrated into ING; others were closed or were sold.

An important company owned by ING that was sold was Life of Georgia, an insurance company based in Atlanta. It has since been purchased by the Jefferson National Life Insurance Company.

An acquisition that increased the strength of ING's presence in the Benelux countries was the purchase of Bank Brussels Lambert, a Belgian bank. Business activity in the United States was increased with the acquisitions of Equitable of Iowa; Aetna Financial Services; ReliaStar, a life insurance company; and Furman Selz, a privately held New York securities firm, in 1997 for $600 million.

Other acquisitions by ING were into territories in which there was more political risk. In 2001 it bought the Polish Bank Śląski and the Mexican insurer Seguros Comercial America. It has also established working relationships with Asian institutions such as the Bank of Beijing and the Pacific-Antai Life Insurance Company based in Shanghai, and the China Merchants Fund Management Company.

In 2008 the financial crisis that began with the subprime mortgage problem in the United States was signaled by events like the bankruptcy of the Wall Street financial firm Lehman Brothers. ING's exposure was very limited, so it was in a position to acquire several major banks in Iceland that collapsed. In a move to stabilize the situation for British depositors, the British Treasury had ING acquire the Icelandic deposits of Kaupthing Edge, Heritable Bank, and the Landsbanki with obligations of over £6 billion.

See Also: Buyout; Iceland; Mortgage Credit Crisis of 2008; Multinational Corporation; Netherlands.

Bibliography. David W. Conklin, *Cases in the Environment of Business: International Perspectives* (Sage, 2006); Hans Ibelings, *ING Group Headquarters: Meyer en Van Schooten Architects* (NAi Publishers, 2003); Derek Loosvelt, *Vault Guide to the Top Financial Services Employers* (Vault, 2005).

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Initial Public Offering

An initial public offering (IPO) occurs when a firm for the first time sells securities to the public. Firms going public can be nascent start-ups or old, established corporations engaged in restructuring programs requiring new capital injection. The IPO as a means by which capital is raised became an increasingly common phenomenon in the 1990s when more than 4,000 IPOs were issued in the United States alone.

The process for conducting an IPO generally involves a firm taking the following steps: (1) it registers with the Securities and Exchange Commission (SEC), (2) it seeks the help of one or more investment banks as "underwriters" to pursue a coterie of institutional investors and the general public to purchase the firm's stock, (3) it presents the IPO fact file and prospects to the investor community, (4) it determines the number and price of shares to be offered in the IPO, and (5) it works out the aftermarket position, after observing the "quiet period."

There are a wide variety of reasons for a firm's decision to go public. As the IPO firm faces lower costs for external equity, going public means a lowering of the cost of capital. Moreover, while an IPO broadens the ownership base of the firm, it also allows insiders to cash out. Founder managers, and, in some instances, financial intermediaries such as venture capital and private equity firms can then harvest their investment. Since an IPO attracts the attention of a wider market, a firm operating in a sector such as high technology may conduct its IPO as a reputation-enhancing move. It is also suggested that when a firm reaches a certain point in the business growth cycle and needs capital to support growth, it will decide to conduct an IPO.

The timing of an IPO is deemed crucial because it is generally observed that IPOs come in waves. There are signs of herd mentality in such behaviors, as first-day stock performance of an issuing firm is likely to lead other firms to decide to go public. Firms can then take advantage of better stock market conditions by entering the IPO market. To the extent that the market timing issue is important, a firm will first need to gauge the strength of the IPO market in terms of market and industry stock returns.

There is a difficulty relating to price discovery in an IPO, which is due to the fact that the issuing firm lacks information about the investor demand for its shares, whereas most investors are not certain about the quality of the firm. Therefore, the IPO firm's value must be established without referring to the market value. To alleviate such problems of information asymmetry, investors use a number of mechanisms that signal firm quality. One such mechanism is the choice of underwriters, who have strong incentive to build a reputation as valuation experts as they repeatedly bring firms public. Underwriters are also expected to have an institutional client base, as institutional investors are more willing to participate in an IPO when there is uncertainty about the IPO firm.

When a firm is not able to raise funds through other forms of financing, such as debt or private equity, an IPO provides access to substantial amounts of capital. However, it is generally observed that IPO firms offer prices that are lower than their first-day market closing price, and this is a well-researched area. There is widespread agreement that underpricing is a strategic move designed to compensate investors, especially institutional investors, for taking the risk of investing in the IPO. There are other benefits such as how additional interest in the stock is generated when it first becomes publicly traded.

The risk of the IPO firm is minimized by insiders agreeing not to sell personal shares for a period of time. Because insiders of an IPO have better information about the firm's operations than outside investors, it is expected that the issuing firm commit to a lockup period. A long lockup signals firm quality, and underwriters may use this period to stabilize the aftermarket trading of IPOs via price support. The long-term performance in the returns to stocks that make an IPO has been poor, as demonstrated by studies in the United States and other countries. One factor particularly responsible for this outcome is excessive optimism regarding the firm's earnings potential. A number of studies have found that IPO firms inflate earnings in periods prior to equity offers. Firms also frequently issue IPOs when "exuberant" investors are prepared to pay a relatively high price for issued stock. These factors to some extent explain why firms with income-increasing abnormal accruals at IPO significantly underperform.

See Also: Emerging Markets; Global Capital Market; Securities and Exchange Commission; Securities Financing.

Bibliography. David A. Cifrino and Thomas P. Conaghan, *The Public Company Primer: A Practical Guide to Going Public, Raising Capital and Life As a Public Company* (RR Donnelley, 2007); G. Gregoriou, *Initial Public Offerings: An International Perspective* (Elsevier Butterworth-Heinemann, 2006); Shmuel Hauser, Uzi Yaari, Yael Tanchuma, and Harold Baker, "Initial Public Offering Discount and Competition," *Journal of Law and Economics* (v.49/1, 2006); Jarrod Johnston and Jeff Madura, "The Performance of Internet Firms Following Their Initial Public Offering," *Financial Review* (v.37/4, 2002); Penn Post, "IPOs—Changing the Focus: Product to Profitability—Companies Doing an Initial Public Offering Need to Know More Than Just What the Rules Are for Public Companies. Employees Need to Understand How Being Public Changes the Vision, Financial Goals and Responsibilities They Now Share," *Financial Executive* (v.23/5, 2007); Lubos Pástor, Lucian Taylor, and Pietro Veronesi. *Entrepreneurial Learning, the IPO Decision, and the Post-IPO Drop in Firm Profitability* (Centre for Economic Policy Research, 2007); K. Pukthuanthong-Le and N. Varaiya, "IPO Pricing, Block Sales, and Long-Term Performance," *The Financial Review* (2007).

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Integrated Marketing Communication

The emergence of integrated marketing communication (IMC) introduced a new paradigm into the corporate sphere, promising to make marketing more effective and competitive. The development of IMC constitutes a significant evolution in the areas of corporate marketing, corporate communications and, in particular, marketing communication. While there is no specific definition or common understanding of the concept of IMC, it is widely accepted that it is based on cross-functional processes given that it aims to coordinate corporate and brand messages and communication activities across units and functions. The aim is to increase brand value and to enhance profitable brand relationships by persuading and influencing customers and other stakeholders such as employees, media, suppliers, local community, and/or prospective customers. Soon marketing and communication practitioners and academics began to recognize and apply an IMC approach to their tactics and strategies.

In the 1990s, the concept of integrated marketing communication became increasingly popular. The various reasons that accounted for its relatively quick spread and acceptance included the following: (1) from the outset the notion of integrating the communication and marketing activities of an enterprise originated in—and was soon supported and adopted by—a wide spectrum of practitioners (advertising, direct marketing, and public relations) as well as by advertising agencies and companies alike; (2) the various academics (including Don Schultz of Northwestern University's Medill School, who allegedly coined the phrase), who embarked upon periods of extensive research into (and subsequent publishing of) the concept, soon found an audience both inside and outside the academic world; (3) faced with the challenges (a) of an increasingly globalizing world, and (b) of the growing importance of the internet for daily life and business, the implications for marketing communication appeared stark: It was necessary now to market and communicate more effectively in increasingly fragmented and segmented markets. Simultaneously, mass advertising was renounced in favor of segmented or more personalized communication; (4) a change of focus from an internal (company)-driven to an external (consumer)-driven marketing and communication orientation, and (5) the increased popularity of integrating business functions in order to use synergies resulting in more competitiveness. A combination of the above changed the nature of competition and the process of marketing communications markedly. There were even claims that the new paradigm had revolutionized the marketing discipline in its entirety.

Concept

The precise nature of integrated marketing communication (IMC) is difficult to capture. Popular definitions include Don Schultz's emphasis on the importance of IMC to influence behavior and to address brand and company contacts with audience. Other definitions of IMC range from understanding IMC's role as managing customer relationships to improving brand value, highlighting the cross-functionality of IMC (Tom Duncan) and the importance of aligning corporate messages (on both the corporate and individual brand level) at all contact points of the company with the customer.

Is IMC a tactic or strategy? In line with the alignment and coordination of all messages going out, a transformation from promotion to communication has taken place, i.e., communication not simply between different business units but also between consumer and company. Dialogue such as this will inevitably result in enhanced consumer participation in the processes of communication, marketing, and finally, brand value creation. Knowing more about customers' needs and preferences allows for increased customized communication and a strengthening of the company's relationship with the customer. Today, more than ever before, concomitant with the spread of internet technologies the customer can be treated, integrated, and involved in a more holistic manner.

Glen J. Novak and Joseph Phelps identified three forms of IMC in the body of relevant research: (a) integrated communication, (b) "one voice" communication, and (c) coordinated marketing communication campaign. Integrated communication, that is, the promotion of brand image and the influencing of direct audience behavior, employs all available communication and marketing tools. As regards "one voice" communication, the company makes it clear from the outset that it is committed to a unified and single positioning strategy. In contrast, a coordinated marketing-communication campaign is about synchronizing marketing communication activities in order to address multiple audiences and to introduce multiple brand positions if necessary.

Critiques

Integrated marketing communication's relevance and practice value are being debated vis-à-vis the applicability of both different product types and different business types. On an organizational level, two critical points affect the implementation of IMC: (1) structural barriers (a pronounced business unit mentality including business unit profit centers, functional specialization and lack of IMC budget) can hinder or restrict integrated marketing communication; and (2) the absence of (or limited) horizontal communication would be incompatible with the IMC mindset.

Critiques of the IMC concept are not necessarily limited to the questioning of the technical applicability of IMC: Postmodernists question the ability of IMC to capably address the increased complexity of today's globalizing world. IMC, with its emphasis on control, order, and predictability, is in general terms a somewhat modern concept whereas market fragmentation and consumption practices tend to display postmodern characteristics. To this end, in their discussions of the integrated marketing communication paradigm, postmodernists call for a more fluid, flexible, and open approach to change.

See Also: Advertising; Branding; Communication Challenges; Marketing; Public Relations.

Bibliography. Lars T. Christensen, Simon Torp, and A. Fuat Firat, "Integrated Marketing Communication and Postmodernity: An Odd Couple?" *Corporate Communications: An International Journal* (v.10/2, 2005); Lynne Eagle, Philip J. Kitchen, and Sandy Bulmer, "Insights Into Interpreting Integrated Marketing Communications. A Two-Nation Qualitative Comparison," *European Journal of Marketing* (v.41/7–8, 2007); Stephen J. Grove, Les Carlson, and Michael J. Dorsch, "Comparing the Application of Integrated Marketing Communication (IMC) in Magazine Ads Across Product Type and Time," *Journal of Advertising* (v.36/1, 2007); Călin Gurău, "Integrated Online Marketing Communication: Implementation and Management," *Journal of Communication Management* (v.12/2, 2008); Olof Holm, "Integrated Marketing Communication: From Tactics to Strategy," *Corporate Communications: An International Journal* (v.11/1, 2006); Philip J. Kitchen, "New Paradigm—IMC—Under Fire," *Competitiveness Review* (v.15/1, 2005); Philip J. Kitchen and Patrick de Pelsmacker, *Integrated Marketing Communications: A Primer* (Routledge, 2004); Glen J. Novak and Joseph Phelps, "Conceptualizing the Integrated Marketing Communications' Phenomenon: An Examination of Its Impact on Advertising Practices and Its Implications for Advertising Research," *Journal of Current Issues and Research in Advertising* (v.16/1, 1994); Don E. Schultz and Heidi Schultz, *IMC, The Next Generation: Five Steps For Delivering Value and Measuring Financial Returns* (McGraw-Hill, 2003).

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Integrative Bargaining

Integrative bargaining can best be analyzed by comparing it with distributive bargaining, as illustrated by Richard Walton and Bob McKersie's pioneering study. These two approaches differ fundamentally: for example, defining the parameters of what is at stake, the range of possible outcomes, and the indices of a successful outcome. Distributive bargaining is conducted on the basis of win or lose: What one side wins, the other side loses. It is an essentially competitive and adversarial process; and it presupposes a zero-sum game or a fixed-size "pie" that implies limits on what is available for distribution. Successful bargaining, in this type of process, means obtaining as much as possible of the contested "pie" at the expense of "the other side." Given that the priority in this bargaining process is the win/lose dynamic, the parties generally show little concern for the quality of their relationship with each other.

Much of the bargaining conducted in commercial or industrial relations contexts could be characterized as the distributive type. For example, if a buyer can successfully negotiate a lower price than that sought by the vendor, then such an outcome might be at the expense of some of the vendor's profit. Similarly, in pay negotiations, there is usually a conflict between the views of the respective parties as to the share of revenue to be made available for employees' pay relative to employer's profits. In pay negotiations, management typically frames what is at stake as a fixed-size "pie."

By contrast, integrative bargaining is a cooperative approach that emphasizes the quality of the relationship between the parties as well as the substantive matters at stake. It is founded on the assumption that constructive negotiations can enlarge the "pie" by means of such strategies as, for example, identifying areas of common interest. Integrative bargaining is not an approach based on conceding easily to the other side; but it can generate agreements where each party simultaneously considers that it has won something that satisfies some significant interest(s).

For instance, if a buyer can negotiate a lower price per unit, this might be a worthwhile trade-off for the vendor if it is in exchange for the buyer committing to a larger purchase or a longer term: both parties thereby will enjoy increased benefits. Similarly, although distributive bargaining may dominate approaches to negotiating pay, managers and unions can still adopt more integrative, or mutual-gains bargaining approaches when negotiating on other relevant employment matters (e.g., occupational health and safety, work organization, training, and professional development).

Although the distinction between distributive and integrative bargaining was developed in the context of industrial relations, it is also applicable in many other contexts: for instance, political negotiations at both national and international levels. One objective of the proponents of the establishment of what later became the European Union (EU) in the post–World War II period was the prevention of further wars between historically hostile European states by means of an integration of those states within a unifying supranational structure. Subsequent bargaining to develop an expanded EU was predicated on an assumption that this could enlarge the European "pie" to make the EU economy greater than the sum of its national parts. Hence, bargaining about such substantial matters could be seen, in integrative terms, as attempts to achieve win-win outcomes for the respective parties.

Power, or the perception of relative power, is fundamental to bargaining processes and outcomes. This is particularly so for those who try to move from distributive to integrative bargaining. Most bargaining processes involve parties or "reframing" contentious questions to try to influence the perceptions and attitudes of the other party to generate opportunities for achieving consensus.

See Also: Alternative Dispute Resolution; Arbitration; Buying Motives/Behavior; Concession; Employer–Employee Relations; European Union; Negotiation and Negotiating Styles.

Bibliography. G. J. Bamber and P. Sheldon, *Collective Bargaining: An International Analysis*, *Comparative Labour Law and Industrial Relations in Industrialized Market Economies*, 9th ed., R. Blanpain, ed. (Kluwer Law, 2007); H. C. Katz, T. A. Kochan, and A. J. S. Colvin, *An Introduction to Collective Bargaining and Industrial Relations*, 4th. ed. (McGraw-Hill/Irwin, 2007); T.A. Kochan and D. B. Lipsky, *Negotiations and Change: From the Workplace to Society* (Cornell University Press, 2003); R. J. Lewicki, D. M. Saunders, and B. Barry, *Negotiation*, 5th ed. (McGraw-Hill/Irwin, 2005); Lynn M. Wagner, "Problem-Solving and Bargaining in International Negotiations," *International Negotiation Series* (v.5, 2008); R. E. Walton, J. E. Cuthcher-Gershenfeld, and R. B. McKersie, *Strategic Negotiations: A Theory of Change in Labor-Management Relations* (Cornell University Press, 2000); R. E. Walton and R. B. McKersie, *A Behavioral Theory of Labor Negotiations*, 2nd ed. (McGraw Hill, 1991).

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Intellectual Property Theft

Intellectual property (IP) rights are the rights given to individuals over the creation of their minds. These rights are afforded legal protection for a specified period of time during which the creator of the intellectual property has exclusive rights to this property. Intellectual property has three principal categories: copyrights, which govern the IP of authors of literary and artistic works (books, writings, and musical compositions), as well as the rights of performers (singers and actors) and those responsible for the dissemination of these works (film and record producers); trademarks, which are the indicia (signs, words, or symbols) used by manufacturers to distinguish their products from those of others. These marks may consist of the same mark applied to a number of different products or they may involve the application of different marks to unrelated products. Owners of registered trademarks are entitled to their exclusive use. Finally, there are patents, which govern the IP of those creating industrial property (for example, new technology, processes, and designs) and may be held by individuals or the corporations which employ them.

Protection of IP, in all its forms, is important for a variety of reasons. As far as the creators of IP are concerned, exclusive rights reward creative work in the arts (copyright); they allow trademark owners to enjoy the goodwill associated exclusively with their marks; and patents encourage research and development into new products and processes. Properly enforced, the rights associated with IP ensure that not only do the creators of IP benefit but so does society as a whole; when not properly enforced, misuse of IP affects both the private benefits that accrue to its creators and society at large. Consider, for example, the following potential consequences for society when IP is misused: Research and development are discouraged and therefore economic growth is reduced; new cures for life-threatening diseases are delayed because of the greater uncertainty surrounding future returns; misuse of trademarks on pharmaceutical products can cause serious injury or death; organized counterfeiting exacerbates the problems associated with organized crime.

At the international level protection of copyright was enshrined by the Berne Convention for the Protection of Literary and Artistic Works, 1886 (and subsequently revised, for example, in Paris, 1896; Berlin, 1908; Rome, 1928; and, most recently, by the TRIPS Agreement, 1994). The Berne Convention and its successors established a series of guidelines and the minimum level of protection to be afforded to copyright. For example, works originating in one of the contracting states were to be given the same protection in each of the other contracting states as the former gave to its own subjects. The Convention provided for "moral rights"—the right to claim authorship of the work and the right to object to any modification of the work that was prejudicial to the author's reputation. The Convention stipulated that the duration of copyright protection was to be 50 years after the author's death.

The U.S. movie industry lost an estimated $1.25 billion from piracy, including from counterfeit DVDs, from 1998 to 2002.

During the Uruguay Round negotiations preceding the TRIPS agreement, it was accepted that the Berne Convention generally provided adequate standards of copyright protection and so the focus was on extending the provisions laid down in the last Convention (Paris, 1971). However, signatories do not have rights or obligations under the TRIPS Agreement in respect to "moral rights." Among the key extensions that TRIPS made to the Berne Convention were that copyright would be extended to expressions; the provisions of the Berne Convention that apply to literary works would be extended to computer programs; and databases would be protected even where the data contained on them was not subject to copyright protection. In the case of computer programs, authors would have the right to authorize or prohibit commercial rental to the public of originals or copies of their copyright work. The duration of copyright protection was retained at 50 years (but 20 years for broadcasting organizations).

In the case of trademarks, international agreements covering their registration and protection date back to the Paris Convention for the Protection of Industrial Property, 1883 (and its subsequent extensions, for example, the Hague, 1925; London, 1934; Lisbon, 1958; and the TRIPS Agreement, 1994). The basic guidelines and rights to protection set out in these Conventions were as follows: First, nationals of each of the countries of the Union shall enjoy in all other countries of the Union the advantages that their respective laws now grant; the countries of the Union agree to refuse or to cancel the registration of or to prohibit the use of, any trademark that constitutes a reproduction or imitation of a mark already used by a person entitled to the protection of the Convention, and used for identical or similar goods; restrictions were placed on the use of state emblems, armorial bearings, and hallmarks, as trademarks.

The TRIPS Agreement continued these basic provisions and made a number of extensions. For example, in deciding whether a mark proposed for registration would undermine the exclusive rights of the owner of a registered trademark, the likelihood of consumer confusion was assumed. Additionally, service marks were specifically included in the definition of trademark (the Paris Convention only contained a general obligation to recognize the rights of owners of these marks). TRIPS introduced the first international requirement to provide for cancellation and opposition procedures when a trademark was published prior to registration.

In the case of patents, these, too, were the subject of international protection under the Paris Convention and its successors. The fundamental rights of patent holders established by these Conventions were similar to those of trademark owners (for example, rights to reciprocal protection within the Union), but differed to the extent that they are an intrinsically different form of IP. Among the key rights accorded to patent holders under the Paris Convention were that patents applied for in the various countries of the Union by persons entitled to the benefits of the Union would be independent of patents obtained for the same invention in other countries irrespective of whether they were members of the Union; if examination indicates that an application contains many inventions, the applicant may divide the application into a number of separate applications, and no country of the Union may refuse an application for a patent on the grounds that it contains multiple priority claims.

The TRIPS Agreement extended the Paris Convention in a number of directions. For example, restrictions were imposed on eligibility: inventions may be excluded from patentability if there was a danger that their commercial exploitation would endanger public order/morality (for example, pornography). Additionally, signatories were permitted to exclude from patentability diagnostic and surgical methods for the treatment of animals (to facilitate the free dissemination of new medical techniques). Finally, patent applications would be subject to a precise test governing the description of the invention. Specifically full disclosure was required to ensure that the invention can be exploited without undue difficulty by others after the expiry of the exclusive right (which is nonrenewable).

Misuse of IP continues to be a booming, if illegal, industry, as demonstrated by Nicole Piquero: In the United States, it has been estimated that the motion picture industry lost $1.25 billion between 1998 and 2002 due to piracy; worldwide estimates of the annual amount of pirated software range between $7.5 and $17 billion. One problem is that rapid advances in technology have increased the opportunities for IP theft. For example, the proliferation of photocopying machines has increased concerns about the effectiveness of rights given to copyright holders; these concerns have been exacerbated by the even more rapid proliferation of personal computers and access to the World Wide Web.

Greater international efforts to combat protection of IP rights, as demonstrated by the TRIPS Agreement, have also been matched by reinvigorated efforts at the national level to solve this problem. For example, in the United States, the Department of Justice created a Task Force on Intellectual Property in 2004, to examine how methods for civil and criminal enforcement of IP could be improved. In the United Kingdom, the Alliance Against IP Theft was formed, comprising, for example, British Brands Group; British Phonographic Industry, British Video Association, and the Institute of Trademark Attorneys. These national initiatives are important to combat indigenous IP theft; however, because globalization has increased trade in semi-processed and finished products, all of which contain IP to varying degrees, greater international coordination of these initiatives will become more important if international IP theft is to be eradicated.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Copyright Infringement; Patents; Trademark Infringement.

Bibliography. Jay S. Albanese, ed., *Combating Piracy: Intellectual Property Theft and Fraud* (Transaction Publishers, 2007); M. Blakeney, *Trade-Related Aspects of Intellectual Property Rights* (Sweet and Maxwell, 1996); Christopher Burgess and Richard Power, *Secrets Stolen, Fortunes Lost: Preventing Intellectual Property Theft and Economic Espionage in the 21st Century* (Syngress, 2008); Geraldine Szott Moohr, *The Criminal Law of Intellectual Property and Information: Cases and Materials* (Thomson/West, 2008); World Trade Organization, www.wto.org (cited March 2009).

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Inter-American Development Bank

A regional development institution for the Americas was first proposed in 1890 at the First Inter-American Conference held in Washington, D.C. Not until 1959 did it come into being, as a complement to the World Bank's Latin American activities. The Inter-American Development Bank (IDB) was the first regional development bank and originally included the United States and 19 Latin American nations. It has since expanded to become the largest source of multilateral funds in the Americas, even including European nations as non-borrowing members, and includes 423 member banks. Headquartered in Washington, D.C., the IDB maintains offices in Paris, Tokyo, and every borrowing member nation.

The 26 member nations eligible for IDB loans are Argentina, the Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, and Venezuela. There are, additionally, 21 non-borrowing member nations: Austria, Belgium, Canada, Croatia, Denmark, Finland, France, Germany, Israel, Italy, Japan, the Netherlands, Norway, Portugal, South Korea, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Borrowing countries hold the majority of the shares in the IDB, setting it apart from other regional banks. The majority of the governors on the board come from Latin American and Caribbean nations, and a board of directors handles most functions, including the approval of loans. Historically, the IDB has tended to support U.S. and capitalist-democratic interests—loan applications from Salvador Allende's Chilean administration were routinely refused in the 1970s.

IDB loans are typically granted for infrastructure expenditures (highways, dams, etc.), and since the Latin American debt crisis, have reflected policy-based lending, reshaping economic policy within debtor nations in return for and as part of granting loans. Funding priority is given to projects that integrate a nation's economy with the worldwide economy, reduce poverty, and further sustainable development. The IDB tends to come under criticism from the same corners as the International Monetary Fund (IMF) and the World Bank. In the 21st century, the IDB's pro-American, Washington Consensus leanings have been more prominent, with as much as a third of the loans in any given year being granted for economic reforms and modernization rather than more policy-neutral loans. A special operations fund has also been established for loans to less developed nations at special below-market rates to encourage economic growth and health in the region. In October 2008 IDB announced it would join the Goldman Sachs 10,000 Women Initiative to support and promote women entrepreneurs in the region.

The IDB's funds are raised by selling bonds to institutional investors, backed by the IDB's ordinary capital (about 5 percent of which is paid in, the remainder of which is callable from the non-borrowing member nations). The weakness of Latin American economies has put the IDB's credit rating at risk, but peer pressure has seemed to help to ensure that the borrower nations—which constitute the majority shareholders—will not jeopardize their peers. Argentina did default on its loans in 2001, and there has been concern expressed about Brazil and Mexico.

See Also: African Development Bank; Antiglobalization Movement; Asian Development Bank; Brazil; Central America; Central American Common Market; Democratic Globalization; Development Assistance; International Monetary Fund; Modernization Theory; Regional Development Banks.

Bibliography. Bank Information Center, "Inter-American Development Bank," www.bicusa.org (cited March 2009); Inter-American Development Bank, www.iadb.org (cited March 2009); *Inter-American Development Bank (IDB) Handbook* (International Business Publications USA, 2007); Paul Nelson, "Whose Civil Society? Whose Governance? Decision-making and Practice in the New Agenda at the Inter-American Development Bank and the World Bank," *Global Governance* (v.6/4, 2000); Inder Jit Ruprah, "'You Can Get It if You Really Want': Impact Evaluation Experience of the Office of Evaluation and Oversight of the Inter-American Development Bank," *IDS Bulletin-Institute of Development Studies* (v.39/1, 2008).

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Interbank Market

The interbank market is a money market that facilitates commercial and noncommercial banks and other nonbank financial intermediaries to lend and borrow to each other. It consists of two tiers: the lending market and the foreign exchange market, which are the biggest and best known over-the-counter financial markets. Unlike the stock market, the interbank market has no physical exchange, and the transactions do not represent any security being traded. Instead, the transactions conducted in the interbank market purely reflect the participants' preferences at the prevailing rate. Also, the interbank market plays a crucial role in the determination of monetary policy.

Banks that have a surplus of funds enter the interbank lending market and lend money to banks that are short of funds. The rate at which banks lend to each other is the London Interbank Offer Rate (LIBOR), which serves as a benchmark for short-term interest rates globally. Since the interbank rate closely monitors the interest rates charged by the biggest institutions, it closely reflects the real interest rate being used by the most prominent market participants.

The interbank rates are maintained and published by the British Bankers' Association (BAA). The BAA maintains a reference panel of banks across a number of countries and institutions; it daily surveys the market activity of the most prominent banks and institutions and classifies their quotes in quartiles. The middle quartiles at which banks lend and borrow are averaged and the resulting rate is the BBA LIBOR rate, which is published in 10 currencies (pound sterling, U.S. dollar, Japanese yen, Swiss franc, Canadian dollar, Australian dollar, euro, Danish kroner, Swedish krona, and New Zealand dollar).

The interbank market is predominantly a short-loan market, with loans ranging from overnight to periods up to six months. The bulk amount of loans, however, is settled overnight. The interest rates charged on the loans is linked to LIBOR plus a margin. So, the loans have the following format: "LIBOR + ¼" or "LIBOR + 10 basis points." While the LIBOR rate constitutes the "sell" side of the interbank market, the London Interbank Bid Rate (LIBOR) constitutes the "buy" side of the market; thus it represents the deposit rate offered by banks to other banks. Similarly, the Japanese Bankers' Association publishes the Tokyo Interbank Offered Rate (TIBOR) and the European Banking Federation publishes the Euro Interbank Offered Rate (EURIBOR), which is the benchmark rate at which Euro interbank deposits are offered. EURIBOR is computed as an average of the quotes provided by 57 of the most active banks in the eurozone. It was first published on December 30, 1998. EURIBOR, however, should not be confused with EUROLIBOR, which is the LIBOR rate quoted in euros.

In the United States, the interbank rate is called the "Federal Funds Rate." The Federal Funds Rate is the rate at which banks and other institutions lend money to each other. However, the mechanism for the Federal Funds Rate is slightly different than the one that prevails in other interbank markets. So, in the U.S. interbank market, banks lend to each other by lending available balances at the Federal Reserve. When banks issue loans, the minimum reserve requirements that should be deposited at any time in the Federal Reserve fall, and the rate at which banks with a surplus of available deposits at the Federal Reserve lend to banks with reserve requirements is called the Federal Funds Rate.

The interbank rate, and accordingly the interbank market, plays a very important role in monetary policy, where an interbank rate target is in essence also a monetary policy target. There is strong correlation between the interbank rate and the rate at which banks borrow from central banks. So, when banks find themselves in need of funds, they can either borrow from other banks at the interbank market and at the prevailing interbank rate or they can instead borrow from the central bank at its rate of interest. Loans offered at the interbank market can mature overnight, while the loans offered by central banks have a minimum maturity of one week. So, provided there is sufficient supply of loans at the interbank market, banks will prefer to borrow at the interbank rate. Yet, if loans are scarce at the interbank market, the interbank rate will increase and banks will have to look for other money alternatives.

The foreign exchange market is also an interbank market where banks can exchange currencies on a 24-hour basis. The foreign exchange market attracts the largest volume at the most competitive quote of any financial market. The market is self-regulated and depends solely on competitive pressures. Transactions in the foreign exchange market can be at the "spot/current," "forward/future," or "swap" price. A swap transaction involves a simultaneous purchase and sale of given amounts of foreign currency. Banks in the foreign exchange market use two forms of quotations when trading foreign currency: The first form states the number of units of foreign currency that are needed to buy one unit of the domestic currency. The second form states the number of units of the domestic currency that are needed to buy one unit of the foreign currency.

See Also: Currency; Foreign Exchange Market; LIBOR.

Bibliography. Valeriya Dinger and Jürgen von Hagen, *Does Interbank Borrowing Reduce Bank Risk?* (Centre for Economic Policy Research, 2008); Falko Fecht, Hans-Peter Grüner, and Philipp Hartmann, *Welfare Effects of Financial Integration* (Centre for Economic Policy Research, 2007); Giulia Iori, Saqib Jafarey and Francisco G. Padilla, "Systemic Risk on the Interbank Market," *Journal of Economic Behavior and Organization* (v.61/4, 2006); Paul Krugman and Robin Wells, *Economics* (Worth, 2009); Paolo Emilio Mistrulli, *Assessing Financial Contagion in the Interbank Market: Maximum Entropy Versus Observed Interbank Lending Patterns* (Banca d'Italia, 2007); Michael H. Moffett, Arthur I. Stonehill, and David K. Eiteman, *Fundamentals of Multinational Finance* (Prentice Hall, 2009); K. Pilbeam, *Finance and Financial Markets* (Palgrave, 2005); J. Rutterford, *An Introduction to the Stock Exchange Investment* (Palgrave, 2007); S. Valdez, *An Introduction to Global Financial Markets* (Palgrave, 2007); D. Watson and A. Head, *Corporate Finance: Principles & Practice* (Prentice Hall, 2007).

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Interest Rates

Interest rates are the cost of borrowing money; more specifically, interest rates are the price of credit. They are sometimes defined as the "rent" on borrowed capital, or as a fee on borrowed capital. The rates vary depending upon the risk assumed by the lender of not being repaid the capital. Interest rates are charge in borrowing transactions. To make a loan there must be a borrower who wants to enjoy the use of the principal and a lender who is willing to risk his or her capital. The interest rate is composed of the opportunity costs, the risks of the lender, and general economic conditions. The interest charged may be called interest, or sometimes it is masked as a fee.

One of the justifications for the charging of a fee on borrowed capital is that it makes up for the lost opportunities for investment incurred by the lender. The opportunity costs are experienced by the lender, who is compensated by the fee that is paid for the use of the capital that must be returned. According to this line of thinking, borrowing money and paying interest on those funds is analogous to renting an automobile and paying a fee for its use.

Types and Definitions

There are several types of interest. Simple interest is calculated on the principal or on the amount that remains unpaid. It can be illustrated by drawing a rectangle with interest and principal on the side of the rectangle and the years to pay along its bottom. Then the rectangle is divided from the upper left to the lower right. The area above the line represents the amount principal that has been paid. The area below the line is the amount of interest paid. By the end of the loan most of the payment is going for the return of principal with most of the interest paid in the early years of the life of the loan. In effect the total amount of interest is calculated as a part of the total to be repaid along with the return of principal. This is different from compound interest, which involves charging interest on interest.

Compound interest allows interest to be accumulated as an addition of the principal. It causes rapid growth in the sum of money that has to be repaid. In addition the time periods for compounding may be daily, weekly, or for a longer period of time. Thus, if a borrower has a loan of $1,000 and a compound interest rate of 1 percent per week, then the loan's balance at the end of the first week would be $1,010. Then at the end of the second week it would be 1 percent added to $1,010, which equals $1,020.10. At the end of the third week the amount would be $1,030.30. The resulting progression causes the principal to increase rapidly, making the cost of borrowing much higher than with simple interest.

Prior to the advent of computers several rules of thumb were used for calculating interest and principal repayment schedules. One was the now outlawed "rule of 78". Another rough rule is the "rule of 72," which allows mental math by dividing the interest rate into 72. So if the rate is 7 percent then the amount of time for the lender to double the amount lent is 7 divided into 72 which is a little more than ten years.

Interest rates in finance are commonly viewed as the yield from the investment. The yield is a composite measure. It includes all payments of interest and principal. Retail finance uses annual percentage rates and the effective annual rate as a way of giving the consumer transparency on the loan.

Setting Rates

Interest rates are the result of a number of factors, one of which involves the concept of deferred consumption. If money, which is the savings accumulated by an individual or by savings institutions is loaned, then it is not used by the lender for consumption. Instead the lender defers consumption until the loan is repaid. Part of the cost of borrowing is the price of delayed gratification by the lender.

Another factor involved in setting interest rates is the expectation of inflation. The interest rate reflects the expectation of the lender that the purchasing power of the loan will over time be diminished unless it is recovered through increases in the interest rate. The loan closes the lender to other opportunities. Thus the lender is part of a process where different investments compete for financing. It may be that a lender sees a more profitable investment but is denied the opportunity to invest because of the commitment to one loan over another. Time is an important factor when inflation is a factor because the shorter the life of the loan, the less the principal will be affected by inflation.

Risk is another factor affecting interest rates. The lender always has to risk the chance of not being repaid. The reasons may be due to failure in the investment project. Rapidly changed economic conditions can ruin the possibility of repayment such as a mortgage on a house that drops dramatically in value to well below the value of the loan. Financial malfeasance is also a cause of losses that can stimulate higher interest rates. Taxes can also affect interest rates as can the desire of some investors for a level of liquidity that requires high interest rates in order to induce lenders to lend.

Interest rates in the global economy are set by market forces and by governments as a part of their monetary policy. They factor in the rate of business activity on a macroeconomic scale. In general when interest rates are high the cost of borrowing becomes prohibitive and it dampens business activity. The reduced investment causes national income to fall and for slower economic activity to mark the markets at that time. However, if interest rates are low the reverse happens.

In the United States the Federal Reserve (Fed) acts as a lender to banks and charges a smaller "federal funds rate" for short-term loans than the market price of interest. The latter is the prime interest rate, which is the rate charged to the highest quality customers who have a very high capacity to repay the loan. It uses the open market operations as one of its monetary policy tools for guiding interest rates.

For the Federal Reserve controlling the interest rate for the main body of money that is being lent is a way of stimulating the economy when it lowers the federal funds rate, or of dampening inflation when it raises interest rates. It is not at all usual for the Federal Reserve and the Congress to work at some cross purposes. The case of the latter fiscal policy, the spending that comes from taxation, may have a negative impact on interest rates because the goal of government spending may be to decrease unemployment with inflationary spending. The Fed is able to set rates that influence interest rates in the short run.

Interest rates are usually set competitively by market forces. They are also set in the light of lending conditions. In times of prosperity lenders compete for the business of borrowers. However, there may be times of recession or depression where the cost of lending, the interest rates, are set high. Rates then can be set by circumstance of need or desperation in the financial conditions of the borrower. A lender could then charge "whatever the traffic will bear" as the interest rate. Even in times of prosperity individuals or firms may be subject to high lending rates because of their personal on the firm's circumstances.

Exploitation and Limits

Interest rates may be low or very high. Strictly speaking any charging of interest is usury; however, modern economies thrive on credit financing that charges interest. To protect individuals from unscrupulous lenders, some of whom may be criminal loan sharks, many governments have set limits on interest rates in order to prevent usury. In the United States the states have laws that limit interest charges on a wide variety of loans. However, the credit card industry has been able to charge high interest rates that often range above twenty percent per annum. These rates have encountered objections as usurious, that is, as excessive and exploitative. To prevent these high rates political action is required that sets a lower cap on rates that is more in favor of the consumer. Some see this as an interference with good banking; however, others see it as exploitation that eventually creates economic problems.

In vast areas of the Third World rural people, and especially small farmers, may be subjected to high interest rates because the only lender available is only willing to lend at high rates. The rates may be higher because of drought or other adverse farming conditions. The terms set by the lender could include rates that will mean the loss of the farm and the indenturing of farmers and their families. However, microlending at low rates in many places has allowed women especially to borrow small sums to pay for such items as sewing machines. Or the microloan may be to purchase a farm animal such as a goat that can give milk and can be sold after breeding.

Religious Views

Historically medieval Catholic theology viewed charging interest as usury, which was a sin because in an agricultural economy interest charges were seen as harmful. It was not until the advent of Protestantism that interest was allowed in moral theology. Protestant charging of interest followed John Calvin's view that interest was acceptable. He viewed renting money to be like renting land from which the produce could be used to pay the rent. This was an acceptable practice in medieval Christian moral theology, while charging interest was not. Since Calvin was the spiritual leader of the merchants of Geneva, they favored the practice of charging interest as renting money and as acceptable as renting a house for business or renting farm land.

Today Jews still follow biblical injunctions to not charge their fellow religionists interest. However, it may be charged on loans made to Gentiles. This practice allowed Jews in the Middle Ages to charge interest, which from the Roman Catholic point of view did not matter, because not being Christians they were considered lost souls.

Charging interest is also forbidden in Islam. There are banks run by Muslims that lend at zero interest. The banks actually take deposits and partner with the depositors and the bankers to find projects that pay a profit. The return from the real and carefully studied investment opportunity is seen as a profit and not as interest. Islamic scholars usually cite Sura (Chapter) II.275-278 of the Koran as the ruling text on *riba* (usury). Because of the prohibition, almost all Islamic banks have survived the economic crisis of 2008.

These religious positions on the immorality of charging interest affect interest rates and the practice of applying interest to loans in many areas of the world. Consumer groups, aiming to protect individuals with limited incomes from predatory lenders, also seek to limit the amount of interest charged on loans. Consumer advocates have particularly agitated for government-imposed ceilings on the interest rates charged by credit card companies.

See Also: Central Banks; Interbank Market; Interest Rate Swaps; Mortgage Credit Crisis of 2008.

Bibliography. Daniano Brigo and Fabio Mecurio, *Interest Rate Models Theory and Practice* (Springer-Verlag, 2005); Delphi, *Monthly Interest Amortization Tables* (NTC Publishing Group, 1994); Ronald Demmel. *Fiscal Policy, Public Debt and the Term Structure of Interest Rates* (Springer-Verlag, 1999); Jack C. Estes, Dennis R. Kelly, and Charles Freedenberg, *McGraw-Hill's Interest Amortization Tables* (McGraw-Hill Companies, 2006); Christine Helliar, *Interest Rate Risk Management* (Elsevier Limited, 2005); Klaas Knot, *Fiscal Policy and Interest Rates in the European Union* (Edward Elgar Publishing, 1996); Joel S. Moskowitz, *The 16% Solution: How to Get High Interest Rates in a Low Interest World with Tax Lien Certificates,* rev. ed. (Andrews McMeel Publishing, 2009); Richard Sylla and Sidney Homer, *History of Interest Rates* (John Wiley & Sons, 2005); Rudi Zagst, *Interest-Rate Management* (Springer-Verlag, 2002).

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Interest Rate Swaps

A swap is an exchange of one asset (or liability) for another in order to change some of the characteristics of the asset being held by an investor. Usually the objective of the investor is to change only a few, even only one, of the characteristics of the asset. In an interest rate swap, an investor may exchange, or swap, a floating-rate bond for a fixed-rate bond. The bonds being exchanged will be very close in terms of the amounts involved, credit risk, and maturity but may be different only in that the interest rate on one bond may be fixed for the life of the bond while the interest rate on the other may change according to a prearranged formula over the life of the bond. Since the investor who wishes to make such an exchange may find it very difficult to find another investor who wants to make the opposite transaction, that is, be the counterparty to the swap deal, financial institutions usually have to get involved to facilitate the swap transactions.

There are two main reasons for investors to enter into swap deals. The most important reason is that swaps allow some market imperfections to be exploited. In other situations, needs of an investor may change after the initial investment has been made and the investor may wish to hold an asset (or liability) with slightly different characteristics. A swap allows such a change at a lower cost than the alternative of liquidating the original asset that is no longer desired and acquiring a new one.

Mechanics of an interest rate swap motivated by a desire to exploit a market imperfection are best explained with the help of an example. Let us say that firm AAA plans to borrow $100 million for five years at a fixed rate of interest. At the same time, firm BBB is planning to raise the same amount of funds in the form of a five-year floating-rate loan. Both firms inquire about the rates they will have to pay in the two segments of the financial markets—the fixed-rate market and the floating-rate market—and obtain the following quotes:

	AAA	BBB
Fixed-rate bond	8.8%	9.1%
Floating-rate loan	LIBOR + 0.5%	LIBOR + 1.1%

If each firm were to raise the type of funds it needs, the total annual cost for the two firms would be 8.8 percent (the rate firm AAA would have to pay) plus LIBOR + 1.1 percent (BBB's annual cost for the loan). This total cost adds up to (LIBOR + 9.9) percent. Suppose, however, that the two firms raise the opposite type of funds from what they need. AAA raises floating-rate funds and BBB raises fixed-rate funds. They then "swap" their funds. They agree that AAA will pay BBB the cost of fixed-rate funds and BBB will become responsible to AAA for the cost of floating-rate funds. The total cost in this case would be {9.1 + (LIBOR + 0.5)} or (LIBOR + 9.6) percent—a saving of 0.3 percent per annum between the two firms. A financial institution that would have observed this anomaly would bring the two firms together, convince them to raise the type of funds they do not need and swap their obligations. The savings of 0.3 percent will be divided between the three parties—the two firms and the financial institution. The financial institution will bear the risk that each party fulfills its obligations.

After the swap, the two firms and the financial institution will have the following obligations and cash flows. Firm AAA would have raised the loan at LIBOR + 0.5 percent and hence will have to pay the lender this amount every year. It will also have to pay firm BBB 9.1 percent annually for the fixed-rate bond that firm BBB would have raised on its behalf. In exchange, it will receive, say, LIBOR + 1.0 percent from BBB for the loan. Firm AAA's net cash flow will end up being {–(LIBOR + 0.5) – 9.1 + (LIBOR + 1)} or a new outflow of 8.6 percent per annum.

Firm BBB would pay the bond holder 9.1 percent—amount that it would receive from firm AAA—and will have to pay AAA (LIBOR + 1) percent for the loan. Its new cash flow will end up being (LIBOR +1) percent. In addition, we can assume that firm AAA will pay 0.1 percent to the financial institution for its help in the intermediation process.

The cash flows of the three parties with and without the swap can be compared easily.

	AAA	BBB
Without a swap	8.8%	LIBOR + 1.1%
With a swap	8.7%	LIBOR + 1.0%
Financial institution	–	+ 0.1%

The market imperfection that the parties exploited was that the floating-rate and fixed-rate markets assessed different risk premiums for the two firms. Assuming that the expected value of LIBOR over the life of the contract was 8.3 percent, AAA was assessed the same risk by the two market segments whereas the floating-rate market considered BBB to be riskier than the fixed-rate market.

The Bank for International Settlements estimates that the notional amount of interest rate swaps outstanding in the over-the-counter market at the end of December 2007 was $393 trillion. The largest share of this market was for interest rate swaps in euros ($146 trillion) followed by dollars ($130 trillion) and yen ($53 trillion).

See Also: Bonds; Futures Markets; Options; Swap.

Bibliography. Paul D. Cretien, "Smoother Way to Trade Interest Rate Swaps," *Futures* (v.37/1, 2008); Frank J. Fabozzi and Franco Modigliani, *Capital Markets: Institutions and Instruments* (Pearson Prentice Hall, 2009); John Hull, *Options, Futures and Other Derivatives* (Pearson/Prentice Hall, 2009); Ira G. Kawaller, "Interest Rate Swaps: Accounting vs. Economics," *Financial Analysts Journal* (v.63/2, 2007); N. Patel, "Interest Rate Swaps: Under Pressure," *Risk* (v.20/3, 2007).

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Internal/External

In 1993 Fons Trompenaars and Charles Hampden-Turner identified seven dimensions of culture in a model that they outline in their book *The Seven Cultures of Capitalism: Value Systems for Creating*

Wealth in the United States, Britain, Japan, Germany, France, Sweden, and the Netherlands. Five of the seven dimensions deal with challenges of how people relate to one another. The other two dimensions deal with how a culture manages time and how it deals with nature. This latter dimension the two authors labeled internal versus external control. This dimension examined whether a culture believed that it controlled the environment or the environment controlled the culture. The following examines the cultural dimension of control in more detail and specifies the application of the internal-external control dimension to management decision making in multinational corporations (MNCs).

Trompenaars and Hampden-Turner proposed that one way to examine how multinational corporations control their operations is to identify whether the MNC utilizes internal control or external control in their overall strategy. This concept of internal versus external control is derived from the psychological variable known as locus of control. Locus of control refers to a person's belief about what causes the good or bad results in their life. Locus of control can either be internal—the person believes that she controls herself and her life—or external—his environment, some higher power, or other people control his decisions and his life.

The notion of locus of control was first developed in 1954 by Julian Rotter, who in 1966 developed a scale to measure locus of control. Extending Rotter's work, Trompenaars and Hampden-Turner propose that cultures with internal control believe they can control their own destiny, and that natural systems and events are there to be conquered. Cultures with external control believe that one's destiny is predetermined and that one should focus on how to live in harmony with nature and others.

To illustrate the differences between internal and external control cultures, Trompenaars and Hampden-Turner presented managers from different countries the following statements: "Nature should take its course, and we just have to accept the way it comes and do the best we can" versus "It is worthwhile trying to control important natural forces like the weather." More than 50 percent of the managers from Spain and Cuba agreed with trying to control nature, while only 20 percent of managers from Egypt and Kuwait did so. Additionally, when international managers were asked to choose between the statements "What happens to them is their own doing" versus "Sometimes I feel I do not have control over the directions my life is taking," 82 percent of U.S. managers chose the first statement while only 40 percent of Russian and 39 percent of Chinese managers did. Other countries with internal control include Brazil, Canada, France, and Norway, while Hong Kong, India, and Singapore display external control.

Application

In applying the concept to MNCs, Trompenaars and Hampden-Turner define internal control as an MNC placing its focus on what it does best. At the other end of the spectrum, companies need to know what customers want, which is a focus on external control. MNCs need to give attention to issues of both internal control and external control, but it generally turns out that the corporation emphasizes one type of control over another.

Theoretically, in external control cultures, managers can become fatalistic, believing that situations must be accepted rather than changed. They see luck, chance, and change as powerful and real factors in business success. Conversely, in internal control cultures, managers, confident that they can conquer obstacles, tend to be more proactive. Generally speaking, however, most MNCs are not at the extreme ends of the internal/external control continuum.

For example, those MNCs that focus on internal control often have a dominating attitude toward the environment (sometimes bordering on being aggressive). Management teams in MNCs with a focus on internal control are often uncomfortable when the environment seems changeable, to the point of viewing the environment as out of control. In an internal control environment, conflict and resistance by an individual is seen as a sign the person has convictions. Additionally, an internal control environment has a focus on self, function, one's own group, and one's own organization.

By contrast, in an MNC emphasizing external control, harmony, sensibility, and a flexible attitude that encourages compromise and keeping the peace are desired. Additionally, managers are comfortable with the changes that occur in the environment and see them as natural. Finally, the focus of the business is outward, toward customers and partners.

It follows, then, that internal MNCs are competitive, often playing “hardball” with competitors in an effort to win. Additionally, managers often emphasize authority and dominate subordinates. On the other hand, external MNCs are much more oriented to a win-win strategy, seeing relationships with others as more important than winning. They also stress the team over individual achievement.

Interestingly, the results of a survey of senior professional accountants from the world’s major accounting firms in Australia, India, and Malaysia indicate that Australian accountants perceived whistle-blowing as an internal control mechanism compared to Indian and Malaysian cultures. The findings suggest that internal control cultures believe that reporting on wrongdoing is a viable means of being able to effect change, while external control cultures are much more fatalistic, believing such actions are futile.

See Also: Achieved Status/Ascribed Status; Cultural Norms and Scripts; Individualism/Collectivism; Multinational Corporation; Time Orientation.

Bibliography. Chris Patel, “Some Cross-Cultural Evidence on Whistle-Blowing as an Internal Control Mechanism,” *Journal of International Accounting Research* (v.2/1, 2003); Julian Rotter, “Internal Versus External Control of Reinforcement: A Case History of a Variable,” *American Psychologist* (v.45, 1990); Fons Trompenaars and Charles Hampden-Turner, *The Seven Cultures of Capitalism: Value Systems for Creating Wealth in the United States, Britain, Japan, Germany, France, Sweden, and the Netherlands* (Piatkus, 1993).

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Internal Labor Market

Companies with internal labor markets may invest in expensive firm-specific training to develop their carefully selected staff.

An internal labor market (ILM) is an administrative unit within an organization in which the hiring, promotion, and wages of workers are governed by a set of rules and procedures, resulting in a job hierarchy, or job ladder. Three factors lead to an ILM: firm-specific skills required for the ILM jobs; on-the-job training necessary to gain the firm-specific skills; and workplace customs that form to support the ILM. The port of entry into an ILM is typically at the bottom of the job ladder in a relatively low-skilled position, such as management trainee. It is what connects the internal labor market to the external labor market (ELM). The rest of the jobs within the ILM are filled by the promotion or transfer of workers who have already gained entry. When someone at the top of the job ladder leaves, workers in the unit move up a “rung,” which creates a vacancy at the bottom. Competition for these jobs is limited to workers already employed within the firm. This restriction of competition for the upper-level jobs to those already employed in the firm, who might not be the most skilled, is the primary cost of an ILM.

Port-of-entry jobs involve intense competition among applicants because it is an entry to promotions, higher earnings, and job security. The administrative unit also faces competition from other employers for workers at this entry level. For the unit, the decision of whom to hire for these jobs is crucial because the worker will ideally be with the firm for a long time, and the firm will invest in the worker in the form of often-expensive firm-specific training. Firms thus spend much time and money in the selection of workers for these port positions, much more so than for positions without a job ladder in which little or no firm-specific skills and training are required, such as clerical or custodial positions.

Wages for the port positions, as for those jobs without job ladders in which the skills are transferable across employers, are determined by competitive pressures in the ELM. However, since jobs in the ILM are not standardized, wages are more wide-ranging. The upper wage limit is the marginal revenue product (MRP) of the worker, or the value of the worker to the firm in terms of revenue generated. The firm will not pay a wage higher than the worker's MRP—that would mean the extra cost of employing the worker (the wage) would be higher than the extra benefit of the worker to the firm. The lowest wage the firm would have to pay to retain the worker is what the worker would earn in the ELM, which would be much less than what the worker could earn in the current firm because the worker's firm-specific skills would not be as valuable to another firm. If a worker in an ILM were to quit or be fired, he or she would lose the position on the job ladder and have to begin again at a (lower) port of entry at another firm.

The potential earnings loss from quitting an ILM creates lower labor turnover within the unit. This employee attachment to the firm and resulting lower turnover costs is an advantage of ILMs to the firm. Further, ILMs give employers an opportunity to observe productive characteristics of employees, allowing employers to make more informed decisions about whom to retain, train, and promote.

See Also: Compensation; External Labor Market; Recruitment; Salaries and Wages.

Bibliography. G. Baker and B. Holmstron, "Internal Labor Markets: Too Many Theories, Too Few Facts," *American Economic Review* (v.85/2, 1995); P. B. Doeringer and M. J. Piore, *Internal Labor Markets and Manpower Analysis* (Heath Lexington Books, 1971); David Fairris, "Internal Labor Markets and Worker Quits," *Industrial Relations* (v.43/3, 2004); Ming-Jen Lin, "Opening the Black Box: The Internal Labor Markets of Company X," *Human Resources Abstracts* (v.42/1, 2007); Craig MacMillan, *Internal Labour Markets: An Institutional Perspective on Recent Research in Personnel Economics* (Department of Economics, Macquarie University, 2007); I. Ohashi and T. Tachibanaki, eds., *Internal Labour Markets, Incentives, and Employment* (St. Martin's Press, 1998).

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International Accounting Standards Board

The International Accounting Standards Board (IASB) is an independent, privately funded accounting standards agency with headquarters in London. The board members represent nine countries and come from a variety of backgrounds as well as bring diverse credentials and experiences to the board. There are 14 board members, and each has one vote. The board members are appointed by trustees. The board is responsible for developing international financial reporting standards, and it follows an open form of due process in order to get this task accomplished. The IASB's goal is to develop a set of high-quality global accounting guidelines for financial statements that will be understandable and enforceable. The IASB also collaborates with national accounting standards agencies to make sure that everyone is in agreement around the world.

A handbook describes how the International Accounting Standards Board operates and proceeds with due process. The framework of the due process system is provided in the Constitution of the International Accounting Standards Committee (IASC) and the International Financial Reporting Standards (IFRS). The handbook reflects the public consultation conducted by the IASB in 2004 and 2005. The Trustees' Procedures Committee (part of the IASC) has been charged with regularly reviewing and amending the due process procedure. This committee is responsible for amending the procedures of due process based on feedback from the IASB and its membership. In addition, the committee has been charged with reviewing proposed procedures on new projects and the composition of working groups. This handbook was approved on March 23, 2006.

The procedures in the handbook address the following requirements:

- Transparency and accessibility: The IASB is responsible for adding topics to its agenda after it has surveyed the membership and conducted research on the topic. Proposed agenda items are discussed at IASB meetings, which are open to the public. IASB meetings are also broadcast and archived on the IASB's Web site.
- Extensive consultation and responsiveness: The IASB solicits feedback from various constituencies in order to collect information from a wide range of groups. In addition, the IASB arranges public hearings and field visits as well as sets up focus groups to promote discussion. After the IASB has listened to all of these groups, it adopts suggestions.
- Accountability: The IASB explains its reasons if it decides to omit any nonmandatory steps of the consultative process as described in the constitution. The trustees are responsible for reviewing and ensuring compliance with the IASB's procedures and mandate, considering the ISAB's agenda, and conducting annual reviews of the IASB's performance.

According to the *Due Process Handbook*, there are six stages to the process, and the trustees are responsible for ensuring that there is compliance at different points through the process. The stages are as follows:

1. Setting the Agenda—The IASB has to consider the following items when deciding whether or not a proposed agenda item addresses the users' needs. When considering future agenda items, the IASB staff is responsible for identifying, reviewing, and evaluating topics that may warrant the IASB's attention. In addition, there may be new proposals that have arisen as a result of a change in the IASB's conceptual framework. Agenda items are also generated via comments from other interested parties. There are times when the IASB receives requests from constituents to interpret, review, or amend existing publications. The staff is charged with compiling a list of these requests, summarizing major and common issues raised, and presenting them to the IASB.
2. Project Planning—When adding an item to its agenda, the IASB has to determine if it is feasible to conduct the project alone or jointly with another standard-setter. If it is a joint project, similar due process is followed under both approaches. After considering the nature of the issues and the level of interest among constituents, the IASB may establish a working group at this stage.
3. Development and Publication of a Discussion Paper—The IASB normally publishes a discussion paper as its first publication on any major new topic as a vehicle to explain the issue and solicit comments from constituents. If the IASB decides to omit this step, it states its reasons. In most cases, a discussion paper includes a comprehensive overview of the issue, possible approaches in addressing the issue, the preliminary views of its authors or the IASB, and an invitation to comment. This approach may differ if another accounting standard-setter develops the research paper.
4. Development and Publication of an Exposure Draft—Publication of an exposure draft is a mandatory step in due process. An exposure draft is the IASB's main vehicle for soliciting feedback from the public. Unlike a discussion paper, an exposure draft sets out a specific proposal in the form of a proposed standard (or amendment to an existing standard). The development of an exposure draft begins with the IASB considering issues on the basis of staff research and recommendations, as well as comments received on any discussion paper, and suggestions made by the Standards Advisory Council (SAC), working groups, accounting standard-setters, and arising from public education sessions. After resolving issues at its meetings, the IASB instructs staff to draft the exposure draft. When the draft has been completed, and the IASB has voted on it, the IASB publishes it for public comment.
5. Development and Publication of an International Financial Reporting Standards (IFRS)—After

resolving issues arising from the exposure draft, the IASB considers whether it should expose its revised proposals for public comment.

6. Procedures after an IFRS Is Issued—After an IFRS is issued, the staff and the IASB members hold regular meetings with interested parties, including other standard-setting bodies, to help understand unanticipated issues related to the practical implementation and potential impact of its proposals.

See Also: Accounting Harmonization; International Financial Reporting Standards.

Bibliography. Shawn S. Donnelly, "The International Accounting Standards Board," *New Political Economy* (v.12/1, 2007); Sylwia Gornik-Tomaszewski and Miguel A. Millan, "Accounting for Research and Development Costs: A Comparison of US and International Standards," *Review of Business* (v.26/2, 2005); "International Accounting Standards Board," *Accountant* (n.6048, 2005); International Accounting Standards Board, *International Financial Reporting Standards (IFRSs) 2008: Including International Accounting Standards (IASs) and Interpretations As Approved at 1 January 2008* (International Accounting Standards Board, 2008); Robert F. Randall, "Global Accounting Panel Named," *Strategic Finance* (March 1, 2001); Cameron M. Weber, "Harmonization of International Accounting Standards," *National Public Accountant* (July 28, 2005).

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International Bank for Reconstruction and Development

The International Bank for Reconstruction and Development (IBRD) has a mission of reducing poverty in middle-income and creditworthy poorer countries. This task is accomplished when the organization promotes sustainable development through loans, guarantees, risk management products, and analytical and advisory services. The organization was established in 1944 in an attempt to assist Europe in recovering from the financial devastation of World War II. It is the original institution of the World Bank Group, and counts itself among the five members. The IBRD has a membership of 185 countries.

The Bretton Woods system was charged with developing and implementing the rules and regulations for global commercial and financial transactions. The International Bank for Reconstruction and Development was established as a result. It was the first effort at creating a system that would govern monetary relations among independent nation-states. It was the first effort at creating a system that would govern monetary relations among independent nation-states.

There was much growth and change in national and international financial systems in the 20th century. During the postwar period, many countries had the opportunity to experience economic growth, low unemployment, and gradual deregulation in their respective financial markets. Positive steps were taken to change the way business was done through acts such as the emergence of the European Union, the North America Free Trade Agreement, and Asia-Pacific Economic Cooperation. In addition, international institutions such as the International Bank for Reconstruction and Development (World Bank), the International Monetary Fund, and the Bank for International Settlements have assisted in the management of the changes that have occurred in the international financial arena.

All of the efforts mentioned above have been an attempt to produce a sound international financial system that will be able to sustain itself over the years. The establishment of the International Monetary Fund (IMF) and the World Bank is probably one of the most important success stories for international economic cooperation. During the last 60 years, there have been many changes in terms of the political and economic climate on a global level, which has caused the world's top international financial institutions to shift in terms of how they operate their businesses. Given the number of financial crises that have surfaced during the last 10 years, many scholars and practitioners in the field have called for reform in how the international financial system is structured. These crises have exposed the weaknesses in the international financial system as well as highlighted the fact that globalization has pros (benefits) and cons (risks).

The IBRD has been given the challenge of raising the bulk of the funds for the world's financial markets. In addition, the agency has become one of the most established borrowers since issuing its first bond in 1947. Through its funding activities, the IBRD has become an entity fully capable of providing financial resources to sustain its existence, which allows it to borrow at low cost and offer clients good borrowing terms.

Although the IBRD provides a solid foundation for the World Bank Group, there are four other member organizations that complete the structure for the group. These organizations are the International Finance Corporation (IFC), which is responsible for securing private sector investments for high-risk sectors and countries and was established in 1956; the Multilateral Investment Guarantee Agency (MIGA), which supports developing countries by providing political risk insurance to investors and lenders and was established in 1988; the International Centre for Settlement of Investment Disputes (ICSID), which is responsible for settling disputes that arise between foreign investors and host countries and was established in 1966; and the International Development Association (IDA), which was established in 1960 and partners with the IBRD to ensure that the poorest countries in the world receive assistance in turning their economy around. It is important to note that the five agencies collectively are referenced as the "World Bank Group," whereas the title of "World Bank" only refers to IBRD and IDA.

Highlights

Although it has been given the name "World Bank," the IBRD is not a bank. Rather, it is a specialized entity with the responsibility of accomplishing the Millennium Development Goals. These goals were established by the United Nations in 2000 as an initiative to reduce the level of poverty throughout the world (i.e., increase school enrollments, decrease child mortality, improve maternal healthcare services, control and eliminate disease levels, and provide access to water by the year 2015). In addition, the agency's activities are monitored by the 185 members who control how the organization is financed and how the money is spent. Its headquarters is in Washington, D.C., and there are approximately 109 offices around the world.

One of the most attractive features of the organization is its ability to offer flexible borrowing terms to developing countries. The IBRD's lending policies tend to allow these countries to have more time to repay loans (i.e., 15–20 years to repay the loan as well as a three-to-five-year grace period before payment begins). These terms tend to be more favorable than a commercial bank, which is why the IBRD has been a key factor in developing countries fueling their economic growth. The World Bank finances these loans through its own funding, which yields billions of dollars each year. Its bonds have an AAA credit rating as a result of the loans being secured by the member states' share capital and borrowers' sovereign guarantees.

The World Bank partners with countries to enforce anticorruption initiatives and has created a structure that prevents corruption and fraud in projects.

See Also: Bretton Woods Institutions; International Centre for Settlement of Investment Disputes; Millennium Development Goals; World Bank, The.

Bibliography. Forrest H. Capie and Geoffrey E. Wood, *The Lender of Last Resort* (Routledge, 2007); *International Bank for Reconstruction and Development (The World Bank) Handbook* (International Business Publications USA, 2007); *The International Bank for Reconstruction and Development. A Guide to the World Bank* (World Bank, 2007); Katherine Marshall, *The World Bank: From Reconstruction to Development to Equity* (Routledge, 2008); Andrés Rigo Sureda, "Informality and Effectiveness in the Operation of the International Bank for Reconstruction and Development," *Journal of International Economic Law* (v.6/3, 2003).

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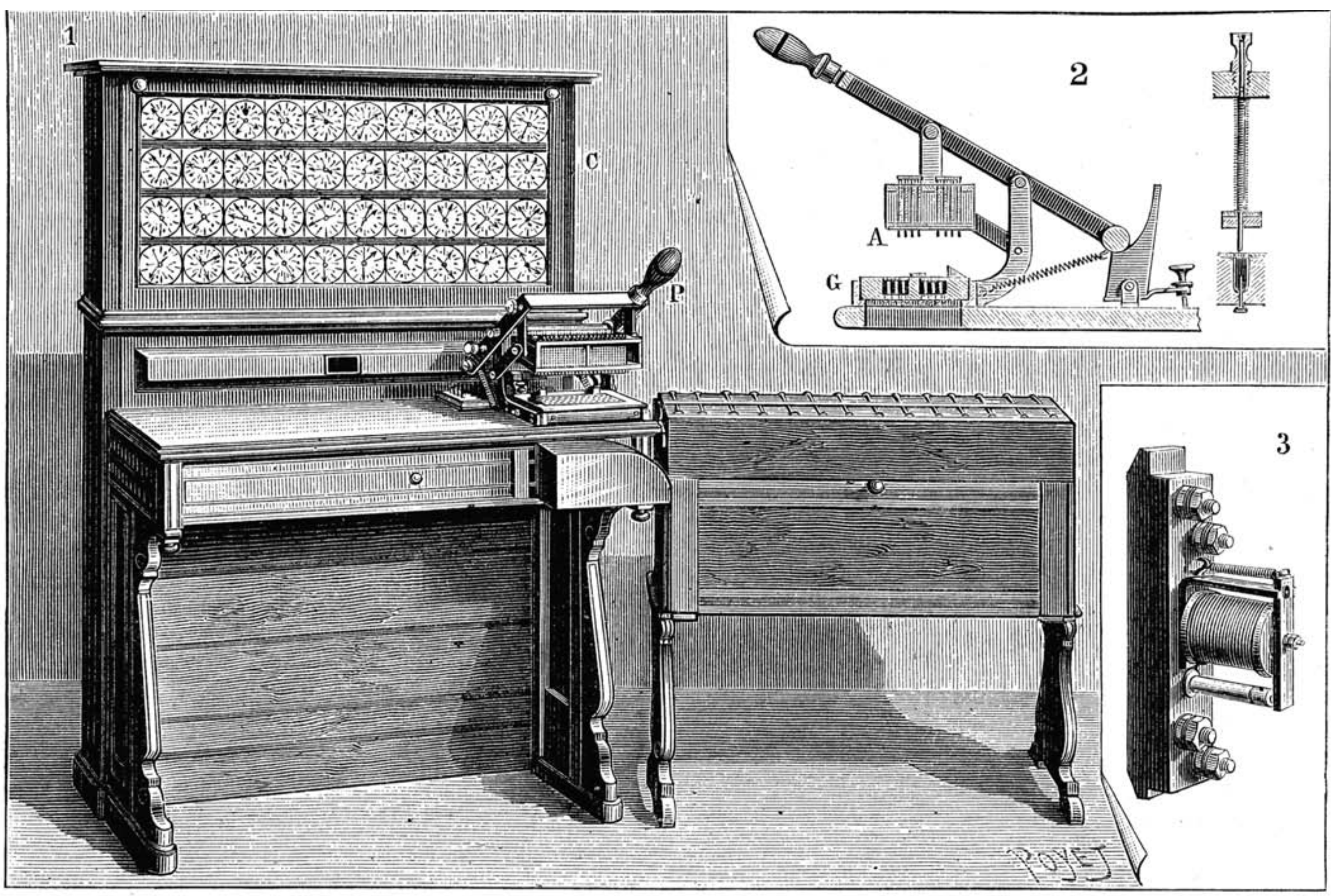
International Business Machines

International Business Machines (IBM) products and services have been a foundation for global business and trade; arguably, without its influence there would be none of the standardization within the information technology (IT) industry so influential in the economic developments of the 1990s. However, IBM has experienced significant losses, notably in 1992, and has had to overcome a cultural and organizational legacy that, although foundational for its growth, had become a barrier to change. This historical legacy runs the entire length of the global IT industry and earlier, with its roots in the activity that even its most sophisticated products still retain: counting.

In the 19th century, at a time of heightened immigration levels in the United States, the U.S. Census Bureau ran a competition to find an efficient way to tabulate census data. This was won by Herman Hollerith, with a punched-card tabulating machine. Hollerith then formed the Tabulating Machine Company (TMC) in 1896. On June 16, 1911, TMC was incorporated in the state of New York as the Computing-Tabulating-Recording Company (CTR). In 1914 Thomas J. Watson, Sr., was recruited from the National Cash Register Company. As company president, he expanded CTR's operations globally, leading to its name change to International Business Machines Corporation on February 14, 1924. During the Depression, Watson counterintuitively produced new machines while demand was low and invested heavily in research and development (R&D). With this excess inventory, IBM was ready when it won the government contract for what was then the largest data processing operation of all time, to maintain all U.S. employment records.

The relationship with the U.S. government proved essential for maintaining IBM's dominance in technological innovation. IBM became a chief contractor for developing computers for the U.S. Air Force's automated defense system. IBM gained access to research being done at the Massachusetts Institute of Technology, working on the first real-time, digital computer. IBM's movement toward electronic computers began with the Automatic Sequence Controlled Calculator in 1944. Increased stability of computers along with other technologies developed with



IBM can trace its roots to the late 19th-century work of Herman Hollerith, whose punch card tabulating machine, a distant forerunner of today's computers, is shown above.

the defense industries during the postwar transition to a civilian economy, combined with the increasing importance of corporate accounting and accountability in U.S. corporations, moved computers into business applications such as billing and inventory control, where IBM already had influence through its tabulating devices.

In 1964 IBM introduced the System/360 product line. In a break from usual practices, IBM unbundled the hardware, software, and service components and offered them for sale individually. In the 1980s, with the Personal Computer (PC), IBM moved into new markets of homes, small businesses, and schools.

However, IBM profits diminished during the global recession of the early 1990s. Mainframe revenue declined due to corporate "downsizing" and the profit margin on microprocessor-based systems was far lower. Louis Gerstner became IBM's CEO on April 1, 1993, and took drastic actions including exiting the consumer business, cutting thousands of jobs, and appointing non–computer industry "outsiders" to key executive positions. Gerstner's successor Sam Palmisano continued this transformation, divesting IBM of its storage, printer, PC, and laptop businesses. As during the Depression and war era, work done in commercially lean times was foundational for success.

When corporate IT expenditures increased during the internet boom and customers were looking for integrated business solutions to contend with new challenges, they required advice as much as technology. Services became the fastest-growing segment of the company. In July 2002 Palmisano purchased PricewaterhouseCoopers's consulting business for $3.5 billion, making IBM the world's largest consulting firm. Despite the emphasis on services, IBM maintains its leadership position in technological innovation, for example, creating the Deep Blue computer that defeated world chess champion Garry Kasparov. The same technology has commercial applications in weather forecasting and modeling financial data.

In 2004 IBM announced the sale of its IBM Personal Computing Division to the Chinese firm Lenovo in a reportedly $1.75 billion deal.

See Also: Information Systems; Lenovo; United States.

Bibliography. David Hart, "Red, White, and 'Big Blue': IBM and the Business-Government Interface in the United States, 1956–2000," *Enterprise & Society* (v.8/1, 2007); IBM, "IBM Archives," www-03.ibm.com/ibm/history (cited March 2009); *IBM IT Governance Approach Business Performance through IT Execution* (Vervante, 2008); V. Kumar, Rajkumar Venkatesan, Tim Bohling, and Denise Beckmann, "Practice Prize Report—The Power of CLV: Managing Customer Lifetime Value at IBM," *Marketing Science* (v.27/4, 2008); Kevin Maney, *The Maverick and His Machine: Thomas Watson, Sr. and the Making of IBM* (Wiley, 2004).

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International Capital Flows

International capital flows include all transactions by residents of one country that involve financial claims on and liabilities to residents of another country. International capital flows are divided into various categories, including foreign direct investment (FDI), foreign portfolio investment (FPI), reserve asset flows, and other flows such as bank loans and export and import credits. International capital flows were vigorous before World War I, resumed in the 1920s, came to a virtual stop after the Great Depression, and were restricted under the Bretton Woods system that defined the international economy between World War II and 1973. Since the collapse of the Bretton Woods system, international capital flows have been a catalyst of increasing integration in the world economy.

International capital flows began to play a major role in the world economy during the second half of the 19th century. Britain, France, and Germany were major sources of financial funds to the rest of the world during this period. The majority of international capital flows were in the form of portfolio investment; debt and equity securities financed governments in the periphery as well as large-scale infrastructure projects such as railroad construction. The volume of international capital flows relative to gross domestic product (GDP) was substantial. World War I disrupted this pattern of high capital mobility. International bank lending and portfolio investment resumed in the 1920s under the leadership of the United States. However, the Great Depression put an end to this wave of rising international capital flows. As autarky became the norm in the

1930s, the volume of international capital flows stood at depressed levels.

The international economic system established after World War II (named after the Bretton Woods conference) was hostile to the free flow of capital across borders; industrialized as well as developing countries restricted international capital flows by adopting binding capital controls. Private capital flows resumed only in the 1960s, with the emergence of the Eurodollar markets. As the Bretton Woods system collapsed in 1973, the abolition of capital controls and of restrictions on domestic financial intermediation began in the early 1970s. The United States took the leading role in abandoning capital controls and was followed by other major industrialized countries in the late 1970s and the 1980s.

The growth of international capital flows since the late 1970s has been remarkable. According to the recent studies conducted by the IMF, gross international capital flows stood at approximately 5 percent of world GDP in 1980. While international capital flows have occasionally decreased during times of major financial crises (such as the developing country debt crisis in the early 1980s and the 1994 Mexican crisis), the overall trend has been upward. In 2005 gross international capital inflows were $6.4 trillion, which was close to 15 percent of world GDP.

Due to growing capital flows, international financial integration has risen significantly over the last three decades. As Philip Lane and Gian Maria Milesi-Ferretti showed, the sum of foreign assets and liabilities as a percentage of GDP increased from approximately 50 percent in the early 1970s to more than 300 percent in 2004 in industrial countries. Furthermore, the rate of the increase itself has been rising, with major acceleration of global financial integration in the 1990s and 2000s (despite a brief slowdown after the Asian financial crisis). Financial integration in emerging and developing market economies has also been strong, although it did not reach the level observed in industrial countries. In emerging economies, the sum of foreign assets and liabilities as a percentage of GDP was approximately 150 percent in 2004.

The recent growth of international capital flows was driven mostly by the expansion of banking flows, derivative transactions, and cross-border investment in debt securities. Indeed, these flows now constitute the majority of international capital flows. An important component of this growth is the surge in foreign exchange reserves among emerging economies. These reserves reached unprecedented levels in recent years. The foreign exchange reserves accumulated by emerging market economies are predominantly invested in industrial countries, especially in U.S. Treasury debt securities.

The main implication of this pattern is that emerging and developing economies (especially in Asia) are now the net creditors in world financial markets. Indeed, while emerging and developing market countries receive significant inflows of equity investment (both FDI and portfolio investment in equity securities), the outflow of their foreign exchange reserves to debt securities in advanced industrialized countries (mainly the United States) exceeds capital inflows. In other words, capital flows from less advanced to more advanced countries. It should be observed that the net outflow of capital from emerging and developing economies to industrial economies is a paradox for standard economic theory (because it asserts that capital would flow to places where the rate of return is greatest).

While international capital mobility due to increasing flows of financial funds across borders has been increasing, capital is far from being perfectly mobile across borders. In contrast, the financial assets and liabilities of industrial, emerging, and developing economies show that there is still a marked preference for holding portfolios biased toward domestic debt and equity securities. This well-documented phenomenon is known as "home bias" in international portfolio selection. A related stylized fact is the high correlation between domestic saving and investment (known as the Feldstein-Horioka puzzle), which challenges the expectation of small correlation ratios under high capital mobility. While the findings of Martin Feldstein and Charles Horioka are confirmed in subsequent studies, there are disputes on the methodology of measuring saving-investment correlation and on what this correlation means. Nevertheless, the Feldstein-Horioka puzzle is often seen as a proof of imperfect international capital mobility.

The growth of international capital flows from the late 1970s until recently has been remarkable.

See Also: Capital Account Balance; Current Account; Foreign Direct Investment, Horizontal and Vertical; For-

eign Exchange Reserves; Foreign Portfolio Investment; Net Capital Outflow.

Bibliography. Bala Batavia and Parameswar Nandakumar, *Globalization, Capital Flows, Competition and Regulation* (APF Press, 2007); Thomas William Dorsey, *The Landscape of Capital Flows to Low-Income Countries.* IMF Working Paper, WP/08/51. (International Monetary Fund, Policy Development and Review Department, 2008); Barry J. Eichengreen, *Capital Flows and Crises* (MIT Press, 2003); Martin S. Feldstein and Charles Y. Horioka, "Domestic Saving and International Capital Flows," *Economic Journal* (v.90, 1980); International Monetary Fund, *Global Stability Report* (April 2007); Maurice Kugler and Hillel Rapoport, "International Labor and Capital Flows: Complements or Substitutes?" *Economic Letters* (v.94/2, 2007); Philip R. Lane and Gian Maria Milesi-Ferretti, "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004," *Journal of International Economics* (v.73/2, 2007); Alexander Ludwig, Dirk Krueger, and Axel Börsch-Supan, *Demographic Change, Relative Factor Prices, International Capital Flows, and Their Differential Effects on the Welfare of Generations* (National Bureau of Economic Research, 2007); Maurice Obstfeld and Alan M. Taylor, *Global Capital Markets: Integration, Crisis, and Growth* (Cambridge University Press, 2004); Cédric Tille and Eric Van Wincoop, *International Capital Flows* (Centre for Economic Policy Research, 2008).

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International Centre for the Settlement of Investment Disputes

The International Centre for the Settlement of Investment Disputes (ICSID) is an international organization linked to the World Bank Group, and it is entrusted with the responsibility of facilitating conciliation and arbitration of international investment disputes. The ICSID was established in 1966 following the entry into force of the Convention on the Settlement of Investment Disputes between States and Nationals of other States (Convention). Negotiated under the auspices of the International Bank for Reconstruction and Development (the World Bank), the Convention represented a significant breakthrough in international law, as it effectively granted foreign investors the right to enforce treaties or contracts against a host state in a supranational forum insulated from the interference of domestic courts or diplomatic protection. Since 1978, the ICSID has expanded its reach with the inclusion of the Additional Facility Rules that enable the use of the ICSID machinery by states and nationals of states not parties to the Convention. The Additional Facility is of particular importance for cases under Chapter 11 of the North America Free Trade Agreement because neither Mexico nor Canada have yet ratified the Convention.

The ICSID organizational structure comprises two organs: the Administrative Council and the Secretariat. The Council includes representatives of each contracting party and is chaired ex officio by the president of the World Bank. It meets once a year in conjunction with the World Bank annual meeting and is responsible for the election of the secretary general and the deputy secretary general; furthermore, it oversees the ICSID institutional rules, operations, and budget. The Secretariat, headed by the secretary general, provides a number of administrative functions such as keeping a record of all the panels of arbitrators and conciliators designated by parties, registering arbitration requests, assisting the formation of conciliation commission and tribunals as well as administering the proceedings and costs of each case. The World Bank houses the ICSID and, in accordance with the Convention, it also finances ICSID administrative costs, although the costs of the proceedings are paid by the disputing parties.

Despite being considered a dormant institution for over three decades, the ICSID has recently experienced a surge in interest and prominence. Compared to the 23 contracting states in 1966, the number of parties currently stands at 143, with an additional 12 signatories. Furthermore, between 1995 and 2008 the caseload has also witnessed a dramatic increase as the number of pending cases climbed from 7 to 124. The revival of the ICSID can be most notably explained by the proliferation of bilateral investment treaties (BITs) and multilateral free trade agreements (FTAs), the majority of which stipulate consent to

ICSID arbitrations to resolve disputes arising from the provisions of these treaties. Although other public and private institutions and rules such as UNCITRAL (United Nations Commission on International Trade and Law) and the International Chamber of Commerce are available to resolve investment arbitrations, the ICSID is the most commonly utilized; estimates compiled by UNCTAD, in fact, indicate that two-thirds of all known disputes have been registered with the ICSID.

Proponents of the ICSID arbitration and conciliation facilities have argued that the institution offers a self-contained and neutral mechanism that offers a high degree of competence in investment and trade matters. Additional advantages include the ICSID independence of the parties' willingness to cooperate, the possibility to object to frivolous claims at an early stage in the arbitration, the recognition and likelihood of awards enforcement in the contracting states, and the option to seek annulment of the award. Furthermore, in April 2006, in order to improve upon what some nongovernmental organizations (NGOs) considered an "opaque" arbitral system with potentially significant social and environmental ramifications, the Administrative Council implemented new rules that allow third parties (amicus curiae) with an interest in the proceedings to send to tribunals written submissions and, subject to the disputing parties' consent, attend the hearings.

Critics, however, argue that the ICSID procedures and new rules continue to favor investor's rights at the expense of democracy and human rights, as several notable cases involved disputes over access to water and electricity while others posed significant challenges to environmental regulation. Reformist NGOs and lawyers have suggested that tribunals should be obliged to ensure open hearings, document disclosure, unconditional acceptance of amicus curiae, and have also proposed for the ICSID to consider the creation of an appeals mechanism to permit the correction of legal errors. However, Bolivia's politically charged denunciation of the Convention and Ecuador's notification of restrictions to the types of cases filed under the ICSID have led commentators to assert that the ICSID is heading toward a broader crisis of legitimacy. Confronted with several challenges posed by civil society and the Convention's parties, the ICSID is at a crossroads.

See Also: Arbitration; Bilateral Free Trade Agreement; International Chamber of Commerce; International Law; World Bank, The.

Bibliography. Sarah Anderson and Sara Grusky, *Challenging Corporate Investor Rule* (Institute for Policy Studies and Food & Water Watch, 2007); James Calvin Baker, *Foreign Direct Investment in Less Developed Countries: The Role of ICSID and MIGA* (Greenwood, 1999); Julien Fouret, "The World Bank and ICSID: Family or Incestuous Ties?" *International Organizations Law Review* (v.4/1, 2007); Rainer Hofmann, *The International Convention on the Settlement of Investment Disputes (ICSID) Taking Stock After 40 Years* (Nomos, 2007); Peter Muchlinski, *Multinational Enterprises and the Law* (Blackwell, 1999); K. V. S. K. Nathan, *ICSID Convention: The Law of the International Centre for Settlement of Investment Disputes* (Juris Pub, 2007); Antonio R. Parra, "The Development of the Regulations and Rules of the International Centre for Settlement of Investment Disputes," *International Lawyer* (v. 41/1, 2007).

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International Chamber of Commerce

The International Chamber of Commerce (ICC) is a nonprofit organization that is made up of member states; it was formed in 1919 for the purpose of promoting open trade and a free financial market. Many believed that there was a need for a neutral entity that could champion corporate responsibility in order to achieve global peace through business transactions. Once the United Nations was formed in 1945, ICC was given the highest level consultative status with the organization and its agencies. The purpose of this move was to ensure that the United Nations was informed of international business views when making crucial decisions during meetings.

ICC's International Secretariat is located in Paris, and the first president was Etienne Clementel. He was a French minister of commerce and has been credited with establishing the International Court of Arbitration in 1923. Originally, the member states were Belgium, England, France, Italy, and the United States.

However, today, the organization represents approximately 140 countries around the world, and national committees are in 84 of the countries.

The ICC is responsible for acting as a catalyst for economic growth, job creation, and prosperity throughout the world. The organization facilitates activities that ensure that global business decisions are in the best interest of economic development throughout the world. In addition, some believe its role is to be a business advocate to governments and intergovernmental agencies. Some of the activities include assisting businesses with self-regulation, working against corruption and commercial crimes in world business, and supporting open trade and marketing a healthy economic system. These activities are achieved through the work of various branches of the organization, including the following:

- International Secretariat—The Secretary General leads this body in an effort to achieve the programs that have been approved by the ICC. This office is the operational component of the organization and responsible for ensuring that the work approved by the World Council is performed.
- Executive Board—The board is comprised of approximately 15–30 members and is responsible for implementing policies approved by the ICC. Each member serves for three years. The chairmanship consists of the present chairman, his predecessor, and the vice chairman.
- International Bureau of Chambers of Commerce—This entity was created in 1951 to bring together the world chambers of commerce in developing and industrial countries. This organization was renamed the World Chambers Federation (WCF) in 2001 during the 2nd World Chambers Congress, held in Korea. WCF is also responsible for administering the ATA Carnet system for temporary duty-free imports.
- International Anti-Corruption Commission—This commission was an attempt by the ICC to create a body that would promote self-regulation against bribery and corruption among businesses. The commission consists of 90 members from 34 countries, and they meet twice a year to discuss issues of interest to maintaining an ethical global business environment.
- Business Action to Stop Counterfeiting and Piracy (BASCAP)—Members of this committee represent organizations that are committed to ensuring that intellectual property rights are respected and protected. Part of their mission is to raise awareness of the social and economic costs of piracy and counterfeiting. These two deviant activities have become a source of concern for many industries around the world (i.e., the music industry). When these actions go uncontrolled, there is a decrease in legitimate employment opportunities as well as tax revenues. BASCAP was formed to connect all of the business sectors around the world in an effort to fight counterfeiting and piracy. Three of the major goals of this group are (1) to increase public and political awareness of these crimes and how the acts can cause economic and social harm; (2) to encourage government action and secure allocation of resources to improve enforcement of policies and laws; and (3) to create an environment where intellectual property is respected and protected.
- ICC International Court of Arbitration—This entity is the oldest established ICC institution, and its main responsibility is to resolve international commercial disputes via the arbitration process. Many companies prefer to use this system because they want to (1) receive a fair trial and avoid potential bias by national courts, (2) avoid bad press and damaging publicity, and (3) maintain confidentiality. In addition, arbitration tends to be less expensive and quicker than litigation.

Arbitration is more flexible than litigation and an organization does not have to be an ICC member to take part in the process. Also, the parties involved in the dispute have the privilege of deciding what form of arbitration will be used to resolve the dispute. They are allowed to select the arbitrators, the location of the arbitration, and the laws that are appropriate. In many cases, the parties can select the target date for completion.

The steps involved in the arbitration process are as follows:

1. The party initiating the dispute submits a request for arbitration to the secretariat of the International Court of Arbitration in Paris. The secretariat is responsible for notifying the defen-

dant of the charges, and the party has 30 days to respond to the accusation.

2. The International Court of Arbitration (ICA) initiates proceedings. At this time, the parties decide whether (1) their dispute will be settled by one or three arbitrators, (2) the International Court of Arbitration will make the selection, and (3) they should select their own arbitrator(s).
3. The arbitral tribunal has two months to draft and forward to the ICA the case's terms of reference. The ICA examines the terms of reference for conformity with ICC Rules. The ICA then takes note of or approves the terms of reference before arbitration can proceed.
4. The second half of the advance is paid and the arbitral tribunal proceeds with the case. The tribunal has six months to prepare and submit a draft award to the ICA.
5. The ICA reviews the award. Once approved, the award is signed by the arbitrator(s) and parties are notified of the decision.

See Also: Arbitration; International Commercial Terms (Incoterms); International Law; World Trade Organization.

Bibliography. "Appendix III: International Chamber of Commerce ICC) National Committees and Groups," *Handbook of World Trade* (2004); R. Bate, "Part 1: The Origins and Nature of the World Trade Organization: Forging the Tools of Trade—Core Tasks of the International Chamber of Commerce," *Handbook of World Trade* (2004); William F. Fox, "The International Chamber of Commerce's GUIDEC Principles: Private-Sector Rules for Digital Signatures," *International Lawyer* (v.35, 2001); Dominic Kelly, "The International Chamber of Commerce," *New Political Economy* (v.10/2, 2005).

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International Commercial Terms (Incoterms)

Commonly referred to as *Incoterms*, international commercial terms are internationally standardized terms of trade that specify the responsibilities of the seller and the buyer in a sales transaction. Incoterms help answer the questions: Which party is responsible for arranging and paying for transport of the goods? Which party is responsible for insurance? Which party is responsible for clearing the goods for export or import and paying duties and taxes? When will transfer of responsibility for the goods take place? Rather than leaving these questions unaddressed or needing to work through each detail for every sales contract, the seller and buyer can select from standard Incoterms that define who bears the cost and responsibility for each of the various activities in delivering the goods.

The 13 standardized international commercial terms have helped facilitate international trade since 1936.

Because they are standardized and have a long history of usage across the globe, Incoterms can simplify the negotiation of sales terms and help the buyer and seller to avoid misunderstandings. Also, because they clarify what is included in the quoted sales price and what additional activities and costs are borne by the buyer, Incoterms help a buyer determine the total landed cost that will be incurred in acquiring and bringing the goods to their final point of delivery.

Incoterms were first created in 1936 by the International Chamber of Commerce (ICC) and subsequently have been revised six times. The most recent version is Incoterms 2000, with the next revision slated for release in 2010. Each of the 13 Incoterms is known by a three-letter abbreviation, with the first letter indicating into which of four groups it falls. While a brief description is given below, it is imperative to reference each Incoterm's full description as provided by the ICC in order to understand and use them correctly.

Origin Terms (E): In this category of Incoterms, the seller's responsibilities are fulfilled when goods are ready to depart from the seller's facility:

- EXW [Ex Works] (named place)

Main Carriage Not Paid by Seller (F): For shipments where the primary or international shipment cost is not paid by the seller:

- FCA [Free Carrier] (named place)
- FAS [Free Alongside Ship] (named ocean port of shipment)
- FOB [Free On Board] (named ocean port of shipment)

Main Carriage Paid by Seller (C): For shipments where the primary shipping cost is paid by the seller:

- CFR [Cost and Freight] (named ocean port of destination)
- CIF [Cost, Insurance, and Freight] (named ocean port of destination)
- CPT [Carriage Paid To] (named place of destination)
- CIP [Carriage and Insurance Paid To] (named place of destination)

Arrival at Destination (D): For shipments where the seller's responsibility ends when the goods arrive at a named place, usually in the destination country:

- DAF [Delivered At Frontier] (named place at border)
- DES [Delivered Ex Ship] (named ocean port of destination)
- DEQ [Delivered Ex Quay] (named ocean port of destination)
- DDU [Delivered Duty Unpaid] (named place of destination)
- DDP [Delivered Duty Paid] (named place of destination)

In actual use, sales documents would reference the Incoterm agreed upon by the seller and buyer by stating the three-letter abbreviation followed by the name of a specific place or port. To illustrate for a Chinese seller and U.S. buyer, "EXW Nanjing, China" would mean that the seller makes the goods available in suitable packaging at its facility in Nanjing and the buyer is responsible for all subsequent activities and costs. "FOB Shanghai, China" means that the seller has accomplished delivery when it has loaded the goods on board the ship in the Shanghai port. "DDU Ogden, Utah, USA" refers to a situation where the seller is responsible for export and import clearances, duties, taxes, insurance, and transportation of the goods to the buyer's named delivery point in Ogden.

Though the Incoterms have standardized definitions that are recognized internationally, U.S. domestic shipments often have used terms of sale with confusingly similar appearances but different meanings. For example, the Incoterm "FOB" is intended for shipments involving ocean transportation in which delivery is accomplished when the goods are placed on board the ship at the origin port. However, many domestic U.S. sales contracts have utilized terms such as "FOB factory" or "FOB origin" to indicate that goods are transferred at the seller's facility (rather than loaded on board a ship), and "FOB destination" or "FOB delivered" wherein the seller is responsible for transport and insurance to the buyer's designated point of delivery.

See Also: Cost, Insurance, and Freight; Ex-Factory (Ex-Works); International Chamber of Commerce; Landed Cost; Transportation.

Bibliography. Dan Gardner, "A New Chapter in Incoterms," *Journal of Commerce* (September 15, 2008); *Incoterms 2000*, ICC Publication No. 560 (ICC Publishing, 1999); International Chamber of Commerce, www.incoterms.org (cited March 2009); Rachael Israel, "The Role of INCOTERMS in International Trade," *Indian Journal of International Law* (v.45/3, 2005); Jan Ramberg, *ICC Guide to Incoterms 2000*, ICC Publication No. 620 (ICC Publishing, 1999).

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International Compensation

Compensation is a critical tool to an organization's strategic planning, given its importance to both employees and employers. Research has shown that compensation is a key factor to employee attitudes and behaviors, and can be a determinant in retention of talented employees. Employers have to pay close attention to the compensation program, given the costs that are associated with it. Total compensation, which includes actual pay plus benefits, can be 23 percent or more of a company's revenue. The percentage can vary by industry and geographic location.

Pay decisions can be broken down into two categories: pay structure and individual pay. Pay structures focus on pay level and job structure, whereas individual pay highlights incentives and rewards that are of interest to the employee. Pay level is the average pay (i.e., wages, salaries, and bonuses) of jobs in an organization, and job structure refers to the relative pay of jobs in the organization.

Pay Structure

One of the most popular theories addressing the compensation field is equity theory. Equity theory implies that individuals evaluate whether or not they are being treated fairly by comparing their situation to others. In this scenario, it is common for an employee to compare his/her pay to the pay of other employees, especially those coworkers performing the same duties. Many researchers and practitioners in the field strongly believe that work attitudes and perceptions are based on whether or not an employee believes he/she is being fairly compensated in comparison to the perception of what other employees are being paid. This theory applies to both internal and external structures.

Organizations tend to address these concerns via market pay surveys (external equity) and job evaluations (internal equity). In order to ensure that external equity and internal equity issues are addressed, human resource professionals should consider the following tools when preparing an international compensation package: (1) an international compensation management grading system that is comparable to the domestic grading system; (2) a base salary delivery process that is integrated into the home country's base pay system as well as taking local country laws into consideration; (3) an incentive and reward system that motivates employees worldwide; and (4) a performance management system that rewards employees regardless of their geographic location.

Pay levels are influenced by two factors: product market competition and labor market competition. Product market competition creates a threshold on labor costs and compensation. The threshold can be constrictive when the labor costs are a larger share of total costs and when demand for the product is tied to the price. Labor market competition highlights the fact that the organizations must research and determine what is a competitive salary for positions, especially compared to what competitors are paying for similar positions. In order to compete for talent, many organizations will benchmark against product market and labor market competitions.

Job evaluations are used to measure a position's internal worth. An effective evaluation system is based on compensable factors and the weighing scheme for each factor (based on the factor's importance to the organization). These factors include working conditions, education, experience, and job complexity. Once scores have been assigned to each of these factors, a point factor system is developed.

Market pay structures can differ across borders in terms of their level and relative worth for the job. Some markets may offer lower levels of pay overall and require lower payoff for skills, education, and advancement. In most cases, expatriate pay and benefits will be closely in sync with the compensation structure of the home country. However, this practice is slowly being replaced with alternative practices as more companies begin to implement policies that have pay differentials that are based on geographic location. The pay differentials are used to address inequities that may arise if an employee wants to consider a position in another country that may have a higher cost of living than the home country. Unfortunately, there is a drawback to this practice. It may be difficult to adjust an employee's salary downward if the cost of living decreases and/or the employee relocates to a lower-cost area.

Components of International Compensation

When creating a compensation system for international employees, one must take four basic components into consideration: base salary, indirect monetary compensation (benefits), equalization benefits, and incentives.

The base salary is the foundation of an international compensation system because it represents the minimum rate at which a candidate will work for your company. Some organizations have elected to develop an international compensation system based on the policies and procedures of the parent company's country, whereas others have created an international compensation program based on the host country. Regardless of which practice is utilized, it is important for the compensation professional to consider what happens to the employee's pay once they leave that assignment. On average, the typical international assignment usually lasts from three to five years.

Although most benefits (indirect monetary compensation) packages are the same as offered in the home country, organizations must consider how to address situations where a host country may require certain benefits that are not offered in the home country. It may be in the organization's best interest to consider offering such benefits in order to keep employees motivated and maintain positive attitudes.

Equalization benefits are offered in an effort to minimize any financial hardships that an employee may experience as a result of considering an international assignment. Some of these benefits include housing allowances, educational allowances, language and culture training, employment opportunities for spouses, and emergency leave. Some organizations have found that it is beneficial to offer incentives to expatriates. Some of these incentives include an assignment completion bonus, cash bonuses, stock options, and performance-based bonuses.

See Also: Compensation; Education Allowance; Expatriate; Housing Allowance; Local/National; Parent Country National; Salaries and Wages; Staffing Levels.

Bibliography. Jaepil Choi and Chao C. Chen, "The Relationships of Distributive Justice and Compensation System Fairness to Employee Attitudes in International Joint Ventures," *Journal of Organizational Behavior* (v.28/6, 2007); Rui Cui, "International Compensation: The Importance of Acting Globally," *Worldatwork Journal* (v.15/4, 2006); Luis R. Gomez-Mejia and Steve Werner, *Global Compensation: Foundations and Perspectives* (Routledge, 2008); Roger Herod, *Expatriate Compensation: A Balance Sheet Approach* (Society for Human Resource Management, 2008); Roger Herod, *Global Compensation and Benefits: Developing Policies for Local Nationals* (Society for Human Resource Management, 2008); Rezaul Kabir, "International Perspectives on Executive Compensation," *Journal of Multinational Financial Management* (v.18/1, 2008); Kevin B. Lowe, John Milliman, Helen De Cieri and Peter J. Dowling, "International Compensation Practices: A Ten-Country Comparative Analysis," *Human Resources Abstracts* (v.38/1, 2003); Y. Stedham, "International Compensation," in S. Cartwright, ed., *The Blackwell Encyclopedic Dictionary of Human Resource Management* (Blackwell, 2004); "Tax Aspects of International Compensation," *Journal of Compensation & Benefits* (v.22/2, 2006).

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International Development Agency

An international development agency is an organization dedicated to designing, implementing, and monitoring humanitarian and economic development–related projects, and in many cases it is dedicated to distributing and managing foreign aid and international assistance programs. An international development agency could be an intergovernmental organization (such as the World Bank, United Nations Development Program, UNICEF, World Health Organization, La Francophonie, Organisation for Economic Co-operation and Development), a governmental agency (such as the United States Agency for International Development, Agencia Española de Cooperación para el Desarrollo, Swedish International Development Cooperation Agency) generally in a developed country, attached to a foreign affairs department responsible for the support of development assistance projects in underdeveloped and developing countries. An international development agency could have the support of a combination of governmental agencies, nongovernmental organizations (NGOs) such as Oxfam and organized civil society actors. Still, at the international level, most of the aid is channelled government to government. The source of the funding could be exclusively from governments, or entirely from private funds, but it also could be a mix of the two.

Overall the objectives of the international development agencies are linked to the United Nations' Millennium Development Goals (MDGs). International development agencies tend to operate under bilateral agreements (country to country); however, there are international development agencies that work under multilateral agreements.

Foreign Aid

The distribution of aid among countries can legitimately reflect multiple aims. Aid may be used to meet humanitarian emergencies, to rebuild post-conflict societies, or to support the commercial, humanitarian, or strategic interests of the donor. Still, the most frequently cited objective of aid programs is economic development.

Although economic development is not the only form of development, it has been identified both as a goal and as a condition for other interrelated development goals such as poverty alleviation, income distribution, debt relief, emergency assistance, food aid, social development, adequate health programs, provision of employment, access to education, gender equality, the spread of democracy, and the provision of a hospitable environment for foreign direct investment. This is the reason why international development agencies depend on foreign aid and why they are focused on economic development. The World Bank (2008) classifies 209 economies. It classifies 49 of them as low income, 54 as lower-middle income, 41 as upper-middle income, and 65 as high-income economies. Of the 49 low income, the vast majority are African countries, a few are Asian, and one of them Latin American (Haiti).

For several developing countries foreign aid represents a considerable component, frequently in excess of 10 percent or more of their national income. However, it is a comparatively small item in the national accounts of the aid-giving countries. Even though the amount and the scope of international transfers toward economic development have increased considerably over the last four decades, the amount of foreign aid differs significantly country to country. For instance, it represents one percent of the gross domestic product of Sweden, the Netherlands, and Denmark. In 2005 the total official development assistance (ODA) rose to a record of US$106.8 billion. Also, the provision of foreign official aid in comparison to private aid varies significantly country to country.

Historical Background

Immediately after World War II, Europe lacked financial capital. The response given by the United States was the Marshall Plan or the European Recovery Program (ERP). The ERP was an initiative for rebuilding U.S.–allied countries while repelling communism from Europe. From 1947 to 1951, US$13 billion was given in economic and technical assistance to the European countries that joined the Organization for European Economic Cooperation (former name for the Organisation for Economic Co-operation and Development). After the Marshall Plan, the participants, with the exception of Germany, surpassed the economic level they had before the war. After the success of the Marshall Plan, attention was turned to developing countries. The Marshall Plan gave rise to many of the elements of foreign aid management and delivery.

International Development Agenda

There are multiple debates on what should constitute the international development agenda. Nonetheless, there are elements that comprise the strategy for development: (1) knowledge and technology transfer from more developed countries; (2) potential role of foreign direct investment (including both long and short term investment); (3) increased role of exports and imports; (4) acquisition of significant levels of resource mobilization; (5) maintenance of a steady macroeconomic environment; (6) investment to dramatically improve social and physical infrastructure (health, transportation, communication, education, etc.); (7) reliance on market mechanisms; (8) well-functioning government institutions; and (9) development of regulatory structures and other market institutions.

Several texts on development have promoted strategic and tactical justification of certain interventions and practices and excluded and delegitimized others. In general, the literature on development is closely related to the literature on apparatuses of power and domination. Development can be autonomous, appropriated, gender conscious, sustainable, or the opposite of all these—the definition depends on the nation, university, policy, or international agencies that define it.

There has never been consensus on the meaning of development. The Westernized idea of development has been used as an agent of economic and cultural hegemony, and some authors argue that development as a construct is used to justify colonization.

Since the creation of Bretton Woods, the idea of development has become fully identified with the idea of economic growth measured as the intensification of production using such measures as gross national product (GNP). The word *underdeveloped* in reference to countries was introduced by U.S. President Harry S Truman on January 20, 1949, in the inaugural speech of the Marshall Plan, introducing a word that labelled and stigmatized those countries that did not fit into the pattern of development dictated by the United States and suggesting it was the "duty" of major nations to improve underdeveloped areas.

Development aid has been a highly controversial subject. Defenders of such aid argue, first, that aid provides emergency assistance and debt relief and that if well administered, its provision can produce long-term improvement in areas such as health, human rights, education, etc.; second, that it can be seen as an exercise of interdependence in which both donors and recipients can pursue their respective interests. On the other hand, the rationale against aid is based on arguments such as (1) aid has been used by authoritarian governments to consolidate their power, meaning it has little effect on the poor; (2) it is used to divert attention from issues such as trade, debt, and the role of TNCs; (3) aid creates dependency, thus weakening the political and economic position of aid recipients; (4) it distorts the free market; (5) aid is often subject to conditions to buy goods and services from the "donor"; (6) the donor-recipient dynamic reinforces stereotypical superiority and racism; (7) aid maintains world inequality rather than challenging it; and (8) aid is often displaced or misused.

See Also: Development Assistance; Economic Development; Nongovernmental Organizations; Organisation for Economic Co-operation and Development.

Bibliography. Santanu Chatterjee and Stephen J. Turnovsky, "Foreign Aid and Economic Growth: The Role of Flexible Labor Supply," *Journal of Development Economics* (v.84/1, 2007); Alberto Chong and Mark Gradstein, "What Determines Foreign Aid? The Donors' Perspective," *Journal of Development Economics* (v.87/1, 2008); Jamey Essex, "The Neoliberalization of Development: Trade Capacity Building and Security at the US Agency for International Development," *Antipode* (v.40/2, 2008); Jonathan Hudec, "U.S. Agency for International Development," *National Journal* (v.37/25, 2005); Roberto Patricio Korzeniewicz and William C. Smith, "Poverty, Inequality, and Growth in Latin America: Searching for the High Road to Globalization," *Latin American Research Review* (v.35/3, 2000); Paul J. Nelson, "Human Rights, the Millennium Development Goals, and the Future of Development Cooperation," *World Development* (v.35/12, 2007); Albert G. Schweinberger and Sajal Lahiri, "On the Provision of Official and Private Foreign Aid," *Journal of Development Economics* (v.80/1, 2006); Margaret Sutton, "UNESCO's Role in Global Educational Development," *Comparative Education Review* (v.51/2, 2007); World Bank, World Development Indicators, 2007, siteresources.worldbank.org (cited March 2009).

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International Division Structure

A firm may establish an international division to contain its international activities, thus creating a separation between domestic and international activities. For example, a British food company may have several domestic product divisions to serve customers in its home country, and also an international division to manage affairs in its various international markets. Another variation is where the international division is a mirror image or a miniature replica of the core domestic business, with a mandate to sell the multinational's products to foreign markets.

According to Charles Hill, the international divisions themselves are usually organized by geographic regions—he provides the example of Wal-Mart, which established an international division in the early 1990s from which to manage its global ventures. He further suggests that the managers of foreign subsidiaries report into the international division, and that their role would be to sell the firm's products to their foreign markets. Another structural possibility is whereby the international division has a market structure—i.e., it may be divided into one department that caters to corporate clients, another that serves the retail market, and another that specializes in serving large nongovernmental organizations (NGOs).

The headquarters of the international division are typically part of the corporate headquarters—if not in the same buildings or campus, then at least in the same home country. This may reflect a limited worldview and commitment to international markets. This corporate center also generally remains the center of knowledge creation, certainly at the early stages of internationalization. Thus we would expect the branding, information systems, strategic planning, human resource policies, and financial management to be parallel with those of the core domestic corporation.

The international division structure is generally used in a firm's early-intermediate internationalization process. According to John Stopford and Louis Wells and other authors explaining the structural stages on the path to internationalization, firms tend to begin their international involvement by initially exporting their products and perhaps setting up an overseas sales office. If initially successful, the firm makes structural changes to accommodate their evolving international activities—from international divisions, to area divisions, to a worldwide product division with a global matrix structure, a multidomestic or some global structure.

The international division is thus an intermediate step in reorganizing a firm from domestic to global in scope. As such it is a compromise between home-country orientation and control to realization that the epicenter of the firm has shifted toward foreign markets and a wider worldview. Strauss-Elite, an Israeli food company, added an international division several years ago alongside its domestic coffee, salty snacks, dairy, confectionary, and salads divisions. More recently the structure has been changed to reflect a hybrid global orientation, with two product divisions (coffee and a chocolate company) representing the company's product focus and two geographic divisions (Israel and North America) representing the planned trajectory of market growth.

Howard Perlmutter identifies various mindsets associated with these shifts—including the "polycentric" phase, wherein the firm begins to identify with the foreign markets in which it now operates; and a truly global or "geocentric" mindset. For example, KPMG is a global professional service firm with member firms in 145 countries and a global geographic structure that divides the world into three regions (the Americas, Asia Pacific and Europe, the Middle East and Africa). However, the global firm is divided into three professional practices, namely, Audit, Tax, and Advisory. The emergent matrix structure is at once truly global (or geocentric) in that it enables KPMG to see the world as one market, and at the same time it allows the polycentric specialization in different markets that is essential to the delivery of professional services.

Customer-Focused Structures

More recent work has suggested that the international division structure, along with the other classical dimensions described by Stopford and Wells, has been superseded by approaches that place more emphasis on the customer interface. For example, Julian Birkinshaw and Siri Terjesen suggest that the emphasis has shifted from the classic structures—like product and geographic divisions—to structures that see the world from the customer's perspective. Birkinshaw and Terjesen describe three characteristics of these "customer-focused structures."

First, they include high levels of global integration and coordination to provide service to the customer, for example, using dedicated global customer units to offer a coordinated and higher value-added set of services to key client groups. Second, a high level of value-added through some market-focused structure at the customer interface. And finally, some combination of the integration/coordination unit with the high value-added structure. They call these "true customer-focused structures" and present contemporary examples from IBM, HP, ABB, and EDS that are able to separate between the product-focused business (manufacturing) and the customer-focused structures that give the customer a single point of contact with the firm.

See Also: Geocentric; Globalization; Global Product Divisions; Global Structure; Home Country; Matrix Structure; Multidomestic Structure; Polycentric; Subsidiary.

Bibliography. Julian Birkinshaw and Siri Terjesen, "The Customer-Focused Multinational: Revisiting the Stopford and Wells Model in an Era of Global Customers," in *The Future of the Multinational Company* (Wiley, 2003); Elhanan Helpman, Dalia Marin, and Thierry Verdier, *The*

Organization of Firms in a Global Economy (Harvard University Press, 2008); Charles Hill, *International Business: Competing in the Global Marketplace* (McGraw-Hill Irwin, 2009); J. Johanson and J-E Vahlne, "The Internationalization Process of the Firm: A Model of Knowledge Development and Increasing Market Commitments," *Journal of International Business Studies* (v.8/1, 1977); Howard V. Perlmutter, "The Tortuous Evolution of the Multinational Corporation," *Columbia Journal of World Business* (v.4, 1969); John M. Stopford and Louis T. Wells, *Managing the Multinational Enterprise* (Basic Books, 1972).

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International Finance Corporation

The mission of the International Finance Corporation (IFC), a member of the World Bank Group, is to foster sustainable economic growth in developing countries. IFC focuses its development efforts on the private sector, mobilizing capital in the international financial markets, and providing advisory services to business and governments. IFC emphasizes the actual impact that funded projects will have on the country's economic and societal development.

Since its establishment in 1956, IFC's task has been to work with the private sector to reduce poverty in developing countries. Today, private sector development is seen as the key driver of growth and poverty reduction. IFC supports private companies by providing capital, financial expertise, advisory services, and leadership in setting standards in 140 emerging markets.

IFC provides two main streams of support: investment services and advisory services. Investment services include loans and intermediary services, equity, syndicated loans, structured finance, risk management products, trade finance, sub-national finance, and treasury operations. IFC's advisory services are aimed at creation of a favorable regulatory environment for businesses, providing corporate advice to firms, supporting environmental and social sustainability and infrastructure, and providing access to finance.

IFC uses these services to help companies and financial institutions in emerging markets create jobs, generate tax revenues, improve corporate governance and environmental performance, and contribute to their local communities. The goal is to improve lives, especially for people in developing regions who most need the benefits of growth. These regions include sub-Saharan Africa, east Asia and the Pacific, south Asia, Europe and central Asia, Latin America and the Caribbean, as well as the Middle East and North Africa.

In addition to the direct investments, IFC has substantial impact through its "convening power." This means that when IFC takes the lead entering a new market or offering a new product, other financial institutions often follow along. Accordingly, IFC mobilizes capital through syndications. For many clients, the IFC "seal of approval" for projects is as important as the actual financing.

IFC's largest shareholders include the United States, Germany, Japan, Switzerland, the Netherlands, Australia, Canada, and the United Kingdom. Together the member countries provide IFC's authorized share capital of $2.4 billion, collectively determine its policies, and approve investments.

The president of the World Bank is also president of IFC. IFC's executive vice president and CEO lead its strategy. IFC's corporate governance is vested in a board of governors, whose members are appointed by shareholder governments. The Board of Governors delegates many of its powers to the board of directors, which also represents IFC's member countries. They review all proposed investments. Voting power on issues brought before them is weighted according to the share capital each director represents. IFC's operations are carried out by its departments, most of which are organized by world region or global industry/sector. IFC has over 3,100 staff, of whom 51 percent work in field offices and 49 percent at headquarters in Washington, D.C.

IFC's focus on sustainable economic growth by creating opportunity and improving lives in developing countries sets it apart. Being a member of the World Bank Group, IFC shares the World Bank's commitment to societal development and growth. Investment services focus on long-term partnerships with its clients and sustainable investments. IFC's association with the World Bank allows it to provide a wide range of advisory services to businesses and governments.

IFC promotes investment including microfinancing in frontier markets, those of the poorest countries or in the poorer regions, and particularly industries of middle-income countries. To foster development and growth in these markets, IFC strives to increase private-sector participation in infrastructure, health, and education. In addition, IFC supports efforts to mitigate global climate change by investing in new clean production technologies and providing financing so companies can upgrade to more efficient and cleaner equipment.

See Also: Development Assistance; Economic Development; Microfinance; World Bank, The.

Bibliography. Denis T. Carpio, *Financing Micro, Small, and Medium Enterprises: An Independent Evaluation of IFC's Experience with Financial Intermediaries in Frontier Countries* (International Finance Corporation, World Bank Group, 2008); Dan Crabtree and Hiroyuki Hatashima, *Independent Evaluation of IFC's Development Results 2007: Lessons and Implications From 10 Years of Experience* (International Finance Corporation, 2007); International Finance Corporation, www.ifc.org (cited March 2009); Elisa Morgera, "Significant Trends in Corporate Environmental Accountability: The New Performance Standards of the International Finance Corporation," *Colorado Journal of International Environmental Law and Policy* (v.18/1, 2007); Edward Russell-Walling, "Issuer Strategy—A Successful Issue by the International Finance Corporation Proves the Rand Can Still Attract Interest," *The Banker* (v.158/990, 2008); World Bank, *Doing Business: An Independent Evaluation: Taking the Measure of the World Bank-IFC Doing Business Indicators* (World Bank, 2008).

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International Financial Reporting Standards

International Financial Reporting Standards are accounting rules and principles developed and promoted worldwide by the International Accounting Standards Board. Accounting systems reflect the legislative environments in which they have developed. Consequently, how companies report their financial statements can differ across countries. Faced with such differences, the national accountancy bodies of the world's leading economies in 1973 founded the International Accounting Standards Committee (IASC) to develop and promote internationally recognized financial reporting standards. These standards, the IASC believed, would provide investors and financial analysts with internationally comparable and transparent financial information and enable them to make better economic decisions.

By 2001 the IASC had developed and promoted 41 International Accounting Standards (IAS), providing principles on various accounting topics including the presentation of financial statements (IAS 1), the initial recognition and accounting of property, plant, and equipment (IAS 16), the disclosure of employee benefits (IAS 19), and the reporting of intangible assets (IAS 38).

In April 2001 the IASC was replaced by the International Accounting Standards Board (IASB), which amended some IASs and proposed new International Financial Reporting Standards (IFRSs) on topics for which no IAS standards had previously existed. In 2008, there were eight IFRSs establishing rules for the first-time adoption of IFRS standards (IFRS 1), shared-based payments (IFRS 2), business combinations (IFRS 3), insurance contracts (IFRS 4), noncurrent assets held for sale (IFRS 5), evaluation of mineral resources (IFRS 6), disclosures of financial instruments (IFRS 7), and operating segments (IFRS 8). That same year, nearly 100 countries required, permitted the use of, or had a policy of convergence with IFRSs.

IFRSs have been promoted by a number of different actors. For example, as cross-border financing has grown, multinational enterprises (MNEs) have increasingly used IFRSs to produce comparable and credible financial statements to access international capital markets. In addition, the increased number of nondomestic firms listed on national stock exchanges has been accompanied by an increased number of stock markets that accept financial statements prepared under international standards. In 2008 capital markets in over 50 countries accepted companies who reported their financial statements using IFRSs.

Companies based in developing countries have also driven the application of international financial reporting standards. Eastern European companies, for example, have significantly enhanced their credibility by drawing up their financial statements in accordance with IFRS. The use and stature of IFRS has also benefited from endorsements from political decision makers. For example, the decision by the European Union (EU) requiring all EU-listed companies to prepare their consolidated accounts using IFRSs beginning in 2005 represented a major milestone for the IASB.

Despite the increased use of IFRSs around the world, convergence between IFRS and country-specific accounting principles remains to be fully achieved. The United States, for example, does not plan to implement IFRSs until 2011. Studies have shown that different types of obstacles have impeded the use of IFRSs. Financial costs are one such obstacle because companies consider the transition to IFRSs to be a costly, complex, and burdensome process requiring, for example, investments to update IT systems so that they can handle IFRS financial statements. Another obstacle is patriotism. Some countries, such as France, are attached to their accounting systems and reluctant to abandon them for ones considered to be inferior. Former colonies of imperial powers can also be sensitive to external intrusions. This helps explain why India and Pakistan currently prohibit companies from using IFRS standards.

Culture presents a further barrier to the use of international accounting standards. For example, French accounting principles have historically stressed conservatism and prudence, as shown, for example, by the requirement that companies report their assets at historical cost. This attachment to conservatism can help explain why French accounting companies, banks, and insurers were concerned about problems of earnings volatility and resisted the introduction under IFRSs of fair-value accounting (whereby annual changes in the value of assets are reported in the income statement). It remains to be seen whether the IASB can overcome these obstacles and further increase the use of IFRS standards.

See Also: Accounting Harmonization; Disclosure Requirements; Financial Reporting; International Accounting Standards Board.

Bibliography. David Alexander and Christopher Nobes, I*nternational Financial Reporting Standards: Context, Analysis and Comment* (Routledge, 2008); Keith Alfredson, *Applying International Financial Reporting Standards* (John Wiley & Sons Australia, 2007); Nick Antill and Kenneth Lee, *Company Valuation Under IFRS: Interpreting and Forecasting Accounts Using International Financial Reporting Standards* (Harriman House, 2008); Barry Jay Epstein, and Eva K. Jermakowicz,*Wiley IFRS Policies and Procedures* (John Wiley & Sons, 2008); IAS Plus, *IFRSs in Your Pocket 2008* (Deloitte Touche Tohmatsu, 2008); Alan Robb and Susan Newberry Robb, "Globalization: Governmental Accounting and International Financial Reporting Standards," *Socio-Economic Review* (v.5/4, 2007); *Wiley IFRS 2009 Interpretation and Application of International Accounting and Financial Reporting Standards 2009* (John Wiley & Sons, 2009); Charlotte Wright, "Current Developments: International Financial Reporting Standards," *Petroleum Accounting and Financial Management Journal* (v.26/3, 2007).

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Internationalization

In the past 20 years, an increasing number of firms have changed their orientation from domestic to international marketing and/or production. Internationalization is accordingly when firms extend their products or services in overseas markets, usually from their home country.

Among the foreign market operation modes firms can use for their internationalization are exporting, licensing, franchising, joint ventures, strategic alliances, or wholly owned foreign direct investment (FDI), such as greenfield investments and mergers and acquisitions. Although in the literature, the foreign market operation mode has mostly been regarded as a singular entity, in the more complex business reality, firms often use multiple or mixed modes in the same foreign market.

Possible advantages of internationalization are the extension and expansion of market (e.g., increasing sales in foreign markets), the diversification of the risk of overreliance on the home market, the exploitation of resources in other countries, the taking advantage of economies of scale, the acquiring of economies of scope (i.e., the building and using of foreign market expertise in against your rivals) in R&D, marketing and distribution systems, etc. Because of these advantages, internationalization can lead to higher corporate performance, higher profitability and more stable profits.

Several theories and models of internationalization have examined the timing strategies of firms. Especially, there is ample evidence in support of the so-called stages models of internationalization, such as the Uppsala model. These models view internationalization as a sequential incremental process with a varying number of stages. At first, firms develop products and services for domestic markets. After having grown and being well established in their home market, the firms begin venturing abroad by transmission of knowledge and domestic-based practices to other countries, usually to those that are similar to the domestic market in terms of culture and language—therefore mostly to nearby countries first. In the initial years of internationalization, foreign market entry is a gradual commitment of resources, often beginning with export, thereby gaining first knowledge about and establishing ties (to politics, local business, etc.) in the target. As these ties deepen, more resources are invested abroad, often in form of a marketing subsidiary that is being founded. In a next step, foreign production might be established.

Although widely empirically supported, over the last decade, there has been much debate over the applicability of the stage models of internationalization towards certain firms, especially small firms in the high-tech sectors. Especially with regards to the so-called born globals (or international new ventures), i.e., firms that engage in international operations from the first day of their establishment, conventional stage theories with their gradual establishment of internationalization activities do not seem to be applicable anymore.

Due to the new economic landscape, internationalization has also accelerated among these small and new enterprises, because international markets can represent new entrepreneurial opportunities. Mostly because to their size, these firms display several of the characteristics that are advantageous for internationalization, such as high flexibility and short lines of communication. In the process of internationalization, small and new firms are confronted with the notion that often neither the development of a subsidiary (greenfield investment) nor the purchase of a company in the target market (brownfield investment) represent an attractive or even possible option. Recent literature therefore especially suggests cooperation or joint ventures with local partners as promising internationalization strategies for small and new firms.

See Also: Entrepreneurship; Entry Mode; Foreign Direct Investment, Horizontal and Vertical; Globalization; Micro-multinational; Multinational Corporation.

Bibliography. Leo Paul Dana, *Handbook of Research on European Business and Entrepreneurship: Towards a Theory of Internationalization* (Edward Elgar, 2008); Jean Guinet and Koen De Backer, *The Internationalisation of Business R&D: Evidence, Impact and Implications* (OECD, 2008); Daniel S. Hamilton and Joseph P. Quinlan, *Globalization and Europe: Prospering in the New Whirled Order* (Center for Transatlantic Relations, Johns Hopkins University, 2008); J. W. Lu and P. W. Beamish, "The Internationalization and Performance of SMEs," *Strategic Management Journal* (2001); B. M. Oviatt and P. P. McDougall, "Toward a Theory of International New Ventures," *Journal of International Business Studies* (1994); Donna L. Paul and Rossitza B. Wooster, "Strategic Investments by US Firms in Transition Economies," *Journal of International Business Studies* (v.39/2, 2008); D. D. Sharma and A. Blomstermo, "The Internationalization Process of Born Globals: A Network View," *International Business Review* (2003); Beth A. Simmons, Frank Dobbin, and Geoffrey Garrett, *The Global Diffusion of Markets and Democracy* (Cambridge University Press, 2008).

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Internationalization Model

The internationalization process of the firm has been of interest to researchers for decades. Indeed, the process of internationalization has been the subject of widespread theoretical and empirical research. Over this time, the views about the process of foreign expansion and about drivers explaining the logic of the process have evolved.

One difficulty with scholarship relating to internationalization is that most of the research has concentrated on large firms, using cross-sectional studies or case studies and often focusing on one country of origin. However, the internationalization of smaller firms across different countries and regions has increasingly been of more practical concern to international business. More particularly, small and medium-sized firms (SMEs) and their role in the internationalization process are gaining increasing attention by both academics and the business community. This is so because the fall in trade barriers over the last few decades, the increasing importance for the world's economies of innovation and new technology, and the general expansion in globalization have meant a growing role of SMEs in international markets. While there has been research on the applicability of international models to SMEs, they are decidedly limited. Yet, the internationalization process of SMEs has paramount importance for economic development, especially in smaller economies where local markets cannot by themselves sustain growth. Continued economic expansion in these economies requires their SME population to successfully enter into foreign markets.

Recent investigations that do exist have in particular examined the rise within, and internationalization of SMEs from, a growing range of Asian and eastern European countries. With respect to the situation in eastern Europe, we observe that, as the European Union (EU) has expanded and become more internally integrated, central and eastern European SMEs find themselves with greater access to international markets. Thus attention increasingly has been shifting to how these so-called transition economies—Hungary, Poland, the Czech Republic, the Baltic States, etc.—can effectively compete internationally with western Europe and the United States. The rise of entrepreneurial SMEs in Asia and eastern Europe, and their ability to generate value added by operating in the global arena, is seen as key to the eventual success of these countries.

Over the last three decades, several internationalization theories have evolved. Some have concentrated only on development of exports and on the steps prior to exports. For example, S. T. Cavusgil distinguished five steps or stages involved in the evolution of exporting activity of firms. These various other studies distinguish between "lower," "middle," and "higher" stages of export involvement.

Entry Modes

There have been studies that look at the reasons why SMEs increase the breadth and depth of their exporting activities. When barriers arise to internationalization, these investigations tend to focus on internal problems in a country, such as political instability, decaying infrastructure, and so forth. But beyond this more empirical focus are broader theories that see internationalization as advancing either in increments (staged) or "rapid leaps." In the former case, rapid SME internationalization is assumed unlikely because of financial constraints, the lack of international market experience or information, cultural friction, and other factors. Thus the incrementalists hold that SMEs will internationalize and create value for a country in an evolutionary manner, first undertaking the least complex forms of entry (e.g., exporting) and then evolving into more complicated types of market entry strategies—from the rather passive forms of contracting work (e.g., becoming part of an outsourcing network) to the more active entry modes of licensing, joint venturing, and merging and acquiring.

In 1970s and 1980s, a number of Scandinavian authors published articles on the internationalization process of SMEs that appears to support the incrementalist model. The so-called Upsala School of scholarship suggests sequential modes of entry into successive foreign markets with a progressive deepening of commitment to each market. In these theories, the initial lack of market-specific knowledge and the subsequent need for a gradual learning process are the main assumptions. These theories see firms starting their internationalization process in culturally and geographically close markets. This research focuses on the concept of "psychic distance" as an important factor involved with the gradual approach and examines factors related to the hindrances to the flow of information needed for SMEs to internationalize, such as language differences, differences in culture, political systems, level of education, or level of industrial development. Initial lack of market experience causes firms to be cautious and rather risk averse in their approach to committing resources. As they gradually learn to cope with a target market environment, the perceived threats are reduced and commitment, including financial commitment, increases. Feedback from activities in each subsequent entry mode helps them to advance to the next level; from simple exporting to engaging in wholly owned subsidiaries.

Sharply contradicting these staged-based theories are studies that argue that firms in high-tech industries often have to be global as soon as they enter the foreign market (the so-called born-global model) and that the concept of incremental development does not hold when a firm's owner manager has accumulated market knowledge even before the establishment of the current firm or when demand is inherently global.

It is not clear the extent to which internationalization, once started, continues unabated within a firm or country. There is increasing evidence that the internationalization process contains within it the seeds of its own destruction—or at the least curtailment. Recent studies suggest that, in certain contexts, inward-outward linkages that may initiate the internationalization process can, at a certain point, hinder as well as propel outward international expansion. This has broad implications related to the rate and direction of SME internationalization and, in turn, the ability of an industry to create and capture value added, that is essential in future economic growth.

see also: Entry Mode; Export; Global Competitiveness Index; Globalization; Internationalization.

Bibliography. P. J. Buckley and P. Ghauri, *The Internationalization of the Firm* (Academic Press, 1993); S. T. Cavusgil, "On the Internationalization Process of Firms," *European Research* (v.8/6, 1980); Mary Han, "Developing Social Capital to Achieve Superior Internationalization: A Conceptual Model," *Journal of International Entrepreneurship* (v.4/2–3, 2006); John S. Hill, *International Business: Managing Globalization* (Sage, 2009); Elizabeth Maitland, Elizabeth L. Rose, and Stephen Nicholas, "How Firms Grow: Clustering As a Dynamic Model of Internationalization," *Journal of International Business Studies* (v.36/4, 2005); L. Melin, "Internationalization as a Strategic Process," *Strategic Management Journal* (v.13, 1992); A. I. Millington and B.T. Bayliss, "The Process of Internationalisation: UK Companies in the EC," *Management International Review* (v.30/2, 1990); Janet Morrison, *International Business: Challenges in a Changing World* (Palgrave Macmillan, 2009); K. A. Nordstrom, "The Internationalization Process of the Firm: Searching for New Patterns and Explanations," Ph.D. diss. (Stockholm School of Economics, 1991); A. R. Reuber and E. Fischer, "The Influence of the Management Team's International Experience on the Internationalization Behaviors of SMEs," *Journal of International Business Studies* (v.4, 1997); D. Sullivan and A. Bauerschmidt, "Incremental Internationalization: A Test of Johanson and Vahlne's Thesis," *Management International Review* (v.30/1, 1990); P. W. Turnbull, "A Challenge to the Stage Theory of the Internationalization Process," in *Managing Export Entry and Expansion*, P. J. Rosson and S. D. Reid, eds. (Praeger, 1987); L. S. Welch and R. Loustarinen, "Internationalization: Evolution of a Concept," *Journal of General Management* (v.2, 1988).

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International Labour Office/ International Labour Organization

The International Labour Organization (ILO) is the United Nations (UN) specialized agency that seeks "to promote rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue in handling work-related issues." It was created at the Peace Conference on January 25, 1919, at Versailles, and in May 2008 the ILO counted 181 member states. Since its creation, the ILO has been the single most influential force—both operational and scholarly—in the international world pressuring governments to take a more humane posture on labor.

The ILO has a unique arrangement within the UN system. It has a "tripartite" format in which representatives of governments, employers, and workers collectively discuss and shape policies and programs at the international level, incorporating a multilevel knowledge about employment and work. This tripartisim is encouraged within ILO's member states by promoting social dialogue. The ILO formulates international labor standards in the form of conventions and recommendations setting the standards for labor rights: freedom of association, the right to organize, collective bargaining, abolition of forced labor, equality of opportunity and treatment, and other standards addressing work-related issues.

The ILO has four strategic objectives:

> (1) promote and realise standards and fundamental principles and rights at work; (2) create greater opportunities for women and men to secure decent employment and income; (3) enhance the coverage and effectiveness of social protection for all; and (4) strengthen tripartism and social dialogue.

The main organs of the ILO are the International Labour Conference, the Governing Body, and the International Labour Office, headed by a director general. The national delegations of the ILO member states meet every year in June at the International Labour Conference in the organization's headquarters in Geneva. Each delegation is composed of two government representatives, an employer representative and a worker representative. Also, alternates and technical advisers generally appointed by the cabinet ministers assist government representatives. Consensus in the national delegations is not required, and each representative has one independent vote. Employers and workers are free to express their views and the vote reflects the positions of their organizations. The Conference is the ILO's policy-making and legislative body. It is also an annual space for the discussion of labor and social issues, and it is within the Conference that international labor standards are established and adopted.

The Governing Body is a tripartite body composed of 56 voting members—28 government members, 14 employer members, and 14 worker members. It is the executive council of the ILO and is elected every three years at the Conference, taking into account geographical distribution. The Governing Body generally meets three times a year. Among its functions are the supervision and application of international labor standards; the design of the agenda for the annual Conference and other ILO meetings; the establishment of the budget to be approved by the Conference; monitoring of the decisions taken at the Conference; and deciding on actions to be taken. The Governing Body also has the function of appointing the director general and directing the activities of the International Labour Office.

A worker at a brick factory in Bangladesh. The ILO pressures governments around the world to improve labor standards.

The International Labour Office, located in the headquarters, is the permanent secretariat of the ILO, and it is the focal point for the organization's overall activities. It prepares the background material for the specialized meetings of the organization and the conferences. It also engages in research and education activities, recruits technical cooperation experts, collects information and statistics relevant to the world of work, issues a broad range of specialized publications (studies, reports, and periodicals), provides the secretariat for the conferences, and assists employers, workers' organizations, and government departments in labor and social matters.

The International Labour Office employs around 1,900 officials at the Geneva headquarters. It also engages with 600 experts undertaking missions of technical cooperation around the world.

The director general is the head of International Labour Office. Since its creation, the ILO has had nine directors general: Albert Thomas, France, 1919–32; Harold Butler, United Kingdom, 1932–38; John G. Winant, United States, 1939–41; Edward J. Phelan, Ireland, 1941–48; David A. Morse, United States, 1948–70; Wilfred Jenks, United Kingdom, 1970–73; Francis Blanchard, France, 1973–89; Michel Hansenne, Belgium, 1989–99; Juan Somavia, Chile, 1999 to present.

The ILO also has regional offices located in Abidjan, Bangkok, Beirut, Lima, and Geneva, and they are supported by 40 ILO offices in other countries. The ILO also holds sectoral meetings and committees in order to facilitate views on the problems faced in different economic sectors and explore specific solutions within them. There are 22 sectoral committees in industry, maritime and transport, and public and private services.

See Also: Child Labor; Labor Standards; World Health Organization; World Trade Organization.

Bibliography. Drusilla K. Brown and Robert M. Stern, *The WTO and Labour and Employment. Critical Perspectives on the Global Trading System and the WTO, 14* (Edward Elgar, 2007); International Labour Office, *International Labour Standards: A Workers' Education Manual* (1998); International Labour Organisation (ILO), "About the ILO" (2008); ILO, *The ILO at a glance* (2007); Everett M. Kasalow, "The Comparative Labour Field," *Bulletin of the International Institute of Labor Studies* (v.5, 1968); Bruce E. Kaufman, *The Global Evolution of Industrial Relations: Events, Ideas and the IIRA* (International Labour Office, 2004); Tsuyoshi Kawakami and Kazutaka Kogi, "Ergonomics Support for Local Initiative in Improving Safety and Health at Work: International Labour Organization Experiences in Industrially Developing Countries," *Ergonomics* (v.48/5, 2005); Daniel Roger Maul, "The International Labour Organization and the Struggle against Forced Labour from 1919 to the Present," *Labor History* (v.48/4, 2007); Guiseppe Nesi, Luca Nogler, and Marco Pertile, *Child Labour in a Globalized World: A Legal Analysis of ILO Action* (Ashgate, 2008); Bala Subramaniam, "Work of the International Labour Organization (ILO) Concerning Security, Safety & Health in Ports," *Ports and Harbors* (v.48/8, 2003).

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International Law

International law should more appropriately be named *transnational law*. Transnational law is defined by Philip Jessup as "all law which regulates actions or events that transcend national frontiers." Transnational law encompasses public international law, private international law, and foreign and comparative law. It includes not only norms that are "international" by their nature, such as treaties or customs, but also domestic rules and principles governing transnational issues, such as Chinese law dealing with foreign litigants or with Spanish business activities abroad. This entry is organized into the three definitional areas: public international law; private international law, including international dispute resolution; and transnational transactions.

Public International Law

Public international law has usually been defined as the law of relationships between "states" (nations or countries). A more expansive definition now in use comes from U.S. law experts: the rules and principles of general application dealing with the conduct of states and of international organizations and with their relations inter se (among themselves) as well as with some of their relations with persons, whether natural or juridical. The sources of public international law include (1) treaties, conventions, protocols, charters of international member-state organizations (e.g., the United Nations), and executive agreements; (2) customary international law; and (3) principles common to major legal systems. Note that no international laws that apply to all nations and citizens of the world are enacted by a supernational body, such as the United Nations. When an issue of international law arises, it may be raised in the courts of a particular nation or in an international forum created by the consent of some or all nations (e.g., the World Trade Organization).

A treaty is an agreement between countries, which can be bilateral (two nations), trilateral (three nations), or multilateral (more than three). There are thousand of treaties in effect globally at this time, covering almost every imaginable aspect of global relations from the law of the sea to human rights to war to commerce. International organizations may also be included in treaties. A convention is also an agreement or compact between nations, often negotiated though the United Nations on a regional or global basis. Protocols are agreements that typically address matters less important than treaty language, but frequently relate to treaty matters. Executive agreements are entered by the chief executive officer of a nation.

In the United States, treaties are recognized in the Constitution, binding on federal and state governments. Some treaties are self-executing, that is, once adopted, these treaties are binding. Executory treaties, on the other hand, need a domestic law enacted by the legislature or an act of the president to be effective. In the United States, executive agreements are as binding as treaties. Some of the agreements can be entered by the president alone, and some are based on congressional authority or a treaty, allowing the president to execute the agreement.

Many treaties affect the conduct of global business and foreign investment. There are numerous intellectual property rights treaties, often bilateral, and domestic laws in various countries which implement the treaties. A summary of the previously informal customary international law that governs all treaties is itself found in a treaty signed by 97 countries: the 1980 Vienna Convention on the Law of Treaties.

Businesses are affected by many public international agreements, especially executive agreements. Trade agreements, the anti-bribery convention, environmental treaties, and protection of intellectual property rights treaties all have a profound impact on international business, be it direct foreign investment, licensing, or importing/exporting.

Trade agreements are often executive agreements that address trade goals, such as liberalizing trade through reduced tariffs or non-tariff barriers, or protecting trade through quotas or tariffs. Trade barriers include tariffs, also known as import duties. Tariffs can be assessed ad valorem (as a percentage of value) or as flat tariffs (based on the number of units). Non-tariff barriers include embargoes and quotas, and indirect non-tariff barriers. Embargoes can dictate a complete ban on imports and/or exports with a foreign nation or a ban on certain goods. Quotas are limits on the number of imports into a country, based on value or quantity. Indirect non-tariff barriers are laws, regulations, practices, and social values that result in reducing the purchase of foreign goods.

Historically, countries have imposed trade barriers for many reasons: tax collection, protection of domestic industry, foreign policy support, national defense, protection of the environment or natural resources, promotion of cultural or religious values, protection of public health and safety, and reciprocation for the barriers of other countries. As countries came to realize that trade barriers may benefit parochial interests, the countries have also determined that barriers damage the international economy. To fully benefit from globalization, most countries are establishing rules to attempt to reduce barriers, notably through the General Agreement on Tariffs and Trade (GATT).

GATT Principles

Almost every industrial sector of the economies of developed countries is now governed by trade agreements. The most significant agreement is the GATT of 1994, which among other provisions, created the World Trade Organization (WTO). The purpose of the original GATT of 1947, signed by 23 countries, was to promote and expand trade between signatory nations by reducing tariffs and non-tariff barriers. Over 125 countries, called members, have now adopted the 1994 GATT, which includes the 1947 provisions, many multilateral trade agreements, and the Uruguay Round Agreements. The Uruguay Round addresses specialized areas of trade relations. GATT requires the domestic trade rules of members to be based on GATT principles.

The WTO sets policies and rules to implement GATT principles and settles trade disputes between nations. It is not, however, a forum for litigation between private parties. The WTO includes about 150 members—all the members of GATT and other countries if two-thirds of the WTO members approve the nation's application.

One critical rule of GATT and WTO is that a nation cannot retaliate against another nation that has imposed a trade restriction. The offended member must proceed through the WTO dispute resolution process. The remedy may in fact include permission to impose a retaliatory trade restriction against the offending member.

Marketing laws come into play when companies hire representatives to promote products abroad. In some countries, such as the United States, there are few, if any, restrictions on the relationship between a company and its representatives. In other countries, local representatives are protected by domestic laws, regardless of a contract between the parties. France, Paraguay, and the European Union, for example, have protectionist provisions for representatives.

Recent Developments in Public International Law

An area of public international law that has gained attention since the mid-1970s has been anti-bribery legislation. Almost every country bans bribery of its public officials. A few countries also ban their citizens from paying bribes to officials in foreign countries. In 1977, the U.S. Congress adopted the Foreign Corrupt Practices Act, the only act of its kind among all nations for 20 years. In 1999, several countries, including all major European countries, adopted the Convention on Combating Bribery of Foreign Public Officials in International Business (CCB). Most of the large international companies are headquartered in nations that have adopted the CCB.

Attention to environmental concerns has grown exponentially in the past half-century. Many laws have been passed by nations, and regional environmental treaties have been adopted addressing some environmental issues. The United Nations adopted the Stockholm Declaration on the Human Environment in 1972, leading to over 30 multilateral agreements. Over 100 nations have adopted the treaty governing transboundary movements of hazardous wastes, the Basel Convention on Transboundary Movements of Hazardous Wastes and Their Disposal. More than 150 nations signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora that governs the import and export of endangered species. The Montreal Protocol addresses the ozone layer and has been very controversial among developed countries. The 1992 Framework Convention on Climate Change and the 1997 Kyoto Protocol have attempted to limit emissions, with no agreement on enforcement mechanisms to date. Businesses will have to take the then-current status of environmental treaties into account when developing locations abroad and at home.

Intellectual property rights (IPRs) include protections for inventions, literary, architectural and artistic works, and words, phrases, symbols, and designs that are eligible for patents, copyrights, and trademarks. Each country grants certain right to the owners of the material. The 2000 GATT Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) requires its member nations to adopt minimum IPR protections and effective enforcement mechanisms. The signatories must abide by the earlier Paris Convention (patents and trademarks) and Berne Convention (copyrights) that result in foreign IPR holders having the same protection as domestic holders of patents, copyrights, and trademarks.

The 1970 Patent Cooperation Treaty centralized the application process for international protection of patents. The UN World Intellectual Property Organization (WIPO) processes the applications and sends them to countries that the applicant specifies, or to the European Union for its member countries. A similar system exists through WIPO for trademarks. Companies must take care about relying on TRIPS, as various nations are seeking mechanisms to delay compliance or interpret its provisions to protect domestic businesses, rather than foreign holders of IPRs.

A growing concern for global business is the issue of human rights. Nongovernmental organizations (NGOs) and corporations are forming alliances to address human rights in the business setting. Under the auspices of the United Nations, over 60 signatories, including some major global companies, signed a "global compact" in 2000 to support human rights, eliminate child labor, allow trade unions, and protect the environment. Lawsuits have been filed under the U.S. Alien Tort Claims Act, passed over 200 years ago, claiming multinational companies can be liable for human rights abuses by foreign governments that helped the companies, when the multinational knew and condoned the violations. In 2005, Unocal agreed to settle such a lawsuit claiming the oil company encouraged and assisted the rape, torture, and murder of Burmese locals by government soldiers so that Unocal could build a gas pipeline.

Private International Law

Private international law deals with the relationships between parties and conflicts of laws when the parties are in a legal dispute. The relationships are largely dictated by private contracts between parties. There are, however, several treaties and conventions that attempt to introduce common ground for transactions. Notably, the Convention on Contracts for the International Sale of Goods (CISG), adopted by some 64 countries, determines the rights of buyers and sellers of most merchant goods in signatory countries, unless the contracting parties opt out of the Convention or have contract provisions that supersede the Convention. Three large categories of sales excluded from the CISG are (1) consumer goods sold for personal, family, or household use, (2) many labor or service contracts, and (3) stocks, securities, negotiable instruments, and money.

As is the case in most countries, contracts may be enforced under CISG if they were entered (1) by mutual consent, (2) with legal consideration (a bargained exchange, whether goods, money, or otherwise), (3) with legal capacity (not legally incompetent, minors, or under the influence of drugs or alcohol), and (4) for a legal purpose. The Convention addresses contract performance and remedies for breach.

International disputes can be resolved in a number of ways. Diplomatic channels are often the first line of approach, whether nations themselves are involved or citizens and businesses of those nations are in dispute with each other or with a foreign government.

The International Court of Justice (World Court) formed under the United Nations Charter hears certain cases, but only when states are in dispute with each other, or states file a claim on behalf of individual citizens or businesses whose rights have been violated and the complaining state alleges that the violation also infringes on the state itself. Both complainant and respondent are free to submit to the jurisdiction of the World Court, but are not required to do so. For the above reasons, few business disagreements are heard at the World Court.

In the world of commerce, business contracts typically specify how disputes will be resolved, through a choice of court and law, or by alternative dispute resolution, such as mediation or arbitration. A sales contract dispute between a European country and China will be heard typically in the courts identified in the contract, and the law of the country the parties specified will be applied by the courts. The cases can be complicated when a court in a given country must apply law from another country, often involving experts to testify as to what the foreign law provides linguistically and legally. In the absence of contract language, elaborate rules are considered by the courts, such as the legal presence of a litigant in the jurisdiction of the court, which body of law to apply, where the disputed transaction occurred, where the contract was made, where it was to be performed, and other matters.

Issues that often arise in both domestic and international cases are proper jurisdiction and proper forum. Even if parties to a contract agree to use a particular court or court system, a threshold question is whether the court is authorized by law to hear the particular type of subject matter in the case in controversy. In addition to subject matter jurisdiction, the court must obtain jurisdiction over the person or an object in controversy. If an object, such as real estate or personal property, is in the geographic jurisdiction of the court, the requirement is satisfied. If a defending person or business or government is being sued, the court obtains jurisdiction if the defendant has the requisite degree of contact in the geographic locale, and if the defendant is properly served the pleadings filed by the suing party.

In addition to proper jurisdiction, the forum or geographical location of the court must be proper. Often, more than one court has proper jurisdiction, and the proper location must be chosen. A case is eligible to be heard in different courts, depending on the country and state, including where defendants reside, where the cause of action arose, where a contract was made, where a contract was to be performed, or where all the plaintiffs reside. The court can transfer a case, even if venue is proper, if it determines another court would be more convenient for parties and witnesses and justice would be better served. This forum non conveniens principle can apply in any court case, whether criminal or civil. A noted example involved the chemical leak disaster in Bhopal, India, resulting in Indian citizens filing suit in New York federal court against Union Carbide. The judge dismissed the case, in favor of Indian courts, as most of the evidence, records, and Hindi-speaking witnesses were in India, as well as several other reasons that made India the better forum to administer justice.

Once a judgment is entered against a defendant, a problematic procedure arises in the international context. Enforcement of a judgment in a foreign nation presents special problems. For example, if the defendant did not appear in court, he may argue that the method used to serve him was unfair under his own nation's laws. He can challenge the judgment in his country, and if the foreign court agrees with him, it will not honor the judgment and allow collection to proceed. Many countries have signed the Hague Convention on Service Abroad of Judicial and Extra-Judicial Documents in Civil and Commercial Matters, which addresses service, albeit not uniform for the signatory countries.

Foreign and Comparative Law

Where no international agreement controls a particular area of activity, companies are subject to domestic laws, regulations, and customs. Businesses face myriad differences in laws in foreign countries. For example, domestic marketing laws come into play when companies hire representatives to promote products abroad. In some countries, such as the United States, there are few, if any, restrictions on the relationship between a company and its representatives. In other countries, local representatives are protected by domestic laws, regardless of a contract between the parties. France, Paraguay, and the European Union, for example, have protectionist provisions for representatives that override negotiated terms in a contract.

When advertising abroad, nations place a varying degree of control over media and message. In some countries, sexual innuendo or explicit messages might be ignored, while in other countries, severe punishment may ensue, including personal punishment for the company's local representative. The European Union, the United States, and most other countries have bans on false advertising. The interpretation of what constitutes false advertising varies, however. In the United States, for example, false advertising must be a misstatement of fact, not mere opinion or exaggeration. In Japan, exaggeration is also forbidden. Many countries strictly regulate advertising available or aimed at children. The European Union prohibits advertising that directly encourages minors to persuade their parents to purchase the goods or services advertised. Some countries, notably France, ban advertising in any language other than their own languages. Some countries ban advertising of certain products, such as alcohol and tobacco.

The corporation and tax laws of countries can encourage or hamper foreign business. Direct foreign investment in subsidiaries or branch offices is subject to the host country's tax laws, absent a tax treaty. Even with a treaty, definitions of income, allowable deductions and their limits, depreciation treatment, and e-sales treatment are calculated domestically. A home country for a business may have restrictions on tax avoidance by establishing facilities in low-tax-rate countries. All countries control ownership in some or all industries. Foreign investors may have to partner with host companies or citizens to purchase property, enter leases, and operate facilities. A few countries do not allow foreign majority control of any branch or subsidiary.

The history of nationalization and expropriation of assets shows a marked difference among nations in cultural and political treatment of foreign investment. Communist and socialist governments nationalized all domestic and foreign business. In the second half of the 20th century, nations in Latin America, Africa, and Asia expropriated only foreign business assets. The prevailing, although not exclusive, view now is that government has the right to take private property under the condition that the taking is for a public purpose, often hotly debated. Whether compensation is just and prompt depends on the nation taking the property. Investors can purchase political risk insurance, but the cost is often prohibitive or has a considerable effect on the enterprise.

Companies operating offices and facilities in foreign countries are subject to the host domestic labor laws. Employee benefits, such as paid medical leave, will vary. Employee dismissal for no reason will be allowed in some countries, including the United States, unless a union contract is in force, or anti-discrimination laws apply. In other countries, considerable legal restraints and guaranteed employment may govern. Some nations require employee involvement in management by inclusion on the board of directors, sometimes, or other methods. When a foreign purchaser acquires a domestic business, the investor may step into the seller's place with respect to employee rights and union contracts. By contrast, in the United States, when a company is sold, all employees may be terminated unless a union collective bargaining agreement provision has restrictions.

A key consideration for foreign investment is the degree to which antitrust regulations will affect business. Most countries have one form or another of antitrust or competition legislation. Some are detailed, such as Germany's, and some leave much interpretation to the courts, such as the United States and Japan. The basic principle in each law is the prevention or distortion of competition. Vertical arrangements between manufacturers and suppliers, distributors, and customers may all be subject to review in certain countries. Perhaps exclusive distribution agreements are banned; perhaps a company cannot have more than a certain percentage of market share in an industry, perhaps exclusive patent licensing is banned.

Engaging in global business is a complex undertaking, requiring knowledge on many fronts. The legal considerations alone are formidable and demand competent counsel from experienced international advisors.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Antitrust Laws; Arbitration; Bhopal Disaster; Foreign Corrupt Practices Act; General Agreement on Tariffs and Trade; International Centre for Settlement of Investment Disputes; International Labour Office/International Labour Organization; Mediation; World Trade Organization.

Bibliography. Ray A. August, Don Mayer, and Michael Bixby, *International Business Law*, 5th ed. (Pearson Prentice Hall, 2008); Malcolm D. Evans and Patrick Capps, *International Law* (Ashgate, 2009); Georgetown Journal of International Law, www.law.georgetown.edu/journals (cited March 2009); Andrew T. Guzmán, *How International Law Works: A Rational Choice Theory* (Oxford University Press, 2008); Oona A. Hathaway, "Why We Need International Law," *Nation* (v.285/16, 2007); International Bar Association, www.ibanet.org (cited March 2009); "International: Controlled Explosion," *Economist* (v.382/8514, February 3, 2007); "International: Escaping the Terror List," *Economist* (v.386/8565, February 2, 2008); Charlotte Ku and Paul F. Diehl, *International Law: Classic and Contemporary Readings* (Lynne Rienner, 2009); Russell A. Miller and Rebecca M. Bratspies, *Progress in International Law* (Martinus Nijhoff Publishers, 2008); Richard Schaffer, Filiberto Agusti, and Beverley Earle, *International Business Law and Its Environment*, 7th ed. (Thomson South-Western, 2008).

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International Marketing Research

With the fast pace of globalization, the necessity to understand customers in all corners of the globe is becoming imperative. Hence, overcoming the challenges of international marketing research is rapidly gaining in importance in multinational organizations. Information needs are changing and becoming more complex and diverse in a hypercompetitive environment in both developed and developing countries.

Traditional markets in developed economies are now increasingly becoming geographically integrated as direct vertical links and information flows are established between customers, retailers, and suppliers. Consequently, it is imperative to conduct research spanning country boundaries in order to examine the differences between the regional and global market segments.

According to ESOMAR in 2008, the international marketing research turnover was $24.6 billion in 2007, representing a growth of 6.8 percent over the previous year, and a net growth of 4 percent, when adjusted for inflation. The fastest expansions were among the BRIC (Brazil, Russia, India, and China) countries, all experiencing double-digit net growths, along with 19 other markets in the world. Latin America was the fastest growing region with a sharp increase in growth at 17.1 percent (11.3 percent after inflation), accounting for well above $1 billion in revenues. The growth rate remained stable in Europe at 5 percent (2.8 percent after inflation), and in North America at 6.6 percent (3.4 percent after inflation).

Online research has grown dramatically in the last decade, and is now the fastest growing methodology with a total spending of around $3 billion in 2007, an increase of 14 percent over the previous year. The largest absolute increase took place in the United Kingdom (UK), the second largest national research

A Coca-Cola ad in Morocco. International market research helps firms target customers in unfamiliar markets.

market, where online spending almost doubled. The major reasons for the rapid growth of this methodology are speed of delivery and low costs. The most successful companies using this method are mostly focused on providing analytical services to meet client needs, differentiate offerings, and benefit from the ensuing competitive edge.

Most of the world's market research is conducted in Europe with a turnover of $10.6 billion (43 percent market share), followed by North America $8.9 billion (36 percent), Asia Pacific $3.53 billion (14 percent), Latin America $1.22 billion (5 percent), and the Middle East and Africa $.39 billion (2 percent). The largest country markets (growth) are in the United States with a turnover of $8.23 billion (+6.6 percent growth), followed by the UK at $2.4 billion (+2 percent), France at $2.2 billion (+2.5 percent), Germany at $2.2 billion (+5 percent), and Japan at $1.4 billion (+4.3 percent).

The global marketplace is in transition—rapid developments in mass communications technology and global and regional media such as CNN, MTV, CNBC, etc., have apparently created a homogenization of expectations and preferences. It is imperative to collect relevant information to validate such assumptions as whether or not teenagers in a particular market do indeed share similar interests in fashion, music, films, and sports as new trends and related products are rapidly diffusing through the global media. The expansion of modern retailing worldwide incorporating point-of-sale (POS) scanner technologies, and modern merchandising practices have also facilitated the collection of syndicated scanner data in many more countries in the globe. The rapid growth of malls has made it possible to conduct mall intercept interviews. Nevertheless, international marketing researchers also have to address the problems of availability and the use of secondary data in many underdeveloped markets, and the reliability, validity, and the comparability of data across various markets.

International marketing research continues to be driven by a shift in focus to emerging markets, which are increasingly becoming the industry's growth engines, in synchronization with the growing force of globalization. The major research firms within the industry continue to broaden their client base, which seek to outsmart their competitors by identifying the most lucrative opportunities and targets for investments. The most intense competition for market share of research services continues to be in the most mature markets, which enjoy stable overall market growth. The international research firms continue to expand their analytical and consultancy services and growing their innovative products.

See Also: Cross-Cultural Research; Focus Groups; Global Brand Strategy; Lifestyle Research; Management Research; Marketing; Market Research; Research Methods: Mixed Methods; Research Methods: Qualitative; Research Methods: Quantitative.

Bibliography. M. Carrigan, S. Marinova, and I. Szmigin, "Ethics and International Marketing Research Background and Challenges," *International Marketing Review* (v.22/5, 2005); S. Tamer Cavusgil, S. Deligonul, and A. Yaprak, "International Marketing as a Field of Study: A Critical Assessment of the Earlier Development and a Look Forward," *Journal of International Marketing* (v.13/4, 2005); C. Samuel Craig and S. Douglas *International Marketing Research*, 3rd ed. (John Wiley and Sons, 2005); Alex R. Criado and J.R. Criado, "International Marketing Research: Opportunities and Challenges in the 21st Century," *Advances in International Marketing* (v.17, 2007); M. G. de Jong, Jan Benedict Steenkamp, Jean Paul Fox, and Hans Baumgartner, "Using Item Response Theory to Measure Extreme Response Style in Marketing Research: A Global Investigation," *Journal of Marketing Research* (v.45/1, 2008); S. P. Douglas and C. Samuel Craig, "On Improving the Conceptual Foundations of International Marketing Research," *Journal of International Marketing* (v.14/1, 2006); ESOMAR, "Global Market Research 2008," www.esomar.org (cited March 2009); V. Kumar, *International Marketing Research* (Prentice Hall, 2000); C. Nakata and Y. Huang, "Progress and Promise: The Last Decade of International Marketing Research," *Journal of Business Research* (v.58/5, 2005); R. V. Young and R. Javalgi, "International Marketing Research: A Global Project Management Perspective," *Business Horizons* (v.50/2, 2007).

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International Monetary Fund

The International Monetary Fund (IMF) is one of the international financial organizations that came out of the Bretton Woods conference, and thus a key institutional component of the international economy since World War II. An international lender of last resort (extending credit and assistance when no one else will), it is the closest thing to an international central bank—lacking control over interest rates and the size of the money supply, it lends money to member states in need, seeking to stabilize exchange rates. Countries receiving loans are, when necessary, required to adopt various reforms to reshape their economy to better reflect the economic values and objectives of the Bretton Woods institutions (the so-called Washington Consensus).

The IMF was founded in 1944, after the Bretton Woods Conference at the Mount Washington Hotel in Bretton Woods, New Hampshire—a meeting of the Allied nations to discuss the shape of the international economy upon the end of World War II. It took another year and a half to implement the ideas forwarded at that conference, and when the founding countries—29 of the 45 attending the conference—signed the Articles of Agreement, the IMF began operations at the end of 1945. Membership has increased since, to 185 countries, including all United Nations members except Andorra, Cuba, Liechtenstein, Monaco, North Korea, Taiwan, Tuvalu, and Nauru. What was originally an Allied operation, then, now encompasses former Axis nations as well as nations of the former Soviet bloc.

The United States has exclusive veto power in the decisions of the IMF. The voting weight in other members is determined by its quota, the amount of money it has contributed to the fund, measured in special drawing rights (SDRs). SDRs are potential claims on the currencies in a figurative basket composed of U.S. dollars (44 percent), euros (34 percent), yen (11 percent) and pounds sterling (11 percent), a composition that will hold through 2010. The makeup of the basket is determined by the IMF's Executive Board every five years. The SDR is used for IMF accounting, and to provide a stable standard against which currencies can be pegged (though the euro is quickly displacing it in that role). Sometimes called "paper gold," the SDR was conceived at a time when the gold standard was still a topic of mainstream discussion, and was designed to replace it internationally. At the end of May 2008, the total value of the IMF's quotas was $352 billion; $19.4 billion in loans were outstanding to 65 countries.

The 20 countries with the most voting power in the IMF are (percentage of total votes in parentheses): the United States (16.79 percent), Japan (6.02 percent), Germany (5.88 percent), France (4.86 percent), the United Kingdom (4.86 percent), China (3.66 percent), Italy (3.2 percent), Saudi Arabia (3.17 percent), Canada (2.89 percent), Russia (2.7 percent), the Netherlands (2.34 percent), Belgium (2.09 percent), India (1.89 percent), Switzerland (1.57 percent), Australia (1.47 percent), Mexico (1.43 percent), Spain (1.39 percent), Brazil (1.38 percent), South Korea (1.33 percent), and Venezuela (1.21 percent).

Structural Adjustments

The reforms prescribed by the IMF for nations receiving loans are called "structural adjustments," because they were conceived of as a way to reshape national economies into something more closely resembling the ideal described at Bretton Woods. These adjustments are free-market-minded, focusing on the reduction of trade barriers (such as is encouraged by the World Trade Organization) and the privatization and deregulation of industries. The underlying assumption is that if the borrower nation had implemented these economic changes earlier, it might be less likely to need the loan, but even when that logic does not apply, the conditions are generally imposed; loans are the carrot, structural adjustments the more important goal than simply recouping the loan.

Balanced budgets, a softening or removal of price controls, and the reduction of corruption are all common conditions of structural adjustments, depending on the country. If the nation has a history of protectionism, it will be required to become more friendly to foreign investment and foreign business; in the past, countries were encouraged to open and enhance domestic stock markets, but in the 21st century such exchanges usually already exist.

Naturally, structural adjustments have come under criticism as a breach of national sovereignty—the very reason why the United States refused to ratify the International Trade Organization. The counterargument is that borrowing from the IMF is voluntary; that these adjustments are not imposed on any nation that does not seek help, knowing what the conditions will be. Since the adjustments are tied to the IMF's beliefs about economic health—they are reforms that the institution believes will better enable the borrower to repay the loan—they are intrusive, but not arbitrary.

On the other hand, some adjustments are more intrusive than others, more beneficial than others. The "austerity" adjustment comes under particular criticism, because it requires the borrower nation to reduce its spending on social programs, and usually specifies an amount that needs to be cut rather than recommending particular budget cuts; health and education programs are generally the first to go, and it seems clear that cutting education funding is in fact not in the economic best interests of any country, and furthermore that any country placed on a path of economic betterment through free market initiatives will in the long run have *more* need for a well-educated citizenry, not less.

Though structural adjustments have been part of the IMF's approach since its inception, they have been especially detailed and deep since the 1970s, when stagflation and the oil crises suggested their necessity.

The 2009 G-20 Summit

In the midst of the acute phase of the 2007–09 global economic crisis, the G-20 summit of the world's largest national economies was held among their heads of state rather than their ministers of finance. Going into the summit, the press and several attendees referred to it as "the next Bretton Woods," and the summit later turned out to be largely a planning session for the April 2009 G-20 summit in London. All of the Bretton Woods institutions are to be reexamined. The IMF's articles of agreement have not changed substantially since the fund's inception; some of the G-20 participants have called for a ground-up rethinking of the world's financial environment and the institutions that maintain it, and major changes to the IMF will at least be discussed.

The IMF planned lending up to $100 billion to countries with overall healthy economies that were having problems borrowing in the tumultuous global market conditions.

See Also: Bretton Woods Accord; Bretton Woods Institutions; Capitalism; Central Banks; G20; Inter-American Development Bank; International Chamber of Commerce; International Development Agency; World Bank, The; World Trade Organization.

Bibliography. Eduard H. Brau and Ian McDonald, *Successes of the International Monetary Fund: Untold Stories of Cooperation at Work* (Palgrave Macmillan, 2009); Warren Coats, "The Future of the International Monetary Fund," *Economic and Political Weekly* (v.43/35, 2008); Susan George, *A Fate Worse Than Debt* (Penguin Books, 1988); Atish R. Ghosh, *IMF Support and Crisis Prevention* (International Monetary Fund, 2008); Graham Hancock, *Lords of Poverty: The Free-Wheeling Lifestyles, Power, Prestige, and Corruption of the Multibillion Dollar Aid Business* (Mandarin, 1991); John W. Head, *Losing the Global Development War: A Contemporary Critique of the IMF, the World Bank, and the WTO* (Martinus Nijhoff Publishers, 2008); Jiro Honda, *Do IMF Programs Improve Economic Governance?* IMF working paper, WP/08/114 (International Monetary Fund, African Department, 2008); Rhona MacDonald, "Experts Call for Reform of the International Monetary Fund," *Lancet* (v.370/9601, 2007); Jan Joost Teunissen and Age Akkerman, eds., *Helping the Poor? The IMF and Low-Income Countries* (Fondad, 2005); "The International Monetary Fund: Fait Accompli," *Economist* (v.384/8537, 2007); Hector R. Torres, "Reforming the International Monetary Fund: Why Its Legitimacy Is at Stake," *Journal of International Economic Law* (v.10/3, 2007).

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International Monetary System

The term *international monetary system* refers to the formal and informal arrangements between national governments and financial institutions—private, public, and international—that govern the flow of money and capital between countries. Some aspects of these flows are strictly regulated by domestic and international laws; others are subject to whims and fancies of the market forces often governed by informal agreements and market conventions. Throughout history, there have been epochs when some countries were able to strongly influence the terms under which these flows would take place, and there have been epochs when chaos seemed to reign. The basic purpose of an international monetary system is to facilitate international flows of money and capital in an orderly fashion.

The system must provide a mechanism for payments across countries. Just as the domestic financial system provides very efficient mechanisms (checks, cash, electronic transfers) for transferring purchasing power across entities within the same currency area, an international system must facilitate transfer of purchasing power across countries. This is the easy part—banks have developed very sophisticated mechanisms for converting and transferring value across national boundaries. The foreign exchange market, the largest financial market in the world in terms of daily turnover, allows for efficient conversion of value from one currency to another. Many specialized instruments, for example, acceptance bills, provide liquidity to the market. Governments regulate such transactions merely to prevent payments for illegal and undesirable activities. There is international supervision and regulation of these activities to prevent some forms of systemic risks from spreading from one institution to another. Currencies of many countries have been used over time as international vehicles or reserve currencies to make this task easy and efficient. The challenge for the international monetary system is to ensure that real economic activities take place with minimum resistance arising from the financial transfer that must accompany every real transaction.

Participants in the international monetary system must agree upon a system that determines the values of various currencies in terms of each other—that is, the exchange rates between national currencies. The broad choices for exchange rate regimes are between fixed rates, managed rates, or floating rates. Since changes in exchange rates can have serious impacts upon domestic economies, governments have strong incentives to manipulate their exchange rates to extract some unfair advantages from the global economy. Since such a gain will probably come at someone else's cost, there is a need either for clear international agreements or an international "supervisor" that will ensure that exchange rates are not manipulated and remain with ranges that are justified by economic fundamentals. The challenge for the international monetary system is to ensure that the rules that determine values of currencies are clearly spelled out and there are few incentives for countries to break the rules.

Since countries are often likely to have imbalances in their economic transactions with the rest of the world, the international monetary system must ensure that there are mechanisms to finance such imbalances. While providing temporary relief to finance these imbalances, the system must ensure that incentives exist for countries to take corrective actions, that is, to "adjust" their economies when these balances have not resulted from temporary and reversible shocks. The international monetary system has to ensure that the pool of resources available for financing global imbalances is sufficiently large to meet the needs of countries under normal circumstances.

The international monetary system must provide for an environment in which capital can move from one location to another in response to investment opportunities so as to maximize the global welfare. The international monetary system has to ensure that governments do not impose controls merely to extract monopolistic rents from such flows at the cost of other investors.

Types

Success or failure of an international monetary system depends upon the extent to which it can fulfill these goals without allowing conflicting goals of national governments to undermine the system. While many international arrangements have tried to fulfill these goals over the past century, three systems deserve special mention.

One type was the gold standard (1879–1913). More by convention than through an international agreement, most countries had based their monetary system on gold in the 19th century. Value of a currency was fixed in terms of gold and the supply of a currency depended upon the gold reserves held by a country. Payments between countries were achieved easily through shipments of gold, and exchange rates were effectively fixed as a result of each currency's rigid link to gold. Trade imbalances between countries were paid for in gold that could be shipped between countries without restrictions. An outflow of gold for a deficit country would reduce gold reserves and hence the money supply (automatically). This would put downward pressure on domestic prices, while foreign prices would be rising due to consequences of increased gold reserves in that country. These changes in relative prices set in motion the corrective forces that eliminated the trade imbalances. Free flow of gold also ensured that capital was free to move from one country to another. Indeed, the global economy had reached very high levels of integration under this regime.

The downfall of the gold standard lay in its reliance on gold supplies. It left very little room for governments to play an active role in their economies. With the start of World War I, that objective became more important than maintenance of fixed exchange rates.

Another type was the Bretton Woods system (1945–1972). Experience with the Depression in the 1930s convinced world leaders that self-serving economic policies that attempt to transfer costs of economic hardships to others do not necessarily work. The financial turmoil of the Depression era was replaced by a fixed exchange rate system in 1945 in which the dollar was to acquire a central role. Signatories to the Bretton Woods agreement gave up their currencies' links with gold and established fixed exchange rates against the U.S. dollar. In turn, the U.S. dollar was to have a fixed price in terms of gold and would be freely convertible into gold.

The international monetary system in effect became a dollar standard. The role of the dollar as a reserve and as a vehicle currency increased significantly over the next three decades. The fixed exchange rates could only be changed infrequently with international consultations and only when fundamental economic situations warranted such changes. The International Monetary Fund (IMF) was established to guide countries and to ensure stability in the international financial markets. The IMF also became a source of funds for countries that were facing balance of payments imbalances.

The Bretton Woods system provided an unprecedented stability in the financial markets for war-ravaged countries to rebuild their economies after World War II. The IMF was successful in persuading more and more countries to gradually open their financial markets and get rid of exchange controls. By the late 1960s, however, flaws of this system became increasingly apparent. First, there was a bias in the system against allowing exchange rates to change quickly and by small amounts when economic conditions warranted. This bias had led to a number of speculative runs against a number of currencies as speculators could spot under- or overvalued currencies and could lay bets against those currencies. Second, the resources of the IMF became inadequate as the industrialized countries grew in size and their financial requirements grew far more rapidly than the funds available to the IMF. Third, and most important, the system had left no room for the U.S. economy to adjust should it have balance of payments difficulties. While all other countries could use a change in their exchange rate as a policy tool, the U.S. economy was denied this possibility because it had become the anchor for the international monetary system.

A third system type is the floating rate system (1973–). In 1968, the U.S. government withdrew the promise to freely convert U.S. dollars into gold for nonofficial purposes. A slight adjustment was made to the price of gold in terms of dollars in 1971, and the gold window was completely closed. By early 1973, the fixed exchange rate system was abandoned and most currencies were allowed to float freely. Market participants would determine the values of currencies.

With the exception of the developments in the European Monetary System, most major currencies of the world continue to float. Central banks of some emerging economies "manage" the values of their currencies by intervening in the foreign exchange markets. Some other countries link their currencies to that of a country on which their economies depend heavily. Most industrialized countries today allow unrestricted flow of capital between their economies and the rest of the world.

See Also: Bretton Woods Accord; Euro; European Monetary Union; Fixed Exchange Rate; Floating Exchange Rate;

Gold Standard; International Monetary Fund; Managed Float Regime; Reserve Currency.

Bibliography. Benjamin J. Cohen, *Global Monetary Governance* (Routledge, 2008); Benjamin J. Cohen, "The International Monetary System: Diffusion and Ambiguity," *International Affairs* (v.84/3, 2008); Barry J. Eichengreen, *Globalizing Capital: A History of the International Monetary System* (Princeton University Press, 2008); Barry Eichengreen and Raul Razo-Garcia, "The International Monetary System in the Last and Next 20 Years," *Economic Policy* (v.21/47, 2006); Roland I. McKinnon, *The Rules of the Game: International Money and Exchange Rates* (MIT Press, 1996); Robert A. Mundell, "The Significance of the Euro in the International Monetary System," *American Economist* (v.47, 2003); Richard Samans, Marc Uzan, and Augusto Lopez-Claros, *The International Monetary System, the IMF and the G20* (World Economic Forum, 2007).

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International Securities Identification Numbering

The International Securities Identification Number (ISIN) is a 12-character alpha-numerical code that identifies uniquely a security (debt instruments such as bonds; share instruments such as equities and collective investments; options; futures; warrants) on the financial markets. This international norm allows a financial intermediary to identify easily the considered security and its associated movements. This identifying number generally accompanies the security description and prospectus.

Confronted with the growing number of financial securities, worldwide organizations decided to attribute a unique number to identify each international financial security. Indeed, the national numbers were generally limited to the considered country and unusable internationally. This standardization enables a uniform and unified financial instruments classification system in order to improve market efficiency (leading to more accuracy and to more effective settlement and clearing). Furthermore, this codification allows the streamlining of back-office routines.

The ISIN does not contain information about the specificities of the considered financial instrument but only identifies the security. However, the securities are not perfectly identified because the ISIN code does not generally specify the exchange place of the selected security (contrary to a ticker symbol).

The Association of National Numbering Agencies (ANNA) was formed in 1992 with 22 National Numbering Agencies. The three main goals of this association, defined in the standard ISO 6166, are to promote, maintain, and develop the ISIN standard. And one of ANNA's key tasks is to improve its general communication to all market investors. ANNA is the registration authority for the allocation of ISINs. ANNA comprises 77 organizations (number of full members in July 2008) handling the functions of National Numbering Agencies, i.e., they assign ISINs to stocks and other financial instruments in their countries. The two main international numbering agencies in Europe are Euroclear Bank S.A./N.V. and Clearstream Banking. Therefore, these agencies are authorized to assign ISINs for securities issued in specific European countries and they are obliged to make available the information to all securities market participants.

The structure of an ISIN code is described by norm 6166 of the International Organization for Standardization (ISO). An ISIN code has traditionally three parts: a prefix composed of two letters identifying the issuing country of the security (for instance, FR for a security issued in France, and US for a security issued in the United States), a basic number formed by nine characters (letters and/or digits), and a final single check digit.

For example, BE0003796134 is the Dexia ISIN code where BE is the country code. These two first letters indicate that the country of the issuer is Belgium. The following characters, 000379613, formed the original CUSIP (Committee on Uniform Securities Identification Procedures) number, and the last character, 4, is the check digit. The CUSIP number can be itself decomposed in three parts: The first part is a four-character code identifying the issuer, the second part is a three-character code identifying the type of asset, and the third part (two characters) identifies the security issuance. Note that the SEDOL (which is a seven-character code) is also a part of the security's ISIN and is used for securities issued in the United Kingdom.

The check digit is computed using the following algorithm. We first convert each letter to numbers (A = 10, B = 11, C = 12 …, Y = 34 and Z = 35) and we exclude the check digit, which is what we are computing. Therefore, we obtain for our example of Dexia [11][14] 000379613. We add up (going from right to left) the individual digit numbers doubling one time over two the digit number considered. We begin doubling the first digit, i.e., the first number beginning from the right. We have therefore the following sum: [6] + [1] + [1+2] + [9] + [1+4] + [3] + [0] + [0] + [0] + [4] + [2] + [1] + [2] = 36. We take the 10s modulo ("*a mod b*" is the remainder of the division of "*a*" by "*b*") of this sum, the result of this operation is 6. We subtract this result from 10, this subtraction is equal to 4. We finally compute the 10s modulo of this final result (in case the result from the first modulo computed is equal to zero). We obtain the digit 4 that is the right final number of the Dexia ISIN code. To avoid programming this algorithm, there are many applications on the Web that compute the check digit for a given ISIN code.

ISIN codes are not the only codes used to identify financial securities. Indeed, it is not always easy for practitioners to remember a series of nine-digit numbers. For this reason, most financial intermediaries or exchange places have other coding systems used by the practitioners. The other codes commonly used are the following: the Tradable Instrument Display Mnemonic (TIDM), the Stock Exchange Daily Official List (SEDOL), the CUSIP, the Reuters, and the Bloomberg codes. Nevertheless, orders expressed in another way are generally converted into ISIN codes.

See Also: Bloomberg; Bonds; Reuters; Prospectus.

Bibliography. Association of National Numbering Agencies, *International Standard ISO 6166*, 6th ed. 2001-03-15, www.anna-web.com (cited March 2009).

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International Training

In today's competitive global business environment, international human resources management (HRM) systems are of significant importance for developing global managers. International training may be defined as any procedure intended to increase an individual's ability to cope and work in a foreign environment. The importance of training in preparing an individual for an intercultural work assignment has become increasingly apparent. International and intercultural work has become the norm for most large organizations. Managers are spending shorter periods in any single country, and they often are moved from one location to another. Because their managers must often operate across borders in teams of internationally diverse units, many organizations express the need for managers who quickly adjust to multiple cultures and work well in multinational teams. This makes the challenge of international training increasingly difficult because conventional methods that rely on country specific knowledge often prove inadequate.

Adjusting to an international assignment can provoke feelings of helplessness in an unprepared manager, who may have difficulty sorting out appropriate from inappropriate behavior. Learning to manage in and cope with a foreign environment involves such a profound personal transformation that it has an analog in the process of human development throughout the life span. Expatriate managers are removed from the comfortable environment of their parental culture and placed in a less familiar culture. A management style that works at home may fail to produce the desired response abroad, or it may be even counterproductive.

A growing consensus in the field of international training is that appropriate pedagogy of any program must begin with a thorough and suitable assessment of managers' strengths and weaknesses. Methods for individual assessment range from paper-and-pencil inventories to elaborate role-playing exercises to behavioral assessment centers. Once managers are assessed and selected for training programs, the key question becomes what design optimizes their training and development. Organizations can improve the quality of managers by providing comprehensive training and development activities after assessment and selection. Considerable evidence suggests that investments in training produce beneficial individual and organizational outcomes.

International competence training and a sensible repatriation plan help buffer the stressors encoun-

Expatriate managers directing locals, such as these oil company workers in Benin, need culture-specific training.

tered abroad. The willingness and courage to undergo the profound personal transformation associated with an international assignment are essential for a healthy expatriate adjustment, even after the expatriate's return. International training can partly remedy cross-cultural insensitivity, but international competence involves more than a series of country statistics and cultural gimmicks learned in a short, pre-departure training session. Making executives aware that they will face different business and social customs is not sufficient, because awareness does not necessarily bring competence in the host culture.

Many organizations are becoming aware of the need to provide continued hands-on training rather than just pre-departure awareness training. In contrast to pre-departure training, post-arrival training gives global managers a chance to evaluate their stressors after they have encountered them. Documentary and interpersonal training methods have additive benefits in preparing managers for intercultural work assignments.

Most international training programs emphasize increasing a manager's cultural competence in dealing with others from different cultural backgrounds by enhancing their cognitive awareness and knowledge of the proposed host culture. The training format is mainly project based, with participants spending much of their time in their respective business areas. At regular intervals they are brought together to discuss their experiences under the guidance of facilitators. So, cultural differences are addressed when they surface in the context of working together. Experiential training formats also provide an opportunity to react to cultural stressors and receive feedback about the adequacy of one's coping responses (i.e., cultural assimilator).

Employees need to actively support the adjustment process of their expatriate managers. International competence–oriented training should be provided before, during, and after the assignment. In addition, the parent firm should be sensitive to the delicate balance between the interests of the parent and the host firm that executives need to maintain, listening and working with them to define and achieve common goals. Training for the global manager should include metacognitive, motivational, and behavioral components.

The effectiveness of global managers will be limited if they are not motivated to perform their jobs. The form and structure of an organization's HRM system can affect employee motivation levels in several ways. Continuous training, job rotation, employment security, performance appraisal, and compensation systems can motivate managers to engage in effective discretionary decision making and behavior in response to a variety of environmental contingencies.

See Also: Cultural Norms and Scripts; Culture Shock; Ethnocentric Human Resource Policy; Expatriate; Geocentric Human Resource Policy.

Bibliography. Clifford Adelman, "Learning without Borders: Training a Global Workforce Requires International Collaboration," *Community College Journal* (v.78/2, 2008); J. Stewart Black and Hal B. Gregersen, "The Right Way to Manage Expats," *Harvard Business Review* (v.77/2, 1999); George W. Bohlander and Scott A. Snell, *Managing Human Resources* (South Western Educational Publishing, 2009); P. Christopher Earley, "Intercultural Training for Managers: A Comparison of Documentary and Interpersonal Methods," *Academy of Management Journal* (v.30/4, 1987); P. Christopher Earley and Randall S. Peterson, "The Elusive Cultural Chameleon: Cultural Intelligence as a New Approach to Intercultural Training for the Global Manager," *Academy of Management Learning and Education* (v.3/1, 2004); Fred E. Fiedler, Terence Mitchell, and Harry C. Triandis, "The Culture Assimilator: An Approach to Cross-cultural Training," *Journal of Applied Psychology* (v.55/2, 1971); LuAnn

Irwin and Renie McClay, *The Essential Guide to Training Global Audiences: Your Planning Resource of Useful Tips and Techniques* (Jossey-Bass, 2008); Juan I. Sanchez, Paul E. Spector and Cary L. Cooper, "Adapting to a Boundaryless World: A Developmental Expatriate Model," *The Academy of Management Executive* (v.14/2, 2000); Jan Selmer, "Effects of Coping Strategies on Sociocultural and Psychological Adjustment of Western Expatriate Managers in the PRC," *Journal of World Business* (v.34/1, 1999); Rosalie L. Tung, "Expatriate Assignments: Enhancing Success and Minimizing Failure," *Academy of Management Executive* (v.1/2, 1987).

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Internet Domain Names

An internet domain name is a unique name that identifies an Internet Protocol (IP) address on the internet. Computers identify each other via numerical IP addresses over the internet. People use domain names to give these IP addresses easily remembered names. Any time someone uses the internet to search for information, buy products, or send e-mail, they are using a domain name to identify themselves or the businesses whose information or products they are seeking. The choice of domain name has potential to make or break an online business. For this reason, a lucrative secondary market has developed for domain names.

Every computer has a unique IP address. The domain name system (DNS) is a network of domain name servers that convert domain names into IP addresses so that computers, and thus individuals, can communicate over the internet. When an individual creates and orders a domain name from a registrar, the name is put into the global registry by the registrar for the registrant. The registry, maintained and overseen by the Internet Corporation for Assigned Names and Numbers (ICANN), is the central directory of the domain name system. Accredited "registrars" are the only agents that can legally submit domain names to the registry. ICANN regulates these agents and keeps a list of accredited registrars. Having one central registry for all domain names assures that those names send internet users to the right IP addresses.

A domain name consists of two essential parts: the top-level domain (TLD) and the second-level domain. The TLD is the rightmost portion of the domain name. Current generic (unreserved) TLDs include .com, .net, .info, .org, and .biz. Typically, businesses anywhere in the world can request one of these common TLDs. Two-letter country-code TLDs (ccTLDs) exist for each country such as .us, .uk, .de, and .au for organizations that wish to be identified by country. TLDs for more specific (reserved) purposes also exist. Examples include .tv (entertainment), .gov (government), .mobi (mobile phone access), .edu (education), .museum (museums), .name (personal names), .int (international organizations established by intergovernmental agreements), .coop (cooperatives), .aero (aviation), .mil (military), .travel (travel), and .jobs (job search). As the internet grows, so does the list of TLDs. TLDs must be approved by ICANN.

The second-level domain (SLD) identifies the organization or host. It is the rightmost portion of the domain name that is to the left of the dot (or "."). For example, in www.google.com, the SLD is "google" and the TLD is ".com." The "www" portion of the name is actually a third-level domain (3LD). The 3LD is left of the SLD. A single domain name can have up to 127 levels. Levels left of the SLD are subdomains. The "www" used in many domain names is just a very common subdomain and it is not an essential part of a domain name. There must be a unique SLD for every TLD; however, SLDs can be duplicated across TLDs. For example, there can only be one encyclopedia.com for a particular IP address, but there can be an encyclopedia.com, encyclopedia.net, encyclopedia.org, etc.

The ability to create and register virtually any domain name has led to a lucrative secondary market for domain names and subsequently a need for a system of dispute resolution. According to marketing researcher Zetetic, as of 2007, 36 domain names had fetched over $1 million on the secondary market, with sex.com being the highest at around $12 million. Speculators in the domain name market, known as "domainers," buy and resell domains. Some speculators, known as "cybersquatters," attempt to profit by buying domain names of celebrities, well-known companies, and trademarks. A kind of cybersquatter, known as a "typosquatter," attempts to profit from common misspellings of popular domain names. Due to the frequency of cybersquatting, many companies now buy domain names defensively by buying their SLDs across TLDs and by buying common misspellings.

If a company feels that it is a victim of cybersquatting, it may file for dispute resolution through ICANN's Uniform Domain Name Dispute Resolution Policy (UDRP) or sue in court via the Anticybersquatting Consumer Protection Act (ACPA, also known as Truth in Domain Names Act) of 1999. An individual can dispute a domain name under UDRP if they feel that a domain name has been registered in bad faith or in violation of their trademark. If the outcome of the proceedings is that the defendant is in violation of UDRP, ICANN can suspend or transfer ownership of the domain name to the plaintiff. If the plaintiff is seeking damages or is unhappy with the UDRP outcome, they can sue under the ACPA. One famous case of cybersquatting was *Electronics Boutique Holdings Corp. v. Zuccarini*, October 2000, which resulted in the defendant being charged with more than $500,000 in damages and attorneys' fees for using five common misspellings to divert business away from the plaintiff.

See Also: Electronic Commerce; Sales; Technology.

Bibliography. M. Brain, "How Domain Name Servers Work," April 1, 2000, computer.howstuffworks.com (cited March 2009); Abida Chaudri, "Internet Domain Names and the Interaction with Intellectual Property," *The Computer Law and Security Report* (v.24/4, 2008); ICANN, "Uniform Domain Name Dispute Resolution Policy," www.icann.org (cited March 2009); D. Marshall, "So, You Want to Build a Website!" August 20, 2003, www.dwmbeancounter.com (cited March 2009); Hendrik Rood, "What's in a Name, What's in a Number: Some Characteristics of Identifiers on Electronic Networks," *Telecommunications Policy* (v.24/6–7, 2000); J. Schiller, "Electronics Boutique Holdings Corp. v. Zuccarini." Keytlaw.com, October 30, 2000, www.keytlaw.com (cited March 2009); Sung J. Shim, "Internationalized Access to Domain Names: a Review of Methods and Issues," *Online Information Review* (v.31/3, 2007); Jonathan D. C. Turner, *Domain Names: Transactions and Disputes* (Tottel, 2008); Zetetic, "All-Time Top Domain Sales," zetetic.com/domain-name-sales.html (cited March 2009).

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Intra-Firm Transfer

The price at which multinational enterprises sell their products to their own subsidiaries and affiliates is known as the intra-firm transfer price. In addition to products, the foreign subsidiary may be using techniques, machinery, or processes, owned, patented, and/or licensed by the multinational parent to whom the subsidiary must pay royalties or license fees. Theoretically these prices and fees are equivalent to market prices and fees, but it is often impossible to find such a product, machine, or process on the open market, as they may be unique to the multinational. Many multinational firms also spread overhead and management expenses incurred at the parent over their foreign affiliates and subsidiaries based on percentage of use. The result may be an intra-firm transfer price, fee, or overhead contribution that reduces the profitability of the subsidiary, exacerbated by the tax on gross revenue imposed on subsidiaries and affiliates by host country governments.

Intra-firm trade within the operating networks of multinational enterprises has become increasingly important in international trade. Haishun Sun argues that more than one-third of international trade in goods and services consists of intra-firm transfer and a further one-third consists of exports from transnational corporations.

The parent-subsidiary flow of resources is captured in the internalization theory of multinational enterprise. Internalization argues that multinational enterprises possess a bundle of proprietary firm-specific (ownership) advantages that enabled them to undertake foreign direct investment (FDI). Multinational enterprises were seen as transferring these proprietary advantages to subsidiaries and affiliates via the firm's internal market compared to transfer via the market for final and intermediate products. Ownership advantages were thought to be in such things as proprietary product and process technologies, brand names, access to or ownership of channels of distribution, management, and capital.

The currently dominant resource-based view holds that a necessary, but not sufficient, condition for foreign direct investment is that the subsidiary abroad possesses the resources to compete with other firms in the host country industry. The subsidiary may come to possess these resources via intra-firm transfer from its parent, or from a joint venture partner (or partners) based in the host country or in another source country, or, if the foreign investment is by acquisition, from the subsidiary itself. Hence, the flow of resources may be subsidiary to parent or subsidiary to subsidiary.

The management of cash flows in a large multinational firm, one with possibly 10 or 20 subsidiaries, is obviously complex and critical to the success of the multinational business. Coordination between units requires planning and budgeting of intra-firm cash flows so that flows are "netted" between each subsidiary and the parent, and between the subsidiaries themselves, to reduce payments and currency exchange charges where multiple currencies are involved. Multinationals might economize by establishing a single large pool to negotiate better financial service rates with banking institutions, and flexible timing of payments between units, allowing the firm not only to position cash flows where they are needed most but also to help manage currency risk. A foreign subsidiary that is expecting its local currency to fall in value relative to the U.S. dollar may try to speed up or lead its payments to the parent; similarly, if the local currency is expected to rise versus the dollar, the subsidiary may want to wait, or lag, payments until exchange rates are more favorable.

Multinational firms with a variety of manufacturing and distribution subsidiaries scattered over a number of countries within a region may find it more economical to have one office or subsidiary taking ownership of all invoices and payments between units. Finally, some multinational firms have found that their financial resources and needs are becoming either too large or too sophisticated for the financial services that are available in many of their local subsidiary markets. One solution to this has been the establishment of an internal bank within the firm to buy and sell payables and receivables from the various units.

Intra-firm transfer is further complicated when the relevant knowledge is tacit, rather than codified, making both the transfer and the price difficult to predict or estimate because one or other (or both) of the parties to the transfer has to make a considerable investment to make the knowledge understandable to the transferee. In fact, James Love has argued that the costs of transferring tacit knowledge could be sufficient to prevent market transfer even if the contracting parties trusted each other completely, and therefore never felt constrained by opportunistic hazard or transaction cost expense.

See Also: Foreign Direct Investment, Horizontal and Vertical; International Division Structure; Joint Venture; Multinational Corporation; Subsidiary.

Bibliography. Giovanni Dosi, Richard R. Nelson, and Sidney Winter, *The Nature and Dynamics of Organizational Capabilities* (Oxford University Press, 2001); John H. Dunning, *Governments, Globalization and International Business* (Oxford University Press, 1999); John H. Dunning and Rajneesh Narula, *Foreign Direct Investment and Governments: Catalysts for Economic Restructuring* (Routledge, 1996); James H. Love, "Knowledge, Market Failure and the Multinational Enterprise: A Theoretical Note," *Journal of International Business Studies* (v.26/2, 1995); Haishun Sun, "DFI, Foreign Trade and Transfer Pricing," *Journal of Contemporary Asia* (v.29/3, 1999).

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Inventory

Inventory is the stock of any item or resource used in an organization. This implies that all organizations carry some inventory or stock of goods at any time. Inventories range from items such as stationery to machinery parts or raw materials. Generally, organizations with activities centered on products or manufacturing processes have more inventory and need to develop more controls and systems than organizations where the service/product mix is oriented more to the service end of the service/product continuum. It has been estimated that a typical firm has about 30 percent of its current assets and perhaps as much as 90 percent of its working capital invested in inventory. Apart from the cost of inventory, the use of excessive inventory can lead to other issues such as the disruption of work flow and hiding problems related to product quality and equipment breakdown. To address these issues and therefore help management keep the cost down while still meeting production and customer service requirements, an efficient inventory system is needed.

Based on an efficient inventory system, inventory is expected to serve several functions that in turn can add flexibility to a firm's operations. Among the most important are the following: to meet anticipated customer demand, to smooth production requirements, to de-couple operations, to protect against stock-outs, to take advantage of order cycles, to hedge against price increases, and to take advantage of quantity discounts.

To accommodate the functions of inventory, firms maintain different types of inventories. Inventory can be classified by location and type. Based on the location, inventory can include raw material inventory, work-in-process inventory, maintenance/repair/operating supply (MRO) inventory, and finished-goods inventory. Inventory classification by type provides a method of identifying why inventory is being held and so suggests policies for reducing its level. Inventory types include buffer/safety, cycle, de-coupling, anticipation, and pipeline/movement.

In making any decision that affects the size of different types of inventory, four basic costs need to be taken into account: holding or carrying costs, setup or production change costs, ordering costs, and shortage costs. Holding costs relate to physically having items in storage. They include the costs for storage, handling, insurance, pilferage, spoilage, breakage, obsolescence, depreciation, taxes, and the opportunity cost of capital. Obviously, high holding costs tend to favor low inventory levels and frequent replenishment. Typical annual holding costs range from 20 percent to 40 percent of the value of an item. Holding costs are stated in either of two ways: as a percentage of unit price or as a dollar amount per unit. Setup costs are the costs to prepare a machine or process for manufacturing an order or changing from one product to another. That is, to make each different product, it is necessary to obtain the required materials, arrange specific equipment setups, fill out the required papers, and move out the previous stock of material. Ordering costs refer to the managerial and clerical costs to prepare the purchase or production order. Finally, shortage costs are the costs resulting from stock-out or when demand exceeds the supply of inventory on hand. For instance, lost profits, the effects of lost customers, or late penalties are examples of shortage costs.

Having discussed the nature, functions, types, and costs associated with inventory, it is of paramount importance for a firm to know how much inventory to keep in stock or to order. In order to answer this question, it is assumed that demand for an item is either independent of or dependent on the demand for other items. In dependent demand, the need for any one item is the direct result of the need for some other item, usually a higher-level item of which it is part. In independent demand, the demands for various items are unrelated to each other. Dependent demand is a relatively straightforward computational problem. That is, needed quantities of a dependent-demand item are simply computed, based on the number needed in each higher-level item in which it is used. For example, if an automobile company plans on producing 100 cars per day, then obviously it will need 400 wheels and tires (plus spares). The number of wheels and tires needed is dependent on the production levels and it is not derived separately. The

The average firm may have as much as 90 percent of its working capital invested in inventory, such as this yarn in a textile mill.

demand for cars, on the other hand, is independent and unrelated to the demand for other products. Here firms usually turn to their sales and market research departments and other various internal and external sources. Because independent demand is uncertain, extra units must be carried in inventory.

To determine how many units need to be ordered, and how many extra units should be carried to reduce the risk of stocking out, several classes of models can be used: economic order quantity (EOQ)/economic production quantity (EPQ)/quantity discount, reorder point (ROP), fixed-order-interval, and single-period models. The question of how much to order is determined by using EOQ/EPQ or the quantity discount model. The question of when to order is answered by ROP when the quantity on hand of an item drops to a predetermined amount. Fixed-order-interval is used when orders must be placed at fixed time intervals (weekly, twice a month, etc.). Finally, the single-period model is used to handle ordering of perishables (e.g., fresh fruits, vegetables, seafood, cut flowers) and items that have a limited useful life (e.g., newspapers, magazines).

In short, inventories are a vital part of business. Not only they are necessary for operations, but also they contribute to customer satisfaction. The overall objective of inventory management is therefore to achieve satisfactory levels of customer service while keeping inventory costs within reasonable bounds. In doing so, management has two basic functions concerning inventory: to establish a system of keeping track of items in inventory, and to make decisions about how much and when to order. More specifically, to be effective, management must have the following: a system to keep track of the inventory on hand and on order (i.e., inventory counting systems that are periodic and perpetual), a reliable forecast of demand that includes an indication of possible forecast error (i.e., use of point-of sale or POS systems), a knowledge of lead times and lead time variability, reasonable estimates of various inventory costs, and a classification system for inventory items (i.e., use of A-B-C approach that identifies inventory items according to some measures of importance and then allocates control efforts accordingly).

See Also: Kanban; Manufacturing; Operations Management; Supply Chain Management.

Bibliography. S. Brown, R. Lamming, J. Bessant, and P. Jones, *Strategic Operations Management*, 2nd ed. (Elsevier, 2005); R. B. Chase, F. R. Jacobs, and N. J. Aquilano, *Operations Management for Competitive Advantage*, 11th ed. (McGraw-Hill, 2006); Andrew Greasley, *Operations Management* (Wiley & Sons, 2009); J. Heizer and B. Render, *Operations Management*, 8th ed. (Pearson Education, 2006); T. Hill, *Operations Management*, 2nd ed. (Palgrave Macmillan, 2005); Lee J. Krajewski, Larry P. Ritzman, and Manoj K. Malhotra, *Operations Management* (Prentice Hall, 2009); Erhan Kutanoglu and Divi Lohiya, "Integrated Inventory and Transportation Mode Selection: A Service Parts Logistics System," *Transportation Research Part E: Logistics and Transportation Review* (v.44/5, 2008); Stan McDonald, *Materials Management: An Executive's Supply Chain Guide* (John Wiley & Sons, 2009); Douglas C. Montgomery, *Operations Research for Production and Supply Chain Management* (Wiley, 2009); R. G. Schroeder, *Operations Management: Contemporary Concepts and Cases*, 3rd ed. (McGraw-Hill, 2007); N. Slack and M. Lewis, *Operations Strategy*, 2nd ed. (FT Prentice Hall, 2008); N. Slack, S. Chambers, R. Johnston, and A. Betts, *Operations and Process Management* (FT Prentice Hall, 2006); W. J. Stevenson, *Operations Management*, 8th ed. (McGraw-Hill, 2005); Peter F. Wanker, "The Uniform Distribution as a First Practical Approach to New Product Inventory Management," *International Journal of Production Economics* (v.114/2, 2008); Tony Wild, *Best Practice in Inventory Management* (Butterworth-Heinemann, 2002); Scott Taggart Webster, *Principles and Tools for Supply Chain Management* (McGraw-Hill/Irwin, 2008); Dong-Qing Yao, Xiaohang Yue, Samar K. Mukhopadhyay and Ziping Wang, "Strategic Inventory Deployment for Retail and E-Tail Stores," *Omega* (v.37/3, 2009).

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Investment Banks

Unlike consumer banks, investment banks offer services that primarily deal with the restructuring of business ownership, including initial public offerings, mergers and acquisitions, leveraged buyouts, securitization, and private placements. In the sense that most people think of it, an investment bank is not a bank at all—insofar as it does not act as a lender or depository, but rather as a middleman and consultant. Most of an investment bank's income comes from fees.

As a business becomes more successful, it is usually to its benefit to become a corporation (having originated as a partnership or proprietorship, most of the time). Most of the corporation's stock is owned by the core of the company—its founders and various key employees—but a fast-growing company will need to expand beyond the funding capacity of those stockholders. Usually the first source of outside funds is obtained through private placements. These are stock issues that are extremely restricted and cannot be resold by their initial purchasers, and therefore do not have to be registered with the Securities and Exchange Commission (SEC). Nonregistered private placements are limited to 35 nonaccredited purchasers and an unlimited number of accredited investors, including the officers of the company, wealthy individuals, and institutional investors like banks, corporations, pension funds, and so on.

The next step in funding is to seek support from a venture capital fund, a private limited partnership that pools money from a group of (usually) institutional investors. The venture capitalists managing these funds are usually very knowledgeable in a particular industry, and limit their activity to that sector—the transportation industry, for instance, or food and beverages, or dotcoms.

IPOs

An initial public offering (IPO) of stock, which can then be traded on the secondary markets, may follow the venture capital stage. This is the principal activity of investment banks: helping companies go public. Investment bankers act as intermediaries to sell stock to their clients (a similar mix to the sort of investors interested in private placements), and help to determine the stock's initial offering price, based on various factors and comparisons to similar companies and the performance of their IPOs. Once the stock has been sold, the investment bank assigns an analyst to maintain investors' interest in it, regularly issuing reports on the stock's prospects.

During an IPO, an investment bank can underwrite the issue or work on a best-efforts basis. When underwriting the issue, the bank purchases all of the offered stock and resells it itself, to guarantee that the company raises the money it seeks. This is usually the case. In a best-efforts sale, the bank makes no guarantees, only agrees to do what it can. From time to time, an underwriting investment bank misjudges the initial offering price, and is stuck with stock it cannot sell; it must pay the business within four days, while other investors have 10 days to pay for their stock. That is the risk the investment bank takes, and encourages them to thoroughly investigate the business going public—which, in turn, acts as a filter to encourage healthy business and healthy stock.

Since the New Deal created the Securities and Exchange Commission in 1933, investment banking services have been subject to significant regulation. All interstate public offerings over $1.5 million fall under SEC jurisdiction, and state agencies generally have relevant regulations of their own. Newly issued securities must be registered 20 days before their IPO, providing critical information to the government. After registration, representatives of the company and the investment bank go on a "road show," making presentations to institutional investors to explain the merits of their company. The investment bankers will gauge investors' interest in the stock at various prices, as part of the process of determining the initial offering price; if there are more interested investors than shares to go around, the price will usually be increased before the IPO. From time to time, the road show may lead to withdrawing the registration altogether, if there is too little interest in the company. During this period, nothing can be disclosed that is not already in the SEC's registration forms, a situation that invites a lot of spin. This quiet period lasts until 25 days after the IPO.

Mergers and Other Activities

Another area in which investment banks are involved is in mergers—when two or more businesses combine into one business with management drawn from all the constituent businesses, more or less equally—and acquisitions, when one business assumes control of or absorbs another. Stockholders can respond to these situations in various ways, depending on the specifics; if a company becomes too diversified through the results of a merger or acquisition, there is typically a fear that it is no longer strong enough in its field, no longer specialized—a jack of all trades and master of none, when what stockholders want to invest in is mastery. (Stockholders love diversity, but in their portfolios, not the individual companies they invest in.) Ideally, what stockholders want to see from a merger or acquisition is synergy: when the whole becomes greater than the sum of its parts, because of economies of scale, tax benefits, financial benefits, increased efficiency, and increased market power. The Justice Department's antitrust division regulates mergers and acquisitions to protect consumers, and keeps an especially close eye on them when the involved businesses are large or dominant in their industries.

Another investment bank activity is the leveraged buyout, in which a publicly held company is purchased in whole by an allied group of investors—which generally includes the company's senior management, and may include outside investors who provide the necessary capital—and is then taken private. Leveraged buyouts may be motivated by the desire to take the company in directions that stockholders would consider too risky or otherwise undesirable, or as a way to remove current management. They are less common when the stock market is healthy (making a leveraged buyout more expensive).

Lastly, securitization is the transformation of a debt instrument into a publicly traded financial instrument, making it more liquid because of its ability to be bought and sold in open market. Home mortgages can be pooled, for instance, and used as collateral to issue bonds. Investment banks help to securitize debt instrument assets ranging from mortgages to automobile loans, credit card balances, and student loans.

History

Investment banking has a long history in the United States, originally involving the exchange of government- and railroad-issued bonds. By the time of the Civil War, the American securities market had become more sophisticated, in response to the large amount of money changing hands thanks to the successes and changes of the Industrial Revolution, the so-called robber barons, and the various tycoons of industry like Andrew Carnegie. The Union funded its side of the war with the first mass-marketed securities (war bonds), and investment banks continued the practice after the war's end. J. P. Morgan opened a banking house in New York principally to deal in gold, foreign currency, and securities, and later organized a syndicate to replenish the country's gold reserve by issuing government bonds.

Before the Great Depression, most commercial banks offered some investment-banking services, but banking mismanagement was blamed as one of the several causes of the Depression. New Deal banking reforms required banks that participate in the Federal Reserve System to abandon the securities market by 1934, and prohibited certain members of securities firms from acting as officers of commercial banks. Many banks thus broke their investment banking services off into separate companies.

Once the Depression had been weathered, banking stayed stable until the 1970s, when inflation led to a series of bank failures and lengthy deregulation of many commercial bank activities. The 1999 Financial Services Modernization (FSM) Act allowed for the mergers of commercial banks, securities firms, and insurance companies, more or less repealing the earlier New Deal legislation, which soon led to the creation of companies like Citigroup (via a merger of Citicorp with Traveler's Insurance, which itself owned Salomon Smith Barney, an investment bank). The Citigroup merger actually took place a year before the FSM Act, which was passed in time that Citigroup was not required to get rid of any of its services (there would have otherwise been a grace period in order to avoid radical overnight restructuring).

In 2008 the U.S. government intervened to prevent Bear Stearns from filing for bankruptcy. Later, it declined to bail out Lehman Brothers, which filed for Chapter 11 bankruptcy protection. Like other financial institutions then, Lehman Brothers had souring real estate investments and confronted tight credit markets.

See Also: Acquisitions, Takeovers, and Mergers; Antitrust Laws; Capitalism; Citigroup; Company Profiles: North America; Debt-for-Equity Swaps; Disclosure Requirements; Diversifying Investment; Economies of Scale; Hostile Takeovers; Merrill Lynch; Morgan Stanley; Mortgage Credit Crisis of 2008; Subprime Loans.

Bibliography. Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management* (South-western, 2009); Michel Fleuriet, *Investment Banking Explained: An Insider's Guide to the Industry* (McGraw-Hill, 2008); Maretno Harjoto, Donald J. Mullineaux, and Ha-Chin Yi, "A Comparison of Syndicated Loan Pricing at Investment and Commercial Banks," *Financial Management* (v.35/4, 2006); Mathew L. A. Hayward, "Professional Influence: The Effects of Investment Banks on Clients' Acquisition Financing and Performance," *Strategic Management Journal* (v.24/9, 2003); K. Thomas Liaw, *Investment Banking and Investment Opportunities in China: A Comprehensive Guide for Finance Professionals* (Wiley, 2007); K. Thomas Liaw, *The Business of Investment Banking: A Comprehensive Overview* (Wiley, 2005); Tom Lott, *Vault Career Guide to Investment Banking* (Vault, 2008); Alan D. Morrison, Jr., and William J. Wilhelm, *Investment Banking: Institutions, Politics, and Law* (Oxford University Press, 2008); Joshua Rosenbaum and Joshua Pearl, *Investment Banking: Valuation, Leveraged Buyouts, and M&A Sale Process* (Wiley, 2009); L. Wiegler, "Banking with a Green Conscience: The Story of America's First All-Green Investment Bank," *Engineering and Technology* (v.3/11, 2008).

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Investor Protection

Investors have certain rights that are generally protected through the enforcement of rules, regulations, and laws. Many of these rights include disclosure and accounting rules that provide investors with the information they need to exercise other rights. Other protected investor rights include things such as participating in shareholders' meetings, receiving dividends on pro-rata terms, voting for directors, subscribing to new issues of securities on the same terms as insiders, being informed about the risks, obligations, and costs of an investment, and having orders executed promptly at the best available price.

In addition, as we saw with companies such as Enron, Adelphia, Tyco, and WorldCom, among others, investors need protection from financial scandals. Quite often scandals involve insiders using their discretion to mislead investors and other outsiders through their financial reporting. Investors have the right to receive clear and timely information that allows them to make informed decisions.

Through the use of earnings management (deliberately manipulating a company's earnings so that the figures match a predetermined target) or impression management (presenting a company's performance in the best light possible, potentially resulting in selective financial communication), companies can structure their disclosures in ways that are potentially misleading or unclear. Such earnings opacity can take the form of earnings aggressiveness (results from the tendency to increase reported earnings), loss avoidance (results from the tendency to avoid reporting negative earnings), and earnings smoothing (results from reporting artificially stabilized earnings). These three practices undeniably weaken the link between accounting performance and the true economic performance of a company. In addition, this obfuscation of financial disclosures can make it difficult for investors to make accurate informed decisions; therefore, investor protection is needed.

Often, investor protection through legal action is highlighted as the key factor affecting the quality of earnings reported. This is because insiders enjoy fewer private control benefits and hence have lower incentives to conceal firm performance from outside investors.

In the aftermath of the stock market crash of 1929, the U.S. Congress created the Securities and Exchange Commission (SEC) as part of the Securities Exchange Act of 1934. This was intended to restore investor confidence in our capital markets. Still, today, the mission of the SEC is to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.

Sixty-eight years after the SEC was created, Congress passed the Sarbanes-Oxley Act (SOX). SOX (also known as Public Company Accounting Reform and Investor Protection Act) was signed into law by President George W. Bush on July 30, 2002. It has had a major impact on the way that all U.S. publicly traded companies conduct and document their businesses. Essentially, SOX was created to reverse the public's declining trust in the accounting and financial reporting process by providing a level of investor protection through regulation. To accomplish this, the Public Company Accounting Oversight Board (a private-sector, nonprofit corporation) was created to oversee the financial reporting of public companies. SOX requires companies to, among other things, have their chief executives sign off on their financial statements; strengthen auditor independence; and have an internal audit function that is examined by external auditors. More than five years after its passage there can be little doubt that SOX has strengthened corporate accountability, thus successfully providing a level of investor protection.

To deal with conflicts of interest, the SEC requires brokerage houses and analysts to provide full disclosure and prohibits analyst compensation based on investment banking business. Another risk to investors is the bankruptcy of brokerage firms, and the Securities Investor Protection Corporation (a private-sector, nonprofit corporation) was created by a U.S. act of the same name to restore funds to investors in such situations.

Outside the United States, rules protecting investors often come from different sources. No matter what the source, their enforcement is as crucial as their content. In most countries, laws and regulations are enforced by market regulators, courts, and/or by market participants themselves. In many countries, such enforcement cannot be taken for granted. At times, courts are slow, subject to political pressures, and even corrupt.

See Also: Accountability; Disclosure Requirements; Earnings Management; Enron Corporation; Sarbanes-Oxley; Securities and Exchange Commission.

Bibliography. Walter Aerts, "Picking Up the Pieces: Impression Management in the Retrospective Attributional Framing of Accounting Outcomes," *Accounting, Organizations and Society* (v.30, 2005); Utpal Bhattacharya, Hazem Daouk, and Michael Welker, "The World Price of Earnings Opacity," *Accounting Review* (v.78, 2003); Hsiang-Lin Chih, Chung-Hua Shen, and Feng-Ching Kang, "Corporate Social Responsibility, Investor Protection, and Earnings Management: Some International Evidence," *Journal of Business Ethics* (v.79, 2008); Mihir A. Desai and Alberto Moel, "Czech Mate: Expropriation and Investor Protection in a Converging World," *Review of Finance* (v.12/1, 2008); Jens Hagendorff, Michael Collins, and Kevin Keasey, "Investor Protection and the Value Effects of Bank Merger Announcements in Europe and the US," *Journal of Banking and Finance* (v.32/7, 2008); Ari Hyytinen and Tuomas Takalo, "Investor Protection and Business Creation," *International Review of Law and Economics* (v.28/2, 2008); Christian Leuz, Dhananjay Nanda, and Peter D. Wysocki, "Investor Protection and Earnings Management: An International Comparison," *Journal of Financial Economics* (v.69/3, 2003); Garth Rustand, *Investor Protection Workbook: Investors-Aid Guide to Protecting Investment Returns* (IA Investors-Aid Inc, 2007); Richard Shelby, "The Implementation of the Sarbanes-Oxley Act and Restoring Investor Confidence," banking.senate.gov (cited March 2009).

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Invisible Trade Balance

Invisible trade balance (ITB) refers to the net monetary value resulting from a country's international trade in invisibles during a given period of time, and it forms an important component of the country's balance of payments (BOP). ITB can be defined as the difference between the total monetary value of invisible exports (exports of intangibles) and invisible imports (imports of intangibles) of a country during a specified period of time, in general, a year or a quarter for which the country's BOP records are prepared.

In general practice, ITB is calculated as the total monetary value of invisible exports minus the total monetary value of invisible imports. As a result, for a period in which the total value of invisible exports exceeds the total value of invisible imports, ITB records a positive value indicating a surplus. When the total value of invisible imports exceeds the total value of invisible exports, ITB results in a negative value indicating a deficit for that period. Thus, ITB indicates the surplus or deficit resulting from a country's international trade flows in invisibles during a given period of time. The international trade involving invisibles (or intangibles) is most often referred to as the international trade in services. Therefore, ITB is also most often referred to as the services balance (or services trade balance) in BOP. However, invisible trade and invisible trade balance are the popular terms still used in the United Kingdom and some of its former colonies.

ITB constitutes an integral part of a country's BOP. BOP is a comprehensive record of a country's international transactions with the rest of the world during a given period of time and is comprised of two main accounts, namely, the current account and the capital account. The transactions resulting in capital inflows and outflows are recorded in the capital account. The current account is comprised mainly of the accounts dealing with visible trade (merchandise trade), invisible trade (services trade), and transfers. Some countries, such as the United Kingdom, include receipts and payments of transfers also among the invisibles, while many other countries, like the United States, include transfers as a separate item in the current account. Following the principle of double-entry accounting, the international transactions resulting in receipts from nonresidents are recorded as credit (+) entries and the international transactions resulting in payments to nonresidents are recorded as debit (–) entries in BOP. According to the same principle, the exports are recorded as credit (+) entries and the imports are recorded as debit (–) entries. ITB can therefore be simply defined as the sum total of invisible exports and imports during a specified time period.

The main components of trade in services that are recorded in BOP include transportation, travel, communication services, construction services, insurance, financial services, computer and information services, royalties and license fees, personal, cultural and recreational services, other business services, and government services. Relative to international trade flows in visible goods, the definition and measurement of international trade flows in invisibles are more difficult. Invisibles are also inherently less tradable than visible goods. International trade in visible goods is characterized by the cross-border movements of physical objects. However, the international trade in invisibles is not always characterized by such physical cross-border movements. There are at least four modes in which the trade in services can take place: cross-border supply (the service is traded by the supplier in one country to a consumer in another country without either one of them moving to the country of the other), consumption abroad (the consumer moves to the country of the supplier to consume the service), foreign presence (suppliers in one country supply their services through their affiliates in other countries), and the presence of natural persons (an individual moves to the country of the consumer to supply the service on his or her own behalf or on his or her employer's behalf).

The importance of services-producing sectors, which are collectively known as the tertiary sector, and their export has increased over time both in developed and developing countries. As a result, ITB in many developed countries recorded increasing surpluses in the recent past, and these surpluses helped offset deficits in merchandise trade in some of those countries. At present, the OECD countries, which are net exporters of services as a group, account for about three-quarters of world exports of services. The categories of services that recorded a faster growth during the period from 2000 to 2005 include the following: computer and information services, financial and insurance services, communication services, and other business services. Some developing countries such as India also had similar experiences. However, the deficits in invisible trade balance in a large number of developing countries have been directly related to their growing problems of international indebtedness.

See Also: Balance of Payments; Trade Balance.

Bibliography. International Financial Services London (IFSL), *World Invisible Trade 2007* (August 2007); Duncan McKenzie, "UK Trends in Invisible Trade and Financial Markets," *European Business Journal* (v.9/4, 1997); Organisation for Economic Co-operation and Development (OECD), *Main Economic Indicators* (November 2007); United Nations Department of Economic and Social Affairs (UNDESA), *Manual on Statistics of International Trade in Services* (UNDESA Statistics Division, 2002).

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IPC

The IPC (Indice de Precios y Cotizaciones) is an index of stocks that trade on the Bolsa Mexicana de Valores (BMV), which is Mexico's only stock exchange. The IPC is the main indicator of the BMV. It measures the performance of the Mexican stock market, and it is representative of all shares listed on the stock exchange. This indicator was implemented in its current structure in 1978.

The BMV is headquartered on Paseo de la Reforma in central Mexico City. BMV is a private limited company, with the exchange's shareholders consisting exclusively of authorized brokerage firms, each of which owns a single share. The exchange trades debt instruments including federal Treasury certificates (CETES), federal government development bonds (BONDES), investment unit bonds, bankers' acceptances, promissory notes with yield payable at maturity, commercial paper, and development bank bonds. In addition, it also trades stocks, debentures, mutual fund shares, and warrants. Trading is conducted electronically through the BMV-SENTRA Equities System.

The mission of the BMV is to

> contribute to domestic savings, productive investment and stock brokerage in the country, meeting the needs of companies, issuers and governments, as well as of domestic and foreign investors. Provide services to enable access to the Stock Exchange infrastructure, in order to facilitate listing and trading of securities, information dissemination and the operation of the organized capital and debt market and other financial assets.

Investors go to stock exchanges worldwide as an option to protect and increase their monetary savings, supplying monetary resources that in turn allow corporations and governments to finance productive and development projects that in turn generate jobs and wealth. The stock exchanges are organized markets that contribute to this financial channeling in a free, efficient, competitive, equal, and transparent way, holding up previously agreed rules for all participant parties.

The BMV is the physical place where the trades made by the brokerage firms are executed and registered. Investors buy and sell stocks and debt securities through intermediaries, called brokerage firms. Note that the BMV does not buy or sell securities directly. The investors send their orders through an account executive employed by a brokerage firm. These account executives are registered specialists who have received training and are authorized by the CNBV. The buy and sell orders are transmitted from the brokerage firms to the market through a sophisticated Negotiation, Transaction, Registry and Assignation Electronic System (BMV–SENTRA Capitales) where they wait to find an equal but opposite order and thus perfect the operation. Once shares or debt securities have been acquired, performance can be monitored in specialized newspapers and the electronic information system of the BMV.

The BMV is where Mexico's organized securities market transactions are held, and its main objective is to facilitate the securities transaction process as well as market development, fostering its expansion and competitiveness through the following functions:

1. Establish the facilities and mechanisms as an aid in the relationship of the securities supply and demand, credit certificates, and other documents registered at the National Securities Registry (RNV), as well as provide the necessary services for underwriting, offering and the exchange of the aforementioned securities.
2. Publish, provide, maintain, and make available to the general public the pertinent information about the securities listed at the BMV and at the International Quotations System (SIC), about its issuers as well as of the executed transactions.
3. Establish the necessary means to ensure that the transactions held at the BMV by the brokerage firms comply with the applicable legislation.
4. Issue regulations that set standards and operative guidelines as well as conduct norms to promote fair and equitable market practices at the securities market; guard their observation and impose disciplinary and corrective measures, in case of lack of fulfillment, that are mandatory for brokerage firms and the issuers with listed securities at the BMV.

Some important milestones in the history of the BMV are outlined below:

1982—President Miguel de la Madrid allowed the establishment of private brokerage houses with wide latitude to conduct financial transactions in domestic capital markets.

October 1987—U.S. stock market crash. The BMV recovered slowly in 1988.

1991—The index of traded stocks rose 128 percent in new peso terms and 118 percent in U.S. dollar terms. In November 1991, the government eliminated all exchange controls, thereby unifying the various peso exchange rates.

1992—199 companies were listed as trading on the stock exchange. A total of 11 trillion new pesos were traded, and the exchange had a total capitalization of US$139 billion and a price-to-earnings ratio of more than 13.

1993—Mexican investors held about 75 percent of the equities traded.

1994—The market was buffeted by a series of political shocks—including two high-profile political assassinations, revelations of high-level corruption in President Carlos Salinas's entourage, and continued unrest in Chiapas—that contributed to its high volatility throughout the rest of the year.

1995—The stock market collapsed, causing the stock index to fall to less than 1,500 points in February of that year. The main stock index gradually recovered to just under 3,000 points by the end of 1995 and reached 3,300.

September 1996—Mexican stocks gained 24 percent in dollar terms during the first eight months of 1996. A slow recovery would follow in the next years.

2008—The world financial crisis that began in 2008 affected Mexican stocks negatively. The falling peso was a precipitating factor.

See Also: Mexico; Tequila Effect.

Bibliography. Bolsa Mexicana de Valores, www.bmv.com.mx (cited March 2009); H. F. Coronel Brizio and A. R. Hernández Montoya, "Asymptotic Behavior of the Daily Increment Distribution of the IPC, the Mexican Stock Market Index," *Revista Mexicana De Fisica* (v.51/1, 2005); Financial Forecast Center, www.forecasts.org (cited March 2009).

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Iran

Iran is one of the oldest nations in the world, and currently has a young and educated population. Iran was a key U.S. ally in central Asia until the Islamic Revolution in 1979 transformed the country into a clerical regime. Iran is a member of the Organization of Petroleum Exporting Countries (OPEC), and its oil-related activities are the backbone of the Iranian economy. In recent years, the Iranian nuclear program has been a controversial subject in the international community.

Most Iranians profess Shi'ism, a brand of Islam. It was brought to ancient Persia during the Arab invasion of the 7th century. Some Sunni Muslim fanatics such as Osama bin Laden consider it to be a form of apostasy and do not consider shi'ites to be truly formed Muslims. An endogenous attempt to realize an Iranian democracy took place after World War II when Iranians supported a visionary leader, Mohammad Mosaddeq. Mosaddeq decided to nationalize the country's oil industry, which had been controlled by a British monopoly, the Anglo-Iranian Oil Company. That action made him a national hero, but it also led to his downfall. In 1953 the British were outraged by the nationalization and, working closely with the U.S. Central Intelligence Agency, arranged to overthrow Mosaddeq. Thus, they opened a new era in Iranian history, one dominated by Mohammed Reza Shah Pahlavi. A close ally of the United States, he ruled with increasing repression until he was himself overthrown by the Islamic Revolution of 1979.

The new regime brought a theocratic government into power, which proved to be hostile to the United States. The Islamic regime allowed radical students to take 66 U.S. citizens hostage in the U.S. embassy in Tehran for more than 14 months. That act helped to undermine Jimmy Carter's presidency and turned Washington and Tehran into bitter enemies. Since then, the United States has used various strategies to weaken Iran. It has encouraged Iranian counterrevolutionary groups, imposed economic sanctions, and worked intensely to prevent Iran from building pipelines that could carry its oil and gas to nearby countries. The United States financially supported Saddam Hussein's regime during the Iran-Iraq war (1980–88).

This pressure intensified after President George W. Bush took office in 2001. Bush famously listed Iran, along with Iraq and North Korea, as part of the World's "axis of evil" and claimed in his State of the Union address in 2002 that Iran had become the world's primary state sponsor of terror. Although it is uncertain whether Iran's Islamic regime is still supporting terrorist groups, it clearly did so in the 1990s.

Iran contains about 125 billion barrels of proven oil reserves—roughly one-tenth of the world's total. As a result, the extraction and processing of petroleum are Iran's fundamental economic activities and

Eighty percent of Iran's export earnings come from oil. It has one-tenth of the world's oil and platforms, such as this one.

the most valuable in terms of revenue. Natural gas production is increasingly important. Oil exports account for about 80 percent of Iran's total export earnings and provide revenue for some 40 to 50 percent of the government's budget. This abundance of mineral resources is a cause of suspicion over the Iranian nuclear program. Although the official position of the Iranian government is that the program has only peaceful purposes, this claim is still controversial. Seen from the Iranian perspective, there is a real interest in having the nuclear deterrence: the fear of a possible U.S. invasion. In fact, the United States has troops on both Iran's western border (Iraq) and its eastern border (Afghanistan). Moreover, Israel, India, and Pakistan have nuclear arsenals. Therefore, the Iranian control of a nuclear deterrence is based both on military consideration and on the search for prestige for the theocracy. In this context, the United Nations Security Council issued several resolutions demanding Iran to suspend uranium enrichment.

The misuse of information over the Iraqi program of weapons of mass destruction made the U.S. intelligence community cautious about how findings are used. That may be why it felt right to admit in a National Security Estimate in December 2007 that Iran halted any clandestine work on nuclear energy in 2003. However, there is no evidence that shows the level reached by the program. The danger is that a nuclear-armed Iran could set off a chain reaction that turns Saudi Arabia, Egypt, and Syria rapidly into nuclear powers, too. Thus, the multiplication of nuclear rivalries would increase the consequences of escalation in central Asia and in the Middle East. Falling oil prices negatively affected the economy of Iran in the world economic tumult that began in 2008.

See Also: Iraq; Israel; Middle East; Saudi Arabia; Syria; Terrorism.

Bibliography. Mohammad Fathian, Peyman Akhavan and Maryam Hoorali, "E-readiness Assessment of Non-profit ICT SMEs in a Developing Country: The Case of Iran," *Technovation* (v.28/9, 2008); Ali Gheissari, *Contemporary Iran: Economy, Society, Politics* (Oxford University Press, 2009); Jubin Goodarzi, *Syria and Iran Diplomatic Alliance and Power Politics in the Middle East* (Tauris, 2009); "Has Iran Won?" *The Economist* (February 2, 2008); M. Khadduri, *The Gulf War: The Origins and Implications of the Iraq-Iran Conflict* (Replica Books, 1988); Mohammad Hassan Kheiravar, *The Role of SMEs on Employment Creation: The Case of Iran* (Eastern Mediterranean University, 2007); Mazen Labban, *Space, Oil and Capital* (Routledge, 2008); Helen Chapin Metz, ed., *Iran: Past and Present: From the Perspective of the U.S. National Interests* (IndoEuropean-Publishing.com, 2008); Pari Namazie and Philip Frame, "Developments in Human Resource Management in Iran," *International Journal of Human Resource Management* (v.18/1, 2007); Heather Lehr Wagner, *The Organization of the Petroleum Exporting Countries* (Chelsea House, 2008).

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Ireland

For generations, the name *Ireland* has been almost synonymous with *emigration*, but in recent decades that image has drastically changed. From the 17th century onward, religious intolerance and economic conditions combined to disperse people from Ireland across five of the world's continents. The first major exodus consisted of Northern Irish Protestants seeking opportunities in the new British colonies in North America. The greatest Irish mass emigration occurred toward the middle of the 19th century when successive failures of the potato crop created famine throughout rural Ireland, which was overwhelmingly Roman Catholic in religion. A quarter of the population of eight million was lost either to death by starvation or to emigration. In the United States in 1850, the census estimated that nearly a million of the country's latest immigrants came from Ireland.

During World War II, the Irish Republic maintained a policy of neutrality, which made its integration into the postwar international economy problematic. The Irish government pursued a policy of protectionism that resulted in mass unemployment. Taking advantage of a long-standing policy of free movement of labor between Ireland and Britain, thousands of workers crossed the Irish Sea in response to the demand for cheap labor to help reconstruct the bombed metropolitan areas of England, Wales, and Scotland, and to build the social housing that was promised by the first postwar British governments, both Labor (socialist) and Conservative.

The Celtic Tiger Economy

Right up to the early 1990s, a visitor to the Republic of Ireland observing career guidance being given to a typical group of those leaving school would have noticed that "how to emigrate" was at the top of the agenda, with young Irish people being advised on destinations like London or Boston where they could find low-skilled work in sectors such as the construction industry or the hotel trade. Then, from the mid-1990s, the country went through a rapid transformation, gaining a reputation for itself as the "Celtic Tiger."

The economic boom of the late 1990s came from two main sources: inward investment and house-building, so that by the start of the 21st century, the housing sector was accounting for approximately 15 percent of gross domestic product, approximately twice the average of most other European Union (EU) countries. Some critics of this phenomenon were describing the country as "a building site with a national anthem," but such comments cut little ice with Irish policy makers and business leaders, who for generations had seen their country regarded as the "joke" economy of western Europe.

Until the Celtic Tiger economy emerged, the Irish Republic was still a net exporter of people, as it had been since the 18th century. The 30 million people worldwide who claimed Irish origin were often called the "Fifth Province" of Ireland. The intelligent use of this diaspora became one of the key elements in the Irish drive to attract inward investment. Irish American business executives were specifically targeted by the Irish government's development agencies and assured that if they were seeking a foothold within the geographical boundaries of the European Union (which Ireland had joined at the same time as the United Kingdom in 1973), they could do no better than to choose a location which was English-speaking, committed to a business-friendly corporate taxation regime, and relatively enthusiastic toward the Single European Market and the euro single currency.

At the same time, Ireland made full use of regional development grants available under the EU's structural funding programs to provide economic infrastructure, such as new transport links and business parks; and it also committed itself to investment in human capital through the modernization of its education system, especially in the university sector. The result was that national income per capita surged upward, and tens of thousands of immigrant workers flocked to Ireland, especially from poorer east European countries such as Poland and Romania.

Toward the end of the first decade of the 21st century, the future prospects of the Celtic Tiger economy began to look more mixed. The worldwide credit crunch arising from problems in the American subprime money-lending markets resulted in large hikes in Irish interest rates, with the result being a major slump in the housing sector. Irish enterprises such as Ryanair kept attracting often-envious attention from larger but less dynamic competitors.

This small country, which as a sovereign nation-state with full fiscal autonomy and a seat at the European Central Bank, has a population similar to areas of Britain, Spain, or Germany such as Scotland, Andalucía, or Bavaria, which operate merely as "regions" as opposed to "states." Ireland still punches above its weight in the corridors of power in the EU and other influential international organizations. However, unless there is a new economic upturn, the signs are that Ireland is moving toward a position of net emigration once again. To begin with, this is likely to involve eastern Europeans returning to their homeland, rather than the traditional exodus of the Irish themselves to places such as England, the United States, and Australia. However, if or when large numbers of Irish begin seeking work overseas once again, the genreation involved is much more likely to be highly skilled, better qualified, and far less ready to enter low-paid occupations than many of their ancestors.

See Also: Asian Tigers; Economic Development; Euro; European Union.

Bibliography. Kieran Allen, *The Corporate Takeover of Ireland* (Irish Academic Press, 2007); Thomas M. Cooney and Etain Kidney, *A Mapping of Entrepreneurship and Innovation Policy in Ireland* (Dublin Institute of Technology, 2008); Colin Coulter and Steve Coleman, eds., *The End of Irish History? Critical Approaches to the 'Celtic Tiger'* (Manchester University Press, 2003); Desmond Dinan, *Encyclopedia of the European Union,* Palgrave-Macmillan, 2000; Brigid Gavin, *The European Union and Globalisation* (Edward Elgar, 2006); Hooke & MacDonald, *Supply in the Irish New Homes Market: Trends and Forecasts for Residential Construction in 2008 and 2009* (Hooke & MacDonald, 2008); Brigid Laffan and Jane O'Mahony, "Managing Europe From an Irish Perspective: Critical Junctures and the Increasing Formalization of the Core Executive in Ireland," *Public Administration* (v.85/1, 2007); Ziene Mottiar and Sarah Ingle, "Broadening the Entrepreneurial Perspective—Entrepreneurship in an Irish Furniture Region," *International Small Business Journal* (v.25/6, 2007).

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ISE National 100 Index

The Istanbul Stock Exchange (ISE) National 100 Index tracks the movement of 100 stocks on the ISE. The ISE is the only securities market in Turkey, established in 1986 to provide a market for equities, bonds, real estate certificates, and foreign and international securities. Three hundred twenty Turkish companies are traded on the ISE, which operates from 9:30 A.M. to noon and 2 to 4:30 P.M. every weekday. In addition to the ISE National 100, other indices are the ISE National All Shares, the ISE National 30, the ISE National 50, the ISE Investment Trusts, the ISE New Economy Market, and specific sector and sub-sector indices.

The earliest securities market in the region, the Dersaadet Securities Exchange, was founded in 1866, during the time of the Ottoman Empire. The DSE acted to attract foreign investors through the end of the 19th century and the early years of the 20th, and upon the creation of the Turkish Republic that superseded the Ottoman Empire, the markets were reorganized into the Istanbul Securities and Foreign Exchange Bourse in 1929—just in time for the Great Depression and other events to impact securities and capital markets worldwide. The 1980s brought an improvement to the Turkish economy, as it did to many economies of the region, and regulatory bodies were established to oversee and modernize the Turkish securities market. After several years of regulatory acts preparing for it, the ISE was established.

The list of companies on the ISE National 100 is recalculated quarterly. As of summer 2008, the list is Adana Cimento, Advansa Sasa, Afyon Cimento, Ak Enerji (50), Akbank (30), Akcansa, Aksa, Aksigorta (30), Alarko Holding (50), Albaraka Turk (50), Alkim Kimya, Anadolu Efes (50), Anadolu Hayet Emek, Anadolu Sigorta (50), Anel Telekom, Arcelik (30), Aselsan, Asya Katilim Bankasi (30), Atakule Gmyo, Aygaz (50), Bagfas (50), Banvit, Bim Magazalar, Bossa, Boyner Magazacilik, Coca Cola Icecek, Cimsa, Dogan Gazetecilik, Dogan Holding (30), Dogan Yayin Holding (30), Dogus Otomotiv, Dyo Boya, Eczaciba Si Ilac (50), Eczaciba Si Yapi, Eczaciba Si Yatirim, Ege Seramik, Enka Insaat (50), Eregli Demir Celik (30), Ford Otosan, Fortis Bank, Garanti Bankasi (30), Global Yat. Holding (50), Goldas Kuyumculuk, Grundig Elektronik, GSD Holding (30), Gubre Fabrik (50), Gunes Sigorta, Hurriyet Gzt. (30), Ihlas Ev Aletleri, Ihlas Holding (30), Is Bankasi (30), Is Fin. Kir, Is Gmyo (30), Is Y. Men. Deg, Izmir Demir Celik, Kardemir (30), Karsan Otomotiv (50), Kartonsan, Koç Holding (30), Koza Madencilik, Marti Otel, Merko Gida, Migros (30), Net Holding (50), Net Turizm, Otokar, Park Elek. Madencilik, Pera Gmyo, Petkim (30), Petrol Ofisi (30), Reysas

Lojistik, Sabanci Holding (30), Selcuk Ecza Deposu, Sinpas Gmyo, Sekerbank (30), Sise Cam (30), T. Halk Bankasi (30), T. Ekonomi Bank (50), T.S.K.B. (30), Tat Konserve, Tav Havalimanlari (50), Tek-Art Turizm, Tekfen Holding (30), Tekstil Bank, Tesco Kipa, Tofas Oto. Fab (50), Trakya Cam (50), Turcas Petrol, Turkcell (30), Tupras (30), Turk Hava Yollari (30), Turk Telekom (30), Ulker Biskuvi (50), Vakiflar Bankasi (30), Vestel (50), Vestel Beyaz Esya (50), Yapi Kredi Sigorta, Yapi Ve Kredi Bank (30), Yazicilar Holding, and Zorlu Enerji.

Parenthetical numbers indicate that the company is also on the ISE National 30 or 50.

See Also: Bonds; Common Market; Company Profiles: Middle East; Dow Jones Index; Economic Development; European Union; Koç Holding; Markets; Turkey.

Bibliography. Istanbul Stock Exchange, www.ise.org (cited March 2009); Cemal Berk Oğuzsoy and Sibel Güven, "Stock Returns and the Day-of-the-Week Effect in Istanbul Stock Exchange," *Applied Economics* (v.35/8, 2003).

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Israel

Israel is a world leader in technologically advanced products and services. Growth has been impressive in recent years, and macroeconomic policy has been well managed. However, significant structural problems need to be addressed in order for Israel to reach its full economic potential. Israel is a highly open, developed economy with gross domestic product (GDP) of $162.75 billion, or $22,500 per capita (unless otherwise noted, figures are from 2007, and are taken from the Central Bureau of Statistics [CBS] or Bank of Israel [BOI]). According to the Organisation for Economic Co-operation and Development (OECD), Israel's per capita purchasing power adjusted GDP, an indicator of living standards, is 21st in the world, at 88 percent of the OECD average and 63 percent of the U.S. level (using a different methodology, the International Monetary Fund ranks Israel 18th). Israel has been invited to join the OECD.

Israel's population is 7.282 million—75.5 percent Jewish, 20.1 percent Arab, and 4.4 percent others (May 2008). From 1998–2008, annual population growth averaged 2.1 percent; during 1989–2000, over one million people immigrated from the former Soviet Union. Israel has a small land area and high population density. It is poor in natural resources, except minerals. The leading population and business center is the Tel Aviv metropolitan area; other population centers are Jerusalem, Haifa, and Beersheba. Life expectancy is slightly above the European average, but infant mortality is high. Health expenditures are 8.7 percent of GDP (2006). Basic health is 70 percent publicly funded. Although hospitals are overcrowded, medical care is generally excellent. Israel has a high rate of homeownership and an underdeveloped rental market. Land is 93 percent government owned.

Water is very scarce. The world's largest desalination plant opened in Israel in 2005; another plant was added in 2007. Agriculture is technologically advanced, capital intensive, and highly productive, but also highly protected and subsidized. Major exports are produce, flowers, and wine.

Defense expenditures average 8.5 percent of GDP (1998–2007). Since 2002, Palestinian suicide bombings and the associated economic costs have declined sharply. The economy was robust to the Second Lebanon War of 2006; the direct cost in lost GDP was just 0.5 percent. In 2008 Israel received $2.4 billion in U.S. military aid; civilian aid has been phased out.

Economy

In 2001–03, Israel experienced a major recession, caused mainly by Palestinian violence. During 2004–07, real GDP grew steadily at 5.2 percent per year. Israel has free trade agreements with the United States, Canada, and the European Union (EU). Exports are 45 percent of GDP, and are divided approximately equally between the United States, the EU, and others. Leading export sectors are high- and medium-high-tech industry, including pharmaceuticals (36 percent of exports), general services (19 percent), diamonds (15 percent), and high-tech services (11 percent). Exports grew 8.6 percent annually (in nominal terms) over 2004–07, led by information and communications technology (ICT). The weight of ICT in total business product is the highest in the world (2006).

In balance of payments, the current account/GDP ratio rose from minus 5 percent to 6 percent over 1997–2006, falling to 3.1 percent in 2007. The capital account has been liberalized since 1991. Israel is among the frontrunners in receiving foreign direct investment (FDI); FDI is concentrated in the ICT sector.

Israel ranks first in the world in availability of scientists and engineers and in research and development (R&D) expenditures as a percentage of GDP. Israel ranks third in patents per capita. R&D is concentrated in ICT. IBM, Intel, and other multinational corporations conduct R&D in Israel. There is limited government support for R&D.

Israeli venture capital funds raised $10.6 billion from 1998–2007. Over 2004–07, Israel's country risk premium was halved to 30 basis points; Israel's sovereign debt ratings have improved steadily. The financial system has become more competitive, efficient and stable, but further improvement is necessary. The Tel Aviv Stock Exchange maintains ties with NASDAQ and the London Stock Exchange (LSE). NASDAQ lists 75 Israeli companies; LSE lists 50.

Banking is dominated by two large banks. Many analysts see consumer banking as a cartel; corporate banking includes foreign players and is more competitive. A corporate bond market has developed; the banks' traditional dominance of credit markets is being gradually eroded. In 2005, the banks were forced to sell off their provident funds; many funds were purchased by insurance companies. From 2008, pensions are mandatory by law.

Over 2003–07 the deficit/GDP and debt/GDP ratios have declined from 6.2 percent to 1 percent, and from almost 102 percent to 80.6 percent. Government spending/GDP declined from 50.8 percent to 44.9 percent, while taxes stayed near 37 percent. Privatization has contributed to the reduction in debt/GDP.

Historically, the tax burden fell disproportionately on middle-class workers; financial income was untaxed. Since 2003, financial income has been taxed, while income taxes have been reduced. VAT and corporate taxes have also been reduced; current tax rates are 15.5 percent and 27 percent, respectively.

Monetary policy has succeeded in achieving price stability; currently, the inflation target is 1–3 percent. Stanley Fischer, a world renowned economist, has served as BOI governor since 2005. In 2007, the Bank of Israel's interest rate was below the U.S. Federal Funds Rate, a historically unprecedented situation.

Exchange rates are flexible. Over 2006–early 2008, the shekel appreciated by over 20 percent against the U.S. dollar, leading the BOI to intervene in currency markets for the first time since 1997. Israel joined the Continuous Linked Settlement (CLS) system in May 2008, making the shekel fully convertible worldwide.

Business firms have invested in quality improvement; ISO 9000 certification is widespread. Some Israeli companies have attained world-class quality, but traditional industry and construction lag behind.

Education and Employment

Primary and secondary education are plagued by inadequate infrastructure, poor discipline, and low teacher salaries. Internationally standardized test scores are low, despite large expenditures. Student achievement is highly stratified by socioeconomic status. Israel's research universities are excellent but public funding (traditionally 70 percent of university budgets) has stagnated. Access to higher education has been expanded dramatically through the opening of teaching-oriented colleges (public and private). The "brain drain" of academics and physicians (especially to the United States) is an acute problem.

Public administration suffers from severe structural problems. Coalition governments average two years in office, public services are limited, and dissatisfaction with bureaucracy is widespread. Construction planning is centralized, rigid, and slow. Law enforcement has serious weaknesses. Israel ranks 30th in corruption perceptions, second-worst among Western nations. A significant deterioration occurred over 2002–06. Many local authorities suffer from corruption, mismanagement, and inefficiency.

Inequality is high, and has risen since 2000, in part due to reductions in real transfer payments. The poverty rate is 23.7 percent overall, 34.9 percent among children (2006/7). (Because the poverty line is defined in relative terms, it actually measures inequality.) Poverty is concentrated in the Arab and Ultra-Orthodox sectors, which have poverty rates near 60 percent.

In the final quarter of 2007, unemployment was 6.7 percent, versus 10.7 percent (average) in 2003. The private sector labor market is highly flexible, and resembles U.S. and UK labor markets. The public sector is less flexible, and resembles the European model. Unionization has declined, especially in the private sector.

Long term growth of per capita GDP has been slow; Total Factor Productivity (TFP) growth has been disappointing, especially in trade and services, construction, and low-tech industry. Labor productivity is close to the OECD average (2006); the BOI cites foreign workers as an important cause of slow TFP growth. Israel suffers from low labor force participation among prime-aged males. High unemployment and low labor market participation are strongly correlated with low education levels. Arab women and Ultra-Orthodox Jewish men have the lowest participation rates. The general participation rate has improved somewhat since 2004. The government spends little on active labor market policies.

Non-Israeli workers (79 percent foreign, 21 percent Palestinian) comprise 8 percent of the labor force; many are employed illegally. Foreign workers are concentrated in agriculture, construction, hotels, and restaurants, and elder care. "Contract employees" compromise 5–10 percent of the civilian labor force. They are employed through manpower agencies ("contractors") at low wages and with few or no benefits, often against the law. They are concentrated in the service sector; surprisingly, the government is a major employer. Public sector strikes are a chronic problem, affecting essential services and education on all levels; many analysts blame Israel's unusual labor laws. Public monopolies (e.g., ports, utilities) pay abnormally high salaries.

Historically, the government has underinvested in roads and rails. However, road congestion has declined somewhat since 2000; intercity rail is gradually being expanded, and light rail projects are under way in Tel Aviv and Jerusalem. The Cross Israel Highway, Israel's first toll road, opened in 2002. Israel lags behind Western nations in traffic safety. Ports are inefficient and domestic shipping costs are very high. Air transport is uncompetitive; regulations strongly favor domestic carriers.

See Also: Company Profiles: Middle East; Middle East; Research and Development; Technology.

Bibliography. Eyal Argov, *Endogenous Monetary Policy Credibility in a Small Macro Model of Israel* (International Monetary Fund, European Dept, 2007); Bank of Israel, *Annual Report* (2006 and 2007); Avi Ben-Bassat, ed., *The Israeli Economy, 1985–1998: From Government Intervention to Market Economics* (MIT Press, 2002); Guy Ben-Porat, *Israel Since 1980* (Cambridge University Press, 2008); Central Bureau of Statistics, www.cbs.gov.il (cited March 2009); Robert Owen Freedman, *Contemporary Israel: Domestic Politics, Foreign Policy, and Security Challenges* (Westview Press, 2009).

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Italy

Italy is a country of southern Europe comprising 20 regions. It is one of the largest economies in Europe, and in the world. Its growth rates are consistently among the highest in the European Community. Italy's economic growth has been characterized, since the political unification in 1861, by the following factors: the divergence between an industrialized north and a prevalently agricultural south; the interventionism of the state; the predominance of family capitalism; and the large number of small and medium-sized firms. More recently, the Italian economy has been affected by political instability and international competition.

The Italian economy is characterized by a rather marked division between an industrialized north, where the great majority of industrial and manufacturing activities are located, and a less developed south. The dichotomy between the northern and southern parts of the country has been a major problem for the implementation of equal economic policies. The northern regions of the Italian peninsula, especially Lombardy, Piedmont, Veneto, and Liguria, see the greatest concentration of industrial activities. By contrast, the southern part of the country has never experienced industrial development comparable to that of the northern regions. In the 1960s, when Italy went through an economic boom, the divergence between the north and the south heightened, and many people migrated from the south to the north in search of better-paid jobs. Although in recent decades new opportunities for the economic development of the southern region have arisen, thanks also to the financial aid of the European Community, the north-south dichotomy and its social and political implications continue to be a current issue.

Since the origin of Italy as an independent and unified country in the mid-19th century, the Italian state has been markedly interventionist, entering the country's economic life in many ways, especially by subsidizing several industrial sectors. Along with Japan and Germany, Italy has been considered one of the most interventionist states. Italian industries and banks have benefited, over time, from large state subsidies. For example, Sofindit (financial company of the Banca Commerciale Italiana), Ansaldo, Terni, and in recent times even Fiat have received frequent subsidies from the state. The reasons behind the interventionism of the Italian state are several and complex; they are closely linked on the one hand, to the atypicality of the Italian political and economic unification, and on the other to the specificity of the Italian economic growth that witnessed a rather peculiar combination of private and public capitalism.

Family ties have been extremely important for the growth of modern Italian business, and Italy owes much to "familial capitalism," as the remarkably impressive persistence over time of family-run firms in the Italian economy evinces. Although the notion of family business has had for a long time a negative connotation that suggests economic backwardness and commercial weakness, the excellent performances of Italian family-run companies and industries in the past decades contradicts such generalized view. Family-run business can be, in practice, highly articulated forms of managing business that displays a remarkable flexibility, ability in negotiation, and noteworthy capacities of quickly responding to market changes. Well-known Italian companies such as Benetton, Missoni, Fiat, and Beretta, have been founded and run by families.

Along with family capitalism, another distinguishing aspect of Italian economic growth has been the pervasive presence of the so-called *piccola impresa* (small business). Since the late 19th century it has represented a vital component of the domestic economy, particularly in northern Italy. In the 20th century the excellent performance of Italian small business, especially in some specific sectors, made it an admired model of "flexible capitalism." The combination of family capitalism and the pervasiveness of small business (the great majority of Italian manufacturing and industrial activities are run by one family and employ less than 50 workers) seems to be the hallmark of the Italian economy.

In spite of its flexibility and competitiveness, the Italian productive system, however, has been able to cope only partially with the upheavals of the last three decades and the challenges of globalization. In spite of an increasing gross domestic product (according to data provided by ISTAT, Italian national product has grown steadily from 1970 to 2007), the Italian economy has been one of the most unstable in Europe in the last two decades. It has continued to have one of the highest growth rates within the European Community, but it has progressively shown a number of structural weaknesses. Italian economic performance has lagged behind that of other EU countries, and the prolonged climate of political instability in the last few years has affected the Italian economy. The introduction of the euro in the 1990s, which replaced the Italian lira, has led to additional difficulty, with consequent price increases and stagnation of production. Fierce international competition in some sectors, such as textiles, has impacted Italian production. A restructuring of the Italian economy has been called for by many parties.

See Also: European Union; Industrialized Countries; Telecom Italia; Western Europe.

Bibliography. Maurizio Carbone, "Italy and the South of the World: Still a Laggard in International Development?" *Journal of Modern Italian Studies* (v.13/1, 2008); Jon Cohen and Giovanni Federico, *The Growth of the Italian Economy, 1820–1960* (Cambridge University Press, 2001); Luca Iandoli, Hans Landström, and Mario Raffa, *Entrepreneurship, Competitiveness and Local Development: Frontiers in European Entrepreneurship Research* (Edward Elgar, 2007); Christiane Krieger-Boden, Edgar L. W. Morgenroth, and George Petrakos, *The Impact of European Integration on Regional Structural Change and Cohesion* (Routledge, 2008); Silvia Magri, *The Financing of Small Innovative Firms: The Italian Case* (Banca d'Italia, 2007); Camilla Mastromarco and Ulrich Woitek, "Regional Business Cycles in Italy," *Computational Statistics and Data Analysis* (v.52/2, 2007).

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Jakarta Composite Index

The Jakarta Composite Index is the major stock market index for the Jakarta Stock Exchange. The Batavia Effectenbeurs had been established on December 14, 1912, under the Dutch trading in shares of companies involved in rubber, tin, pepper, and the like. It was closed during World War I, reopened in 1925, and continued in operation until 1942, with the start of the Japanese occupation. It remained closed until 1952 when it was reopened under the Capital Market Emergency Regulations, but the only products traded were Indonesian government bonds. By 1956 it had stagnated and it remained closed during the rest of the presidency of Sukarno, Indonesia's first president. It reopened on August 10, 1977, when it was managed by the Badan Pengawas Pasa Modal ("Capital Market Supervisory Agency": Bapepam), under the control of the Ministry of Finance.

During the years that Suharto was president of the country, according to former investment banker and author Kevin O'Rourke, the Jakarta Stock Exchange (JSE) had become a venue for legalized gambling. Part of this was because of the tiny capitalization and hence the small number of shares being traded. This led to Indonesian banks establishing high-yield portfolio accounts and margin-trading instruments that pushed up stock prices. The economy was further deregulated between 1988 and 1990, allowing foreign investors to trade easily in the country. The Securities and Money Trading Organization also oversaw the Pararel Bourse, which consisted of brokers and dealers. On June 16, 1989, the Surabaya Stock Exchange also opened.

To measure how much shares on the stock exchange were rising, the JSE Index was established using a representative group of companies traded in Jakarta. There was a massive bull run in 1990, and large profits were being made. One of the companies involved there was the British firm Barings Bank, but it started registering a loss from trading despite the large rise in prices. In 1991 they sent over a newly-trained banker, Nick Leeson, who discovered some £100 million in share certificates lying around the room the bank was working from in the Hotel Borobudur. Because of his work there, he was later sent to Singapore where, in 1995, he was involved in the collapse of the bank.

The result of the 1990–91 bear market was that the price of shares became heavily inflated; on July 13, 1992, the JSE was privatized and became the Jakarta Exchange Inc., with Bapepam becoming the Capital Market Supervisory Agency, although it was not until 1996 that it had the power to investigate possible violations of stock exchange rules that were handled by the police. To help the growing numbers of stock traders, the Jakarta Stock Exchange, by this time known as the JSX, established a series of automated trading. This continued to encourage investors and gamblers alike, and was measured by the JSX Composite Index.

The Asian financial crisis of 1997 led to a collapse in the share values of many companies on the JSX, which was measured by falls in the JSX Composite Index. Many people lost fortunes, and it took many years for some of the major companies to regain the price levels that they had in the boom years—some companies did not survive. Some people found fault with the JSX, and as a result, some 30 corporate stocks switched to being listed on the Jakarta Islamic Index that was established in 2002. All the companies listed on this rival index had to fulfill the requirements of Islamic sharia law.

In 2005, with further globalization, the JSX Composite Index, along with the indices from the Bursa Malaysia, the Philippine Stock Exchange, the Singapore Exchange, and the Stock Exchange of Thailand, was used to establish an FTSE/ASEAN index to show the rise or fall of stock prices throughout the member states of the Association of Southeast Asian Nations (ASEAN).

Up until September 2007, there had been a separate Surabaya Stock Exchange, operating in the city on the east coast of Java. In that month it merged with the Jakarta Stock Exchange to create the Bursa Efek Indonesia (Indonesian Stock Exchange). On July 13, 2007, the JSX established the Kompas100 Stock Price Index, which started operating from August 10, 2007, to coincide with the 30th anniversary of the reopening of the stock exchange in Jakarta. For this, the Kompas100 Stock Price Index is based on a weighting of some 100 companies chosen because they reflect the frequency of sale, the value of transactions, and also the market capitalization, as well as the fact that they reflect a range of different sectors of the economy.

See Also: Asian Financial Crisis; Company Profiles: East Asia; Indonesia.

Bibliography. James S. Ang, Alireza Tourani-Rad, and Jean C. Yu, "Some Lessons from Price Bubbles and Market Crashes in Southeast Asia," *Managerial Finance* (v.30/7, 2004); David C. Cole, *Building a Modern Financial System: The Indonesian Experience* (Cambridge University Press, 1996); Ayşe Y. Evrensel and Ali M. Kutan, "IMF-Related Announcements and Stock Market Returns: Evidence from Financial and Non-Financial Sectors in Indonesia, Korea, and Thailand," *Pacific Basin Finance Journal* (v.15/1, 2007); Alicia García-Herrero, Jacob Gyntelberg, and Andrea Tesei, *The Asian Crisis: What Did Local Stock Markets Expect?* (Bank for International Settlements, 2008); Nick Leeson, *Rogue Trader: His Own Amazing Story* (Little, Brown & Company, 1996); Kevin O'Rourke, *Reformasi: The Struggle for Power in Post-Soeharto Indonesia* (Allen & Unwin, 2002); Assif Shameen, "Indonesian Market Is Hot, and Getting Hotter," *Barron's* (July 16, 2007); Jasso Winarto and Simon Wang, *Winarto & Wang's Indonesia Stock Market Handbook* (Bisnis, 1991).

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Japan

With a GDP of $4.417 trillion in 2007, Japan is the second-largest economic power and the second most important consumer market in the world. Japan was an island country completely closed to all Western influences until the 1850s. But after opening itself to the West in 1853, Japan developed from the status of a medieval country to the top of the economic world by the end of the 20th century. During this period, typical Japanese management practices developed that, along with strong cooperation between government and industry, low expenditures for national defense, and a high interest in technology and innovation, led to unprecedented success for the Japanese economy. During the 1980s, at the height of economic success, Japanese management style was seen as a role model and began to influence Western business practices.

From the beginning of the 1990s, however, Japan went through a major recession that led to numerous changes in traditional Japanese management processes. Only at the beginning of the 21st century did Japan seem to have recovered from its economic crisis; it is now trying to keep its role as a major player in the global economy.

Country and People

Japan consists of 6,852 islands occupying 377,887 sq. km. Honshu, Hokkaido, Kyushu, and Shikoku are the biggest and most populated islands, with Honshu serving as the economic, political, and cultural center of Japan. The capital Tokyo and the major cities Osaka and Nagoya are located on Honshu. Tokyo accounts for only 2 percent of the land but hosts more than 40 percent of the total population (127.5 million people in total). About 18.5 percent of the population are older than 65 years. The average life expectancy, 78.32 years for men and 85.23 years for women, is one of the highest in the world.

Over 80 percent of Japanese observe either the Shinto or Buddhist religion or both. The remainder of the population practice other religions, including Christianity.

Japan is the home of the oldest continuous imperial family in the world, the current emperor being the 125th in an unbroken line. He is the official head of the government but has no governing authority. All his acts require the advice and the approval of the Japanese cabinet. Today the emperor is still considered the spiritual head of the nation and is responsible for performing a variety of Shinto rituals. The current emperor, Akihito, succeeded to the throne in 1989, adopting the formal reign title Heisei ("Establishing Peace"), which is also the imperial reign name.

Today, the Japanese cabinet, headed by a prime minister from the majority party, holds executive power. The Japanese parliament, the highest organ of state power, consists of the House of Representatives (with 500 members) and the House of Councilors (with 252 members). The dominant political party in Japan is the LDP (Liberal Democratic Party), which was formed in 1955 and, because of Japan's rising prosperity, remained in sole power for 38 years. After a year and a half in opposition, it again became the single ruling party in 1996.

Economic Development

Japan's economic success and development is a unique phenomenon. Japan was a closed country (*Sakoku*) until 1853. This was originally initiated by the third Shogun Iemitsu, who—in an attempt to create internal peace and stability—closed the island country to foreign commerce and expelled missionaries in 1635. While the seclusion created internal peace and stability, Japan fell behind in terms of technological development and remained a medieval state for the next 200 years. The turning point in Japanese history came in 1853, when Commodore Matthew C. Perry entered Japan with his "Black Ships" (steam boats), which forced Japan to open up to the West and triggered a chain of events. The Shogunate fell and the Imperial Restoration in 1868 ended Japan's seclusion.

The new Meiji government set out to transform Japan from a medieval empire into an industrialized state within 30 years, so that Japan could match Western developments and deal with them on equal terms. These attempts were supported by the fact that Japan was already a well-developed market with its own currency and distribution system even before opening up to the West. Industry was promoted, Western culture was encouraged, and a parliament was established. The slogan of the new government was *fukoku kyôhei* ("Enrich the country, strengthen the military"). Japan also built up sufficient military power to become Asia's major imperialist power in the early 20th century.

Japan's economic success did not start directly after World War II. After the defeat in 1945 Japan faced the Allied occupation, which forced the country to demilitarize and put an end to the long-running *zaibatsu* (the old Japanese combines) control over the economy. They also made changes in the constitution and the educational system, and gave women the right to vote.

At the end of the Allied occupation in 1952, Japan still ranked as a less-developed country. The Korean War was the first impetus to help Japan recover, because the American forces used Japan as a base to fight the North Korean army and received supplies from Japanese suppliers. Japanese companies started to increase their production and had a young and highly motivated workforce to support them.

Japan's economic development was accompanied by the structural development of Japanese industry. Even before World War II, Japan possessed very impressive light industry, with textiles and food production being the most important. Most notable was the increase of heavy industry, such as machinery manufacturing and the chemical industry. These changes were strongly supported by the Japanese government. The Japanese also had an enormous fascination regarding modern technology and traditionally have shown a great openness toward ideas and con-

Shoppers throng an open-air market in Japan. Although personal consumption has decreased with the country's ongoing financial turmoil, Japan is still the second most important consumer market in the world.

cepts introduced from Western countries. This led them to accept Western products and behavior rather quickly compared to other developing countries.

Other factors that influenced the high growth rate of Japan after the war were found in the strong relationships between government and industry. The government promoted long-term investment in future industries and technologies while keeping expenditures on self-defense relatively low compared to other government ministries. More resources were being spent on developing industry.

From 1953 until 1973 the Japanese economy grew at an annual growth rate of 8 to 10 percent, making it the first less-developed country in the postwar period to graduate to developed nation status. During the 1950s the major industries were textiles and light industry. During the 1960s the iron and steel industry and the shipbuilding industry were most dominant. Japan at that time also hosted the Olympic Games, which was the first time it presented itself on an international stage. By the 1970s, the automotive industry rose to prominence. This development was accompanied by strong urbanization that made Tokyo and Osaka the most populated areas in Japan.

Despite the success of its economic rebound, occasionally Japan would suffer from events that would affect its economy. In 1974 the GNP fell 1.4 percent for the first time since 1950 because of the oil crisis. Growth also fell in the 1970s and slowed from 10 percent to 3.6 percent between 1974 and 1979. Despite a weak economy from 1981 to 1983, a strong dollar led to an increase in exports after 1983. By 1985 the surplus in Japan's balance of payments account reached 3.7 percent of the GNP. Exports had increased in the early 1980s, due to a strong U.S. dollar. Japan's economic turn-around was complete. It had emerged as an economic powerhouse, boasting trade surpluses with the United States and the European Union (EU). This was the time when Western managers and researchers developed a deeper interest in the Japanese economy and traditional Japanese management styles.

The Bubble Economy and the Lost Decade

Japan's export-bolstered economic growth first experienced difficulties after the G-5 Plaza Agreement of 1985 and the rapid appreciation of the yen. Interest rates were lowered in order to increase domestic demand, and the expanded supply of domestic capital resulted in an increase of investment in land and stocks. At the same time, land values increased and finance companies increased the number of loans with real estate as security. Capital secured by such loans was used to purchase more real estate; these were later to become "bad debts." In these years, Japanese companies borrowed massively from Japanese banks, which got their funds from the high amount of household savings. An ongoing inflation allowed them to pay back their debts without any problems until 1990, when the bubble finally burst. Properties purchased at high "bubble era" prices were not able to pay for themselves, putting pressure on the businesses that owned them. Consumers also reacted to these changes and personal consumption decreased. Banks were left with bad loans, with many ending in bankruptcy or needing support from the government.

During the 10 years of recession, the Japanese government invested ¥130 trillion on structural reforms. However, there were no visible effects for a long time due to the inflexibility of Japanese organizations and structures. The 1990s, after the bubble burst, are therefore known as the "lost years" in Japanese economic development. There were difficulties in disposing the bad debts, for which interest payments were late, or which were not recoverable because of bankruptcy. This inevitably forced the Japanese economy into low growth for more than a decade until 2000.

The recession and the lost decade significantly damaged Japan's image as an economic powerhouse. It added a layer of skepticism to the already existing difficulties of Japanese corporations coping with globalization, the increasing challenge that China presented for the Japanese economy, and the tariff and non-tariff entry barriers as well as cultural and business differences that are faced by foreign firms attempting to enter the Japanese market.

Japan's internationalization also got a boost in the 1990s. China became its main competition, since Japanese manufacturers realized that they could not compete with their cheap production processes. This led to the internationalization of a high number of Japanese companies, which previously focused mostly on the Japanese market and had not yet exported their manufacturing processes. Today Japan is the most influential foreign investor in China.

Only in 2003 did the Japanese economy start to show subtle signs of recovery. Parts of the economic recovery are based on the weak value of the yen, which boosted export sales, parts of the long-expected effects of structural reforms started in the 1990s. By 2007 Japan's GDP was growing at 1.9 percent, unemployment stood at 4 percent, and inflation was negligible. In the same year, its exports were valued at $665.7 billion, with nearly 23 percent going to the United States.

Japanese Management

Japanese business practices have been strongly influenced by Japan's seclusion and differ from Western approaches in numerous fields. The extraordinary development of the Japanese economy from a less-developed country to a member of the G7-states, as well as the success of Japanese corporations, made Japanese management a focus of Western researchers and managers.

The most notable differences are lifetime employment, seniority-based pay and promotion, and the role of Japanese trade unions. Lifetime employment refers to the preference of Japanese corporations to hire their employees after their graduation from university and then keep them in the company for most of their length of their careers. Lifetime employment is not a legal requirement for Japanese companies, but a custom that developed after World War II. The strict Japanese labor laws, which make it very difficult to lay personnel off, supported the establishment of this system.

Lifetime employment offers great advantages for the economic development of Japanese corporations. Corporations can invest in the training of their employees and support them in building up know-how over a long period of time. Lifetime employment is further thought to improve employee motivation and loyalty. Next to lifetime employment, seniority-based pay and promotion are also well-known features of Japanese management. Traditional Japanese corporations are strongly hierarchical systems in which career opportunities depend on the length of service in the firm. This provides a stable and reliable system for employees, but could decrease motivation for ambitious workers.

The most well-known and influential part of Japanese management is Japanese production management, which is mostly related to the Toyota Production System. This system became a role model for Western car makers and manufacturers of all kinds of products in terms of safety, quality, and cost effectiveness and made Toyota one of the most successful Japanese corporations in the world. Japanese production management incorporated the just-in-time (JIT) style of management. This is a system in which all parts used during the production process are delivered exactly at the right time and used in their proper amounts. Just-in-time management reduces waste and costs and uses methods such as the *kanbans* (small cards that help the coordination of parts used during the manufacturing process) and *heijunka* (continuous control of quality during the production process as well as after the product is manufactured). Japanese production management is further strongly based on the philosophy of *kaizen*, which refers to continuous improvement of all management and manufacturing processes with the overall goal of improving quality and customer value. All these concepts allowed Japanese manufacturers not only to take the lead in quality and in cost but also supported the development of the Japanese economy.

Other interesting features of Japanese management are *nemawashii* or unofficial negotiations and the *ringi* system, a group decision-making process. Nemawashii refers to communication between negotiators in an environment before an official meeting takes place. This allows all participants of a negotiation to present their ideas and circulate them among all participants. In this way, problems can be solved before a final meeting, and harmony and understanding are secured for all participants. Nemawashii is the reason why Japanese meetings often only have an information exchange function and simply finalize the results of the nemawashii process.

The ringi system, on the other hand, is a bottom-up group decision-making process that includes members of all management levels. In a ringi document a new idea is presented and then improved and revised by all managers involved. The document is often circulated a number of times throughout a company. The whole process is finalized once all participants agree on a solution and sign the document. It sometimes can be signed by up to 30 or more people. The ringi system decreases individual responsibility and informs employees of a new strategy or idea. This allows Japanese teams, departments, or companies to set very ambitious goals, but also leads to time-consuming decision-making processes and indecisiveness in times of crisis.

Japanese management has further become famous for its particular way of managing knowledge. Japanese knowledge management focuses on tacit knowledge or knowledge that is located in people and not documented in the form of reports or data. Lifetime employment supports this practice. Japanese companies do not have to be afraid of their employees leaving their companies and can therefore allow them to gain a high degree of company-related know-how. In many Japanese firms knowledge is therefore communicated from person to person and on-the-job training is preferred. Because of this, knowledge also flows freely within a Japanese firm, a fact that supported Japanese advances in new product development.

The 21st Century

Even against the background of strong economic transformations in countries such as India and China and a strong enthusiasm in dealing with these upcoming economies, it should not be forgotten that Japan is still the world's second-largest economy in terms of GDP. However, Japan's economy faces further challenges. Besides the reforms in the 1990s, there are still many unsolved problems such as the tremendous public debt, the fragile banking industry, and the comparatively unproductive domestic sector.

Since 2007 Japan's baby boomers (Japanese who were born from 1949 until 1951) have been gradually retiring. They account for about 10 percent of the Japanese workforce. For companies, this led to high investments in retirement contributions as well as to a drain in tacit knowledge. However, the retirement of the baby boomers opened the way for a new generation of young Japanese who are entering the corporations. A decreasing Japanese population makes this problem even worse. After years of recession, Japan's corporations now fear a labor shortage for the first time.

These challenges and the turbulent developments in the Japanese economy and management over the last several years led to the question of whether Japanese management practices will become more Western or shareholder-oriented or keep with their traditions. Only in the field of production management do Japanese firms manage to defend their world leadership. The main challenge of Japanese corporations will be to internationalize their workforce and to develop more flexible organizational structures. Japanese negotiation and decision-making practices are further seen as management styles that kept Japanese firms inflexible and delayed reform processes during the 1990s. Some Japanese firms such as Toshiba have taken up the challenge and developed a balance between a profit and efficiency-oriented management style and their classic management style. However, it remains to be seen whether a large amount of Japanese corporations will change their ways to adapt to the 21st century or continue with their traditional ways.

See Also: Asia; Dai-ichi Mutual Life Insurance; Deming Model; Fujitsu; Hitachi; Kaizen; Kanban; Keiretsu; Matsushita Electric Industrial; Mitsubishi; Mitsubishi Electric; Mitsubishi UFJ Financial Group; Mitsui; Mizuho Financial Group; NEC; Nikkei Index; Nippon Life Insurance; Nippon Oil; Nippon Steel; Nippon Telegraph and Telephone; Nissan Motor; Nokia; Quality Control; Sumitomo Mitsui Financial Group; Tokyo Electric Power; Toshiba; Toyota Motor Corporation; Zaibatsu.

Bibliography. Michael J. Artis and Toshihiro Okubo, *The Intranational Business Cycle: Evidence from Japan* (Centre for Economic Policy Research, 2008); *CIA World Factbook*, www.cia.gov (cited March 2009); Susan Carpenter, *Why Japan Can't Reform: Inside the System* (Palgrave Macmillan, 2008); James R. Lincoln, *Japan's Network Economy: Structure, Persistence, and Change: Structural Analysis in the Social Sciences* (Cambridge University Press, 2007); IIkujiro Nonaka, *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation* (Oxford University Press, 1995); Kenichi Ohmae, *The Mind of the Strategist* (McGraw-Hill, 1982); Ralph Paprzycki and Kyoji Fukao, *Foreign Direct Investment in Japan: Multinationals' Role in Growth and Globalization* (Cambridge University Press, 2008); Edwin O. Reischauer, *The Japanese Today: Change and Continuity* (Harvard University Press, 1988); John Tsalikis and Bruce Seaton, "The International Business Ethics Index: Japan," *Journal of Business Ethics* (v.80/2, 2008); Hiroshi Yoshikawa, *Japan's Lost Decade* (I-House Press, 2008).

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Job Enrichment

Job enrichment arises with the inherent need of employees to be satisfied with their jobs and the tasks that need to be accomplished. Mundane and repetitive tasks and routines might lead employees to lose interest in their jobs and subsequently become dissatisfied and lose morale. Similarly, job content and factors such as job scope, lack of complexity and challenge of routine work duties, job stress, lack of intrinsic or internal motivation, lack of job involvement, and lack of managerial motivation and support can lead to the dissatisfaction of employees. This can have an adverse impact on organizational practices as well as on the productivity of the company.

One way of motivating employees to perform better and increase their commitment to the organization is through redesigning and enriching their job descriptions and task specifications. Job enrichment, sometimes also referred to as vertical role integration, offers greater scope for personal achievement and recognition at work. Job enrichment is an attempt to motivate employees by giving them the opportunity to use a wide range of their abilities, knowledge, and skills. It allows employees to perform beyond their predefined duties, feel valuable to the organization, and further contribute to the realization of organizational goals and targets. It provides scope for challenging and responsible work. Job enrichment also offers opportunities for continuous growth and advancement. Job enrichment can take a variety of forms and occur for many reasons, but it normally involves aspects such as having a variety of tasks, autonomy, and the extent to which the job produces an tangible end result.

Job enrichment can take two forms. The first one is to increase responsibility for decisions traditionally made by supervisors. For instance, certain tasks could include scheduling of work and allocation of tasks. This increased responsibility gives employees the autonomy to perform their duties without direct and strict supervision that occasionally can lead to demotivation and increased stress in the workplace. The second form refers to upgrading jobs to include additional skilled tasks that are not elements of supervisory work, like machine maintenance and ordering supplies. This provides employees with a range of tasks and challenges of varying difficulties that will help them engage in their work. Ideally, these two forms of job enrichment should also contain feedback, encouragement, and communication so as to further motivate employees to go beyond their duties and perform better. Getting feedback on their performance means that errors can be detected and corrected so as to improve the productivity and accountability of workers. Therefore, if employees perform their jobs correctly, then satisfaction is greater, performance is improved, and this leads to enhanced motivation and organizational commitment.

Job enrichment includes a number of different workplace practices, such as quality circles, self-directed teams, job rotation, and information sharing. One possible reason for adopting these practices is to motivate workers and to encourage them to participate in improving productivity, safety, and the quality of their products or services. An alternative motivation for adopting job enrichment is to enlarge the jobs by encouraging multitasking and to adopt peer monitoring. This also improves productivity and, in return, job satisfaction. Furthermore, job enrichment can lead to better work methods, attracting and retaining capable employees as well as helping to increase quality and improve decision making at the job level.

Moreover, job enrichment is closely linked to autonomy in the workplace. Employees receive higher levels of flexibility and responsibility in the tasks that they have to perform, allowing for an enriched content and context of their jobs. This means that jobs are delegated and decentralized so as to achieve the highest possible performance, to minimize employers' control, and to reach the organization's aims and objectives more effectively. Also, having flexible job content enables employees to redirect their efforts, focus on their resources and consider new approaches when dealing with problems. This in turn leads to increased satisfaction and enthusiasm.

Overall, the purpose of job enrichment is to make jobs more intrinsically rewarding through the enhancement of responsibility, authority, and accountability. Job enrichment increases employees' sense of belonging as well as engaging them to perform better. This, in turn, leads to higher organizational commitment, job satisfaction, and improved results. This also has a direct positive effect on organizational performance, on the organization's reputation, and on its relationship with customers.

See Also: Employer–Employee Relations; Empowerment; Motivation.

Bibliography. John H. Bernardin, *Human Resource Management* (McGraw-Hill College, 2009); Steve Durkac, *21 Motivational Insights on Leadership Enrichment* (Steve Durkac, 2007); Geraldine Grady and Alma M. McCarthy, "Work-life Integration: Experiences of Mid-career Professional Working Mothers," *Journal of Managerial Psychology* (v.23/5, 2008); John M. Ivancevich, *Human Resource Management* (McGraw-Hill College, 2009); Roberto Luna-Arocas and Joaquin Camps, "A Model of High Performance Work Practices and Turnover Intentions," *Personnel Review* (v.37/1–2, 2008); Rino J. Patti, *The Handbook of Human Services Management* (Sage, 2009); Sophie Rowan, *Happy at Work: Ten Steps to Ultimate Job Satisfaction* (Prentice Hall Life, 2008); Stephen J. Wood and Toby D. Wall, "Work Enrichment and Employee Voice in Human Resource Management-Performance Studies," *International Journal of Human Resource Management* (v.18/7, 2007).

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Johnson & Johnson

Johnson & Johnson is a global firm active in the consumer healthcare, pharmaceuticals, and medical devices and diagnostics sectors with a long history dating back to 1886. At that time, the company's founders—Robert Wood Johnson, James Wood

Johnson, and Edward Mead Johnson—developed a product based on a premise that today sounds like common logic: Doctors and nurses should use sterile sutures, dressings, and bandages to treat wounds. In 1886 they started a small medical products company in New Brunswick, New Jersey, that produced and sold the first-ever commercial sterile surgical dressings. Since then, the company has brought the world new ideas and products that have transformed human health and well-being, such as dental floss, the earliest First Aid kits, sanitary napkins for women, baby powders, and more. The firm has been publicly traded on the New York Stock Exchange since 1944.

The international expansion of Johnson & Johnson started in Canada in 1919 and then continued in England in 1924. A continuous internationalization process accelerated further growth of the firm in the pharmaceuticals and medical products sectors. This overseas growth witnessed the expansion of the firm into numerous countries in Europe, Latin America, and Africa until 1946, more in Asia, Central America, and Europe until 1966, and China in 1985. During this wave of international expansion, operating companies of the firm across the world pioneered several important medical advances and the mother firm entered new businesses (e.g., disposable contact lenses) through acquisitions. These modes, along with internally developed businesses, are the dominant tools of growth for Johnson & Johnson, which has secured a leadership position for the firm in a number of health-related sub-sectors.

Of significant importance for Johnson & Johnson are the values that guide its decision making and are spelled out in the firm's credo. The credo was crafted in 1943 by one of its founders; in a few words, it codifies the company's practice with regard to social responsibility and ethics of business activities. The credo can be summed up as putting the needs and well-being of the people Johnson & Johnson serves first. It focuses on the needs of customers and aims to provide a strict set of rules that guide employees' conduct. The output of this behavior should be in line with the firm's main premise: Healthcare is the business of caring for people and the employees' objective should be to deliver products that promote health and well-being. This aim is assisted by investing personal and corporate resources in developing new treatments through research.

The board of directors consists of 11 board members and is responsible for appointing the senior management of the company. However, local managers are in charge of the subsidiaries of the firm across the world. Each of the subsidiaries functions as its own small business, is strongly entrepreneurial in character, and works on anticipating local customers' needs and delivering high-quality solutions. While local management operates in a small-company setting in each country, they also have access to the know-how and resources of a Fortune 50 company. Currently, Johnson & Johnson has more than 250 companies located in 57 countries globally. These companies are organized into several business segments comprised of franchisees and therapeutic categories.

The usual mode of foreign market entry for Johnson & Johnson is the establishment of a fully operating subsidiary. In smaller markets, though, costs of adapting managerial processes through setting up a wholly-owned subsidiary may be high; in such a case, a local representative is preferred. This is the reason why Johnson & Johnson's products can be found in more than 175 countries, more countries than the ones where the mother company owns operating businesses. The firm also strives to attract and keep talented people in each country who will drive product inventions and leverage breakthroughs in human health and well-being. It currently has more than 119,000 employees.

Johnson & Johnson has recently enjoyed more than $62 billion in sales and more than $11 billion in profits. It is a well-respected firm with a long history and aspires to dominate the fields in which it operates.

See Also: Corporate Codes; Corporate Social Responsibility; Pfizer; Procter & Gamble.

Bibliography. Forbes.com, www.forbes.com (cited March 2009); Johnson & Johnson, www.jnj.com (cited March 2009); Lawrence G. Foster, *Robert Wood Johnson and His Credo: A Living Legacy* (Lillian Press, 2008).

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Joint Venture

Somewhere between the competitiveness or indifference of autonomy and the border erasure of a merger is a joint venture, a business entity created by two or more parties (generally other businesses) that contribute an economic stake. Joint ventures are more than just agreements between cooperating companies; the venture takes the form of a new business. Often this is because, for instance, one company markets chocolate and the other has a stake in confection-quality peanut butter; while continuing to pursue their own concerns, they create a peanut-butter cup company. Or one company may be experienced in the field of magazine publishing, while the other has developed an improved technology for printing high-quality photographs on thin paper; they could benefit from a joint venture in the form of a photo-intensive magazine.

Though those two examples describe synergistic relationships, there are many reasons a joint venture is desirable, and depending on the industry and the purpose for which it is formed, it may be a corporation, an LLC, a partnership—essentially anything but a sole proprietorship, by its nature. A joint venture may be designed to take advantage of economies of scale. It may be the only way one of the participating companies is willing to share access to certain markets, customers, technologies, processes, or other resources. It spreads out the costs and risks of the venture more than if either company engaged in it on its own—in Hollywood, there have been a small number of movies produced as joint ventures between studios unwilling to take on the full financial risk by themselves, and willing to share the potential rewards. Even when the risk is not perceived to be high, the manner in which a joint venture reduces a company's economic stake relative to pursuing the activity on its own keeps the company more liquid and does not require the interest payments of a loan or other funding.

Recent Examples

Joint ventures may be the quickest way to bring a product or service to market, before other competitors in the industry are able to do so. A joint venture may be an alternative to competition, especially in cases where competition offers no obvious benefits. Hulu is a good example of this, one that demonstrates that the avoidance of competition in no way harmed the consumer or resulted in a product of lesser quality. A Web site that allows viewers to watch ad-supported television shows and movies online—primarily new and classic shows from broadcast television, not the "produced for the Web" shows that had been plentiful elsewhere and in low demand when the site launched—Hulu is a joint venture between NBC Universal and News Corporation (the Australian media conglomerate that owns the Fox television network). In addition to shows from those networks and their cable affiliates (Bravo, the SciFi Channel, USA, FX, et cetera), shows from the Sundance Channel, the Disney Channel, PBS, Comedy Central, and others are available. There is no apparent reason why networks, studios, or viewers would benefit from each network or studio having its own online presence—though in fact NBC continues to show streaming television shows on their own Web site rather than redirecting to Hulu. But the joint venture clearly benefits viewers by aggregating content in one place and providing an experience as uniform as television itself. (Though formed as a joint venture in part to avoid competition between NBC and Fox, Hulu is not immune to competitive impulses, and has pulled content from both Boxee and CBS-owned TV.com.)

Another well-known joint venture is Verizon Wireless, 45 percent of which is owned by Vodafone, a British cell phone operator and the operator of the largest cellular telecommunications network in the world. Vodafone's infrastructure and wireless assets were a perfect match for Bell Atlantic, which was looking to launch a large national cellular network. Announced in September 1999 and launched the following April, the joint venture was known as Verizon Wireless, adopting the Verizon brand name two months before Bell Atlantic renamed itself Verizon Communications. The venture combined the best assets of both companies and allowed for a much more rapid launch than would have been possible otherwise.

There is also the CW Television Network, a result of the struggles of the WB and UPN networks, which had failed to find the same long-term success enjoyed by Fox—their spiritual predecessor in breaking the broadcast dominance of the Big Three networks that had persisted since the days of radio. At the time of its dissolution, UPN—founded by Viacom (owners of MTV, Paramount, and other media concerns)—was owned by CBS, which had been bought by Viacom before the company split in 2006. The WB was owned by media company and content provider Warner Brothers. Both networks had had successful shows, but had been unable to sustain their ratings once those shows reached the end of their runs.

Reflecting the conventional wisdom that neither network had offered enough successful content to justify its continued existence, equal partners CBS and the WB formed the CW Television Network to combine the resources of the defunct networks and focus on programming for the WB's ages 18–34 demographic. Despite rumors that the CW name was just a working title to give executives convenient shorthand by which to refer to the joint venture, the network stuck with it, citing polls showing that the name was highly recognizable even before launch, thanks to press coverage of the plans. The CW continued the WB and UPN's plans to compete with the Big Three (plus Fox) by gearing its content for younger audiences, essentially treating their ratings on a "quality, not quantity" basis by targeting the desirable demographic, one that was brand-conscious, loyal to its favorite series, and had ample disposable income. Popular shows like *WWE Smackdown, Gilmore Girls, Supernatural*, and *Veronica Mars* continued their existence from the old networks to the new one, and the network hoped for a "the whole is greater than the sum of its parts" synergy. The ratings, unfortunately, have not reflected this, but the network has produced several shows—*Gossip Girl* and the remake of *90210*—with headline-generating buzz.

See Also: Acquisitions, Takeovers, and Mergers; Competition; Entry Mode; Foreign Direct Investment, Horizontal and Vertical; Globalization; Internationalization; Investment Banks; Multinational Corporation; Strategic Alliance.

Bibliography. Kate Barclay, *A Japanese Joint Venture in the Pacific: Foreign Bodies in Tinned Tuna* (Routledge, 2008); John D. Carter, C. Scott Hartz, and Robert F. Cushman, *The Handbook of Joint Venturing* (McGraw-Hill, 1988); John Child, David Faulkner, and Stephen Tallman. *Strategies of Cooperation: Managing Alliances, Networks, and Joint Ventures* (Oxford University Press USA, 2005); Marcello Hallake, *Structuring & Negotiating Cross-Border Mergers, Acquisitions, & Joint Venture Transactions* (Reedlogic, 2007); *Harvard Business Review on Strategic Alliances* (Harvard Business School Press, 2002); Robert Wallace, *Strategic Partnerships: An Entrepreneur's Guide to Joint Ventures and Alliances* (Kaplan Business, 2004).

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Jordan

The Hashemite Kingdom of Jordan is situated in the Middle East (Southwest Asia) and occupies an important strategic position. It shares land and water (Gulf of Aqaba) borders with Israel (including the West Bank) to the west. It borders on Syria to the north, Iraq to the northeast, and Saudi Arabia to the east and southeast. The capital city of Jordan is Amman, situated in the country's northwest region. Other major cities are Irbid, Az Zarqa, Al Karak, and Al Aqabah.

Jordan is a small country (92,300 sq. km) with limited natural resources. It is covered primarily with desert terrain in the east, while some arable highland areas are present in the west. These areas reflect the climate of the country, which is very dry in the east and with a rainy season, from November to March, in the west. Since the majority of the country is 300 m (984 ft.) above sea level and Amman is 756 m (2,480 ft.) above sea level, snow in the capital city is common.

Just over six million people live in Jordan (2008) and the national growth rate is 2.5 percent. The population of Jordan is young with a median age of less than 24. Jordanians are predominately Arabs (95 percent). The non-Arabs belong to small communities of Circassians, Chechens, Armenians, and Kurds. Recent conflicts in Iraq and Lebanon have contributed to a large inflow of Iraqi and Lebanese refugees and displaced persons. The number of Lebanese permanently settled in Jordan due to the 2006 Israel-Lebanon conflict is small. At the same time, according to an independent census in 2007, the number of immigrants coming from Iraq is estimated to be around 700,000.

Independent Jordan is a relatively young country. After the end of World War I and the dissolution of the Ottoman Empire, the League of Nations gave Great Britain a mandate to govern a large part of the Middle East. In 1921 Great Britain gave semi-autonomous control of what was known as Transjordan to the Hashemite family led by Abdullah I. In 1946 the United Nations approved a British request to end the British mandate; Transjordan became an independent country and Abdullah I became king and the first ruler of the Hashemite Kingdom of Jordan (the name "Jordan" was adopted in 1950). King Hussein ruled the country from 1953 until 1999 and was directly involved in the 1967 war with Israel and indirectly involved in the 1973 Arab-Israeli war. Finally, he negotiated the end of hostilities and signed a peace treaty with Israel on July 25, 1994. King Abdullah II, the son of King Hussein, assumed the throne in 1999 and is currently the ruler of Jordan. Jordan is a constitutional monarchy and executive authority is in the hands of the king and his council of appointed ministers. The legal system is based on Islamic law and French codes; Jordan's constitution guarantees the independence of the judicial branch.

Unlike other Middle Eastern countries, Jordan has very limited natural resources. High levels of poverty, inflation, and unemployment are problems that King Abdullah II started addressing when he took power in 1999. Jordan is a member of the World Trade Organization and currently practices careful monetary policy, pursuing privatization of state-owned enterprises and liberalizing trade. Jordan's exports increased after it signed the Free Trade Agreement with the United States. This agreement, which is driving economic growth, specifies that textiles and garments made in Qualifying Industrial Zones can enter the United States tariff and quota free. This agreement will phase out duties on nearly all goods and services by 2010.

Tourism is a very important sector of the Jordanian economy and contributes to around 10 percent of the country's gross domestic product. A long history, political stability, and diverse geography make Jordan an attractive tourist destination. Some of the most famous Jordanian attractions are Petra in Ma'an, Umm Qais, Ajlun, Jerash, Amman, Al Karak, Madaba, the Dead Sea, Wadi Rum, Fuheis, Mahis, and Al-Omwia's Palace.

Although Jordan is an Islamic country, it has consistently followed pro-Western policies illustrated by economic restructuring and political reforms. Besides signing the peace treaty with Israel in 1994 (the Washington Declaration), Jordan has discussed with Israel issues such as security and water-sharing, infrastructure, finance, banking, and trade. Cooperation with Israel has the potential to serve as an example to other Middle Eastern countries and contribute to long lasting stability and progress in the region.

The ancient city of Petra draws international visitors to Jordan, where tourism accounts for 10 percent of GDP.

See Also: Asia; Israel; Middle East.

Bibliography. Z. S. H. Abu-Hamatteh, T. A. Al-Azab, and M. El-Amyan, "Total Quality Management Achievement: King Abdullah II Award for Excellence of Jordan as a Model," *Technovation* (v.23/7, 2003); Association of British Chambers of Commerce, *Jordan: Market Brief* (Ten Alps, 2007); Gökhan Bacik, *Hybrid Sovereignty in the Arab Middle East: The Cases of Kuwait, Jordan, and Iraq. The Middle East in Focus* (Palgrave Macmillan, 2008); Faten Baddar Al-Husan and Philip James, "Cultural Control and Multinationals: The Case of Privatized Jordanian Companies," *International Journal of Human Resource Management* (v.14/7, 2003); Thomas Baunsgaard, Randa Sab, and Helaway Tadesse, *Jordan: Selected Issues,* IMF Country Report (n.8/291, 2008); *CIA World Factbook*, "Jordan," www.cia.gov (cited March 2009); Hamed El-Said and Kip Becker, *Management and International Business Issues in Jordan* (Haworth Press, 2001); Amal A. Kandeel, *Jordan's Struggle for Survival: War in the Middle East and Arab Economies' Underdevelopment* (Pluto, 2008); Markus Loewe, *The Impact of Favouritism on the Business Climate: A Study on Wasta in Jordan* (Deutsches Institut für Entwicklungspolitik, 2007).

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JPMorgan Chase & Co.

One of the oldest financial firms in the world, JPMorgan Chase and Co. originated as New York Chemical Manufacturing Company, which was established in 1823. The next year, it became involved in banking services and began the Chemical Bank of New York. It functioned as an independent organization from 1851 onward. The company developed significantly through successive mergers with other financial institutions and banks. There were unions with Corn Exchange Bank and Texas Commerce Bank 1954 and 1986, respectively. The Chemical Bank joined with Manufacturer's Hanover Trust Company in 1991 to become the second largest bank in the United States. Another legacy of the Chemical Bank was First Chicago Corporation, which had merged with National Bank of Detroit.

The most significant merger took place in 1996, when the Chemical Bank acquired Chase Manhattan Corporation to form the largest American banking company of that period. After four years, there was further acquisition, when J. P. Morgan and Co. joined to form JPMorgan Chase & Co. The company grew again in July 2004 after a merger with Bank One Corporation. Jamie Dimon became the new president of the company and continued as the chief executive officer (CEO) from January 2006 onward.

With a penchant for acquisitions since its inception, the company took over Collegiate Funding Services, LLC in 2006. Exchanging corporate trust units with the Bank of New York facilitated JPMorgan Chase's expansion with 338 additional branches and 700,000 customers in New York, New Jersey, and Indiana from April 2006. In March 2008, the company obtained the British offsetting company, Climate Care. In 2008, the company acquired a 39.5 percent stake in Bear Stearns, and the banking operations of Washington Mutual for $1.9 billion.

From its corporate headquarters in New York City, JPMorgan Chase operates in 60 countries and has 180,667 employees. Its American consumer services, commercial banking, and retail financial services are headquartered in Chicago. JPMorgan Chase's services include investment banking, financial transaction processing, security and treasury services, private banking, and asset management for individual customers, small business enterprises, corporations, and government institutions. It provides credit card services, housing loans, insurance, automobile finance, and educational loans to its American clients. JPMorgan Chase is the third-largest banking institution in the United States, preceded by Bank of America and Citigroup. Listed on the NYSE as JPM, the company boasted $2.18 trillion in assets of year-end 2008 and for fiscal year 2008, posted net income of $5.6 billion on revenue of $67.3 billion. In the United States, JPMorgan Chase possesses the largest hedge fund with $34 billion in assets. A component of the Dow Jones Industrial Average, its net income in 2007 and first-quarter 2008 were $14.4 billion and $2.4 billion, respectively.

JPMorgan Chase has faced criticism and legal problems in some of its operations. Its dealings with the troubled Bear Stearns investment firm were not above suspicion. In March 2008, it, along with subsidiary J.P. Morgan Securities, Inc., faced a legal suit by the firm Girard Gibbs LLP. It was charged with violating the Securities Exchange Act of 1934 by misleading clients between March 2003 and February 2008 over auction rate securities. The company's stock advisors faced allegations over loss of investments by the University of California and previous Enron employees.

Notwithstanding these aberrations, the company has instituted community partnership, community development, and environmental protection programs. In 2006 it invested $800 billion, stressing small-business lending, mortgages, and development programs among low- and moderate-income communities inside the United States. The company has also assisted business enterprises owned by women and minority groups. JPMorgan Chase has been the winner of many awards, such as Best Investor Service, Best Custodian Corporate Action Services, Best Global Custodian, and Technology Vendor of the Year.

In late 2008 and early 2009, after receiving $25 billion in federal capital from the U.S. Treasury's program to shore up financial institutions and get credit flowing, JPMorgan Chase looked at ways to make payments easier for problem mortgage loan payers who accounted for more than $100 billion in loans.

See Also: Company Profiles: North America; Financial Markets; Investment Banks; Merrill Lynch; Morgan Stanley; Mortgage Credit Crisis of 2008.

Bibliography. Patricia Crisafulli, *The House of Dimon: How JPMorgan's Jamie Dimon Rose to the Top of the Financial World* (Wiley, 2009); *Hoover's Handbook of World Business, 2007* (Hoover's Business Press, 2007); "JPMorgan Chase & Co. Company Profile," *Business Week*, investing.businessweek.com (cited March 2009); JPMorgan Chase & Co., www.jpmorganchase.com (cited March 2009); Qontro Business Profiles, *JPMorgan Chase Business Profile* (Qontro, 2008).

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Kaizen

Kaizen is the Japanese term for continuous improvement and refers to Japanese management practices that aim to lead a company to higher quality and superior performance. The philosophy of *Kaizen* was popularized in the West by Masaaki Imai in his book about Kaizen, which created worldwide interest in the concept. The term itself is not clearly defined, and is often confused with concepts like Kanban system, total quality management (TQM), and just-in-time management (JIT). However, *Kaizen* is neither a single management activity nor a management technique but can be best described as a positive attitude or the philosophy of creating the highest value and quality for the customer. *Kaizen* is performed by making small changes on an everyday basis to improve productivity, safety for all employees, and business process effectiveness while reducing waste. The overall goal is to enhance the quality of products and maximize cost-efficiency and safety of manufacturing processes.

Western corporations started to show an interest in how to implement *Kaizen* in their organizations when Japanese companies were at the height of their economic success during the 1980s. This interest has resulted in *Kaizen* methods being codified in ISO 9000 and Sigma Six initiatives.

Kaizen is a process—not a result-oriented management approach. It is based on two main aspects: First, Kaizen is not restricted to a single management discipline, but rather should be part of every single business process. Second, Kaizen is a continuous process that is supported by all members of a Japanese organization. We can distinguish between two types of *Kaizen*: *Gemba* (actual workplace) *Kaizen* and *Teian* (plan) *Kaizen*. *Gemba Kaizen* is an action-oriented approach; it refers to improvement activities that are performed at the actual workplace, such as on the shop floor or on the manufacturing line. *Teian Kaizen*, on the other hand, represents the theory-based approach and refers to strategic improvements influenced by top management. *Gemba* and *Teian Kaizen* aim at developing higher production and quality standards.

Kaizen is executed in a number of ways. *Gemba Kaizen* methods are quality circles and suggestion systems. In quality circles, a specialized team develops and designs ideas on how to improve the company's performance. Suggestion systems encourage employees to submit suggestions on how to improve work processes and customer satisfaction. Another aspect that is related to *Gemba Kaizen* is the 5S-System: *Seiri* (sort), *Seiton* (setting in order), *Seiso* (clean), *Seiketsu* (systematize), and *Shitsuke* (standardize). *Seiri* refers to discarding items that are unnecessary and keeping only the relevant ones for the production process. *Seiton* describes how all these leftover items are organized. *Seiso* means to clean all these items, as well as the workplace and all other materials used in the manufacturing process. *Seiketsu* refers to making all the cleaning, control, and improvement processes a regular activity at the workplace, and shitsuke means to standardize and sustain the process to support long-term *Kaizen* goals.

The most prominent *Teian Kaizen* methods include total quality control and JIT management. Total quality control is implemented in all phases of the manufacturing or work processes, and is not only result-oriented. JIT management refers to a production system in which all the parts used during the manufacturing process are delivered only when needed at exactly the right time and in the right amount. By doing so, waste is cut and costs can be reduced.

Besides improving quality and safety, another major aim of *Kaizen* is the elimination of *Muda, Mura*, and *Muri*. Muda includes all corporate activities that do not add value to the product or service, such as overproduction, unnecessary movements or worker waiting time, excessive inventory, or unnecessary repairs. *Mura* describes overburdening people or equipment or any other type of irregularity. *Muri* on the other hand refers to unnecessary difficulties during the production process.

Kaizen is not just the task of a special group within a company—employees of all levels, from the CEO down, participate in *Kaizen* activities. However, *Kaizen* can also include outside stakeholders, such as suppliers. When the *Kaizen* philosophy is applied, every single organization member is responsible for the improvement processes.

See Also: Japan; Company Profiles: East Asia; Keiretsu; Quality Control; Toshiba; Toyota.

Bibliography. Katsuki Aoki, "Transfering Japanese Kaizen Activities to Overseas Plants in China," *International Journal of Operations and Production Management* (v.28/5–6, 2008); M. Imai, *Gemba Kaizen: A Commonsense, Low-Cost Approach to Management* (McGraw-Hill, 1997); M. Imai, *Kaizen—The Key to Japan's Competitive Success* (McGraw-Hill/Irwin, 1986); Matthew E. May, *The Elegant Solution: Toyota's Formula for Mastering Innovation* (Free Press, 2007); Chris Ortiz, "All-out Kaizen: A Continuous Improvement Plan Delivers Change to the Production Floor … and Dollars to the Bottom Line," *Industrial Engineer* (v.38/4, 2006); Andrew Scotchmer, *5S Kaizen in 90 Minutes* (Management Books 2000, 2008); Katsuaki Watanabe, "Lessons from Toyota's Long Drive," *Harvard Business Review* (v.85/7–8, 2007).

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Kanban

The Kanban system is a version of just-in-time (JIT) inventory management developed by Taiichi Ōno, who initiated his experiments in organizing the flow of production on the shop floor at Toyoda Spinning and Weaving, carrying over his ideas to Toyota Motors. Informing JIT is the supermarket principle. To maximize the economic return, stack wares on shelving; let consumer demand determine what items are stocked. At all costs be flexible—consumers are fickle. Keep inventories to a bare minimum, constantly adjusting your store layout. The pull of actual purchases should be decisive.

As refined by Toyota Motors, the standard model for the Kanban system organizes the flow of production through the pull of final demand for vehicles, the factory working on a short production horizon. To keep inventories at a minimum, produce—or secure from suppliers—components just before they are actually required in assembly. At each component-producing division is a pallet—for instance, outside the room where bolts of various diameters and threading are manufactured—upon which the division places boxes with finished components, upon which empty boxes are placed for it to fill or for another division to fill. Attached to each box is a flag—a *kanban*—indicating what type of part is already in the box—or the type of part to be produced and placed within it—which division has produced the components, and which division requires the components. Facilitating the process whereby the pull of component demand shapes production in each division, small vehicles snake around the shop floor, picking up empty or filled boxes, dropping them off where the parts they will hold are to be manufactured or where these parts already manufactured are to be utilized. Rather than following a rigid schedule for each division within the factory, stockpiling the completed products in warehouses from which they are obtained if and when required, the Kanban system minimizes inventories and potential wastage—of components no longer needed, for instance—letting the pull dictated by the flow of Kanban around the shop floor dictate daily production.

It should be noted that defects are extremely costly in a JIT system like Kanban. If the bolt division produces bolts with the wrong threading, the door assembly division cannot use them, throwing up bottlenecks to the continuous flow of final vehicle assembly. Thus Kanban goes hand-in-hand with building quality directly into each component of vehicles, aiming at achieving a "zero-defect" ideal, a general goal of the post–World War II Japanese automobile industry aiming to sell in both domestic and international markets.

Kanban is more than an engineering system; it is also a human resources management system. Under the logic of JIT, employees monitor each other's performance in the sense that a division receiving poorly produced components from another division knows immediately which group of workers was responsible for the errors, the shoddy output, the misguided machine calibration, and setup.

Kanban is a way to organize production by tying supplies like these auto parts very closely to the pull of actual needs.

Why did this innovative system emerge in the Japan of the 1950s and 1960s? Economic arguments abound. One possible explanation is the small lot sizes characteristic of the industry in the 1950s and early 1960s. A second thesis points to the prevalence of unwritten implicit contracts—between subcontractors and main parent firms—that may stem from the cultural homogeneity for which Japan is famous. Relatively high costs of land in a country in which most of the land area is mountainous—hence expensive warehousing—may have been a factor. A fourth line of reasoning emphasizes the highly internalized nature of large-firm post–World War II Japanese labor markets: Wages being tightly tied to age and seniority—not to occupations or job assignments—binding workers to firms and firms to workers in long-term relationships; unionization being typically organized within enterprises giving both union and management a common interest in improving productivity and expanding market share. In highly internalized labor markets, in which job assignment is largely independent of wages and productivity gains are important to the union, workers embrace flexibility, mastering new skills, practicing rapid machine recalibration in an effort to speed up each division's ability to respond to changing demands placed on it by other units on the shop floor.

Sociologists and anthropologists often point to general features of Japanese society that may have shaped the internalization of labor in postwar Japan: Concepts of Confucianism that stress mutual responsibility and mutual interdependence, and a willingness of individuals to subordinate their own needs to that of groups, especially small work groups and teams.

See Also: Confucian Work Dynamism; Flexibility; Honda Motor; Kaizen; Supply Chain Management; Supply Chain Risks; Toyota Motor.

Bibliography. B. Cottenceau, L. Hardouin, and I. Ouerghi, "Kanban Policy Improvement Thanks to a (Max,+)-Algebra

Analysis," *International Journal of Systems Science* (v.39/7, 2008); Michael A. Cusumano, *The Japanese Automobile Industry: Technology and Management at Nissan and Toyota* (Harvard University Press, 1985); Qi Hao and Weiming Shen, "Implementing a Hybrid Simulation Model For a Kanban-based Material Handling System," *Robotics and Computer-Integrated Manufacturing* (v.24/5, 2008); *JIT Implementation Manual Flow Manufacturing—Multi-Process Operations and Kanban* (CRC Pr I Llc, 2008); Raymond S. Louis, *Custom Kanban: Designing the System to Meet the Needs of Your Environment* (Productivity Press, 2006); Taiichi Ōno, *Toyota Production System: Beyond Large-Scale Production* (Productivity Press, 1988); G. D. Sivakumar and P. Shahabudeen "Design of Multi-Stage Adaptive Kanban System," *The International Journal of Advanced Manufacturing Technology* (v.38/3–4, August 2008).

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Kazakhstan

The largest of the central Asian countries, and the ninth-largest country in the world, with a population of over 15.3 million (2008) in a land area of 2,724,900 sq. km, Kazakhstan was a part of the Russian Empire and then the Soviet Union until independence in 1991. It shares borders with Russia, Kyrgyzstan, Turkmenistan, Uzbekistan, and China, and has a significant coastline in the Caspian Sea. During the Middle Ages, the famed Silk Road connecting China with Europe went through Kazakhstan, which was occupied by the Mongols at that time.

During the 19th century the Russian Empire gradually took over the area controlled by the Kazakhs and from the 1890s a significant number of Russians settled in the region, becoming the government and business class. When the Trans-Aral Railway was completed in 1906, there was even more migration from Russia, encouraged by the government. This led to tensions including the Central Asian revolt of 1916. This led to attacks by the Kazakhs on Europeans, and the Tsarist soldiers then took part in a large-scale massacre of Kazakhs, devastating Kazakh society. During the famine that took place in the region from 1921 until 1922, about a million Kazakhs died from complications from malnutrition and from starvation.

The Soviet Union transformed the country, establishing large collective farms and destroying the power of the local elite. From 1926 until 1939, the population of Kazakhs fell by 22 percent. Stalin deported many people, such as the Kalmyks, to Kazakhstan during the 1940s, with the "Virgin Lands" program that saw an enlargement of the agricultural sector. In 1959 the ethnic Russians made up 43 percent of the population, with only 30 percent being Kazakhs. The centrally planned Soviet system led significant investment in the region that was rich in natural resources, particularly oil and natural gas.

With independence in 1991, many companies recognized the great economic potential of Kazakhstan. It had a well-developed industrial sector involved in the production of chemicals, textiles, the processing of food, and metals. Indeed, some geologists claimed that just about every element in the periodic table could be found in the country, with the gold mines there making up 24 tons, or about 7 percent, of the gold production of the former Soviet Union. The mineral sector has been closely controlled by the Kazakh government since independence, and the country remains rich in iron ore, manganese, and also uranium, chrome, nickel, titanium, silver, wolfram, molybdenum, bauxite, and copper. Its coal mines located at Torghay, Qaraghandy, and Ekibastuz produce most of the coal in the country. This has led to a large heavy-manufacturing base. During the 1980s Kazakhstan made up some 11 percent of the military production for the entire Soviet Union, and since independence most of these factories have been transformed to make nonmilitary products.

In 1993 and 1994 the country went through a major economic crisis coming from the separation of their economy from that of the rest of the former Soviet Union. Since then, it has partially recovered. Nowadays, some 30 percent of the workforce is employed in the industrial sector that makes up 40 percent of the nation's gross domestic product (GDP). There are plans to expand this sector with the exploitation of new oil fields that have been found around the country. The existing ones, such as that on the Mangyshlak Peninsula, on the east coast of the Caspian Sea, have already generated great wealth. However, there have been problems over the use of the Russian oil pipeline, which has therefore involved Kazakhstan in the building of a new pipeline to the Black Sea to reduce the dependence of the country on the politicians in Moscow.

In addition to minerals, agriculture has remained a large industry in the country. Agriculture employs about 20 percent of the population, but makes up only 8 percent of Kazakhstan's GDP, well down from 36 percent in 1993. This drop in the agricultural sector has come largely from mismanagement of resources, and also the lack of water. After independence, the government ensured that it kept control of most of the agricultural land, operating it in about 7,000–8,000 collective farms, each being, on average, about 35,000–40,000 hectares in size.

See Also: Company Profiles: Central Asia; Russia.

Bibliography. John C. K. Daly, *Kazakhstan's Emerging Middle Class* (Central Asia–Caucasus Institute & Silk Road Studies Program, 2008); *Europa Year Book* (Europa Publications, 2008); Mark J. Kaiser and Allan G. Pulsipher, "Business Environment Still Seen as Risky in Kazakhstan," *Oil and Gas Journal* (v.104/27, 2006); Natalya Shevchik Ketenci, *Kazakhstani Enterprises in Transition: The Role of Historical Regional Development in Kazakhstan's Post-Soviet Economic Transformation* (Ibidem-Verlag, 2008); Nursultan Nazarbaev, *The Kazakhstan Way* (Stacey International, 2008); Martha Brill Olcott, *Kazakhstan: Unfulfilled Promise* (Carnegie Endowment for International Peace, 2002).

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Keiretsu

Keiretsu refers to the Japanese form of corporate organization that involves a grouping or family of affiliated firms that form a tight-knit alliance and work to each other's mutual benefit. They became prevalent after World War II, prior to which the industries were controlled by large family-controlled monopolies called Zaibatsu. The companies were reintegrated after the war through share purchases to form horizontally integrated alliances across many industries. The companies also bought from each other, making the alliances vertically integrated as well.

Keiretsu exist in a wide array of markets, including the capital, primary goods, and components parts markets. The relationships are usually anchored around a bank, and by cross-ownership of equities in companies. The executives of these companies sit on each other's boards, share information, and set prices and overall strategies similar to the operation of cartels. Many have attributed the global successes of Japanese firms in new markets to this system of operation.

Although the divisions have blurred in recent years, the six major industrial groups (and major companies comprising the group) are Mitsubishi (Mitsubishi Electric, Kirin Brewery, Nippon Oil, Nikon, etc.), Mitsui (Fuji Photo Film, Mitsui Real Estate, Mitsukoshi, Suntory, Toshiba, Toyota, etc.), Sumitomo (Asahi Breweries, Hanshin Railway, Mazda, NEC, Sumitomo Real Estate, etc.), Fuyo (Canon, Hitachi, Matsuya, Nissan, Ricoh, etc.), Dai-Ichi-Kangyo (Fujitsu, Hitachi, Isuzu, Itochu, Tokyo Electric Power, etc.), and Sanwa (Hankyu Railway, Kobe Steel, Konica Minolta, Kyocera, Takashimaya, Toho, etc.). Annual revenues for each conglomerate are in the hundreds of billions of dollars.

The major advantage of a Keiretsu system is that the vertically integrated alliances between suppliers and manufacturers are closely integrated, resulting in suppliers receiving long-term contracts. Research has also indicated an optimal balance of supplier and buyer power in these systems and superior discipline down the network. Finally, the use of a just-in-time (Kanban) system also ensures high quality products, a major competitive advantage for most Japanese (particularly the automobile) industries.

The major criticisms of this system include complaints by foreign firms about the collusion of the system with Japanese governmental authorities, who try to protect their local businesses, hence violating antitrust laws. Moreover, the system creates a vertical chain of affective relationships between producers, wholesalers, and retailers that outside firms find difficult to penetrate. Finally, the Japanese channels are longer, more expensive to operate, and complex, thus imposing additional surcharges on the customer because of the inefficiencies—the only reason to continue having them is to exclude foreign competitors.

Even though the Keiretsu system is physically rooted in the Japanese landscape and national character, businesses in other parts of the world like the Tata Group (India) and the Virgin Group (United Kingdom) are described as such, even though these groups exhibit looser equity ownership connections than their Japanese counterparts. Keiretsu in many ways are also similar to Chaebol, or South Korean conglomerates, although current Western conglomerates like General Electric and even pre–World War II Zaibatsu in Japan appear to be more comparable.

See Also: Barriers to Entry; Business to Business; Centralized Control; Chaebol; Channels; Comparative Advantage; Economic Union; Franchising; Fujitsu; Hitachi; International Trade Logistics; Japan; Kaizen; Kanban; Matsushita Electric Industrial; Mitsubishi; Mitsubishi Electric; Mitsubishi UFJ Financial Group; Mitsui; Mizuho Financial Group; NEC; Nippon Life Insurance; Nippon Oil; Nippon Steel; Nippon Telegraph and Telephone; Nissan Motor; Nokia; Quality Control; Sumitomo Mitsui Financial Group; Tata Group; Tokyo Electric Power; Toshiba; Toyota Motor; Vertically Integrated Chain; Zaibatsu.

Bibliography. Asli M. Colpan, "Dynamic Effects of Product Diversity, International Scope and Keiretsu Membership on the Performance of Japan's Textile Firms in the 1990s," *Asian Business & Management* (v.5/3, 2006); Takehiko Isobe, Shige Makino, and Anthony Goerzen, "Japanese Horizontal Keiretsu and the Performance Implications of Membership," *Asia Pacific Journal of Management* (v.23/4, 2006); Onji Kazuki and David Vera, *Tax Law Asymmetries and Income Shifting Evidence from Japanese Capital Keiretsu* (Australia-Japan Research Centre, 2007); Yoshiro Miwa and J. Mark Ramsayer, *The Fable of the Keiretsu: Urban Legends of the Japanese Economy* (University of Chicago Press, 2006); Larry D. Qiu and Barbara J. Spencer, "Keiretsu and Relationship-specific Investment: Implications for Market-opening Trade Policy," *Journal of International Economics* (v.58/1, 2002); Mohammed Rawwas, Kazuhiko Konishi, Shoji Kamise, and Jamal Al-Khatib, "Japanese Distribution System: The Impact of Newly Designed Collaborations on Wholesalers' Performance," *Industrial Marketing Management* (v.37/1, 2008); Ulrike Schaede, *Choose and Focus: Japanese Business Strategies for the 21st Century* (Cornell University Press, 2008).

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Kenya

The Sahara Desert accords the continent of Africa a natural geographical divide into two distinct regions: the northern sub-region and the southern sub-region, also called sub-Saharan Africa. The northern sub-region comprises the North African countries of Morocco, Algeria, Tunisia, Libya, Egypt, Sudan, and Western Sahara. The southern sub-region (sub-Saharan Africa) accommodates 48 countries, of which 42 are mainland countries and six are island countries. These 48 countries are spread across four geographical regions: west Africa, south Africa, east Africa, and central Africa. In west Africa, there are 21 mainland and two island countries; in south Africa, 10 mainland and three island countries; in central Africa, five mainland countries; and in east Africa eight mainland and one island countries.

Kenya is a mainland country in the east African part of sub-Saharan Africa, formerly the British East Africa. Kenya gained independence from the United Kingdom in December 1963. Nzee Jomo Kenyatta was the first president and ruled from the start of independence in 1963 to his death in 1978. In a constitutional succession, Daniel Arap Moi became president in 1978 and reigned for 24 years, stepping down in 2002. During this period, political instability in Kenya grew with ethnically charged, violent, and fraudulent elections in the political process. In fact, Kenya became a one-party state under the ruling Kenya African National Union (KANU), spurring domestic and international political pressure to liberalize the political process. The domestic and international political pressure brought about change and the conduct of free and fair elections that put Mwai Kibaki in power in 2002. However, his reelection bid in 2007 suffered yet another blow characterized by ethnic violence that disrupted economic activity and almost tore the country apart.

Kenya is about twice the size of the U.S. state of Nevada and borders Sudan and Ethiopia to the north, Uganda and Somalia to the west and east, respectively, and Tanzania and the Indian Ocean to the south. Kenya's topography is unique, including highlands comprising the most flourishing farming area in Africa, and Mount Kenya, the second highest peak in Africa. Though the climate is tropical with two major seasons, the dry and the rainy, the interior part is also arid.

The population of Kenya is about 38 million, ranking in seventh position in sub-Saharan Africa. About 55 percent of the population are between the ages of 15 and 64 years, 42 percent are under 14 years, and about 3 percent are 65 years and over. The life expectancy of the total population is about 56 years. Females live slightly longer than their male counterparts do. Infant mortality is higher in males than in females. The literacy level of the population is relatively high, and higher among males than females. However, literacy rate as a measure of human capital has not promoted substantial economic development.

Diversity in Kenya is not as pronounced as diversity in Nigeria, the most populous mainland country in the west of sub-Saharan Africa. While Nigeria has 250 ethnic groups, Kenya has only nine ethnic groups that include Kikuyu, 22 percent; Luhya, 14 percent; Luo, 13 percent; Kalenjin, 12 percent; Kamba, 11 percent; Kisii, 6 percent; Meru, 6 percent; other African, 15 percent; and non-African (Asian, European and Arab), 1 percent. The diversity of the ethnic groups in Kenya has contributed to some dimensions of instability and corruption.

The Kenyan economy is market-based, revolving predominantly around agriculture, services, and private foreign industrial investment. In recent times, agriculture—horticulture and tea—contributed 23 percent and 22 percent, respectively, of the total export earnings. The service sector is dominated by tourism, which contributes 63 percent of gross domestic product (GDP), and the manufacturing sector accounts for only 14 percent of the GDP. The boost in the industrial sector resulted in the inclusion of Kenya in the African Growth and Opportunity Act (AGOA). The AGOA is an American initiative aimed at stimulating trade with African countries.

Economic performance in Kenya has not been steady. From 1963 to 1973, the economy grew significantly, reaching about 7 percent of GDP. However, between 1974 and 2001, economic performance declined overall, showing stagnated, negative, and minimal GDP growth at various points. The inadequate macroeconomic, microeconomic, and institutional policy reforms are responsible for aggravating the decline in GDP. Nevertheless, economic growth improved slightly in 2001. In addition, in 2006 GDP growth reached about 6 percent and 2007 projections about 7 percent, due to reforms instituted by President Mwai Kibaki. However, economic performance in Kenya still faces several growth inhibitors that include dependence of agricultural produce exports on world price fluctuation, unreliable service sector (tourism) due to poor governance and instability promoted by ethnic disunity, industrial export competition, and a continued high rate of corruption. Transparency International ranks Kenya among the most corrupt countries in Africa. These factors influence the Kenyan economic growth negatively, leaving about 50 percent of Kenya's population below the poverty level.

See Also: Africa; Corruption.

Bibliography. John E. Akoten, *Breaking the Vicious Cycle of Poor Access to Credit by Micro and Small Enterprises in Kenya* (Institute of Policy Analysis and Research, 2007); John E. Akoten, *Determinants of Small Firm Productivity and Growth in Kenya: Its Implications for Policy* (Institute of Policy Analysis and Research, 2007); CIA, "Kenya," *The World Factbook*, www.cia.gov (cited March 2009); P. Collier, *The Bottom Billion* (Oxford University Press, 2007); R. Crilly, "After Clashes, Kenya Tourist Trade Struggle," *Christian Science Monitor* (March 2008); Peter Kimuyu, "Corruption, Firm Growth and Export Propensity in Kenya," *International Journal of Social Economics* (v34/3, 2007); Dorothy McCormick, Patrick O. Alila, and Mary Omosa, *Business in Kenya: Institutions and Interactions* (University of Nairobi Press, 2007); M. Umeadi, *A Dark Century for Sub Sahara Africa* (AuthorHouse, 2008); Douglas Zhihua Zeng, *Knowledge, Technology, and Cluster-Based Growth in Africa* (World Bank, 2008).

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KLSE (Malaysian Stock Index)

The Kuala Lumpur Composite Index (KLCI), recently renamed the Bursa Malaysia, was introduced on the Malaysian Stock Exchange in 1986 to provide a performance indicator for the share prices similar to those that exist on other stock exchanges. Under the British, the colonial power in Malaya (as it was then called), most companies operating in the peninsula were traded on the London Stock Exchange until the establishment of the Malayan Stockbrokers' Association that traded mainly in shares of rubber and tin companies, rubber and tin being the major exports of Malaya. The public trading of shares on the Malayan Stock Exchange started in 1960 when a group of brokers were brought together in Kuala Lumpur, then opened another trading floor in Singapore the following year—the two being connected by telephone and thus being a single market with a single set of prices in both places. In 1964 it became the Stock Exchange of Malaysia, and in the following year (when Singapore became independent), the Stock Exchange of Malaysia and Singapore—remaining as such until 1973 when currency interchangeability ended and the exchange split into the Kuala Lumpur Stock Exchange Bhd. (KLSEB) and the Singapore Stock Exchange.

Prior to the establishment of the KLCI in 1986, the measure of the performance of shares on the KLSEB was shown by the Fraser's Industrial Index. This had its origins in the firm Fraser & Company, a part of the trading group Fraser & Neave, which had been a dominant force in the early days of share-trading in Singapore, and was effectively the stock exchange for Singapore (where shares for British Malaya were also traded) until the establishment of the stock market in Kuala Lumpur in 1960. Because of its history, the Fraser's Industrial Index continued in use for many years.

In 1985, the year before the introduction of the KLCI, the Fraser's Industrial Index for Kuala Lumpur hovered around the 3,000 level as the Malaysian government sought to introduce their New Economic Policy and give members of the Malay ethnic group a greater percentage of shareholdings, with laws stipulating that there needed to be 70 percent local shareholding. In 1987, using the Fraser's Industrial Index, the market fluctuated wildly, running from around 2,800 at the start of the year, up to a peak of 5,500 by the middle of the year, and then back to roughly where it had started by the end of December. This was one of the reasons for the introduction of the KLCI.

Within a couple of years of its introduction, the KLCI was providing a good measure of the performance of the KLSEB, running at levels between 300 and 400. The *Far Eastern Economic Review*, the well-respected Hong Kong–based finance and news magazine, started quoting it regularly, and described it as being "widely watched," largely because it had a far wider base than the Fraser's Industrial Index, noting its movements were in tune with many of those on Wall Street. The magazine in 1989 called the KLSEB the "darling of foreign institutional investors," and also noted that the KLCI was closely following the changes in shares in tin in the country, as well as fluctuations in industrial and commercial stock, far more than shares in companies concerned with property or finance. On August 13, 1989, it reached a peak of 515.09, and was not that much affected by the crash in property stock in August 1990. In 1993 the KLCI reached a peak of 1,275.32, the highest it had reached up to that point.

In 1994 the KLSEB renamed itself the Kuala Lumpur Stock Exchange (KLSE), and in 1995 the KLCI was increased to include 100 companies from the stock exchange's Main Board, which had about 500–650 companies. The 100 were chosen because of their importance in the market, and also because they reflected a range of sectors of the economy. The index is capitalization-weighted; thus, rises or falls in the prices of companies with larger market values have a proportionally greater impact on the movement of the index.

The biggest fall in the KLCI came in 1997 when, during the Asian financial crisis, the index fell more than 500 points in six months. By August 1998, it had fallen to 261.33, the lowest it had ever been. However the underlying economic indicators showed that the country was relatively robust, and it had managed to weather the Asian financial crisis, and by 2000, the KLCI reached 974.38, after a massive surge in share prices through investment opportunities and speculation.

The KLSE was renamed the Bursa Malaysia in 2004, and the KLCI managed to reach 1,000 in November 2006, the highest it had been in six years. Throughout 2007, it rose steadily as the Malaysian economy continued to improve, surpassing its previous record on April 9, 2007, when it closed at what was then its all-time high of 1,298.3. On May 3, 2007, it reached 1,342, rising to 1,386.67 on June 20, and closing at 1,410 on October 29. Since then it fell, including a dramatic 9.5 percent drop after the government faced a major setback in the general election on March 8, 2008—an election that saw its majority in parliament reduced significantly.

See Also: Company Profiles: East Asia; Hong Kong; Malaysia; Singapore.

Bibliography. Kam C. Chan, Benton E. Gup, and Ming-Shium Pan, "An Empirical Analysis of Stock Prices in Major Asian Markets and the United States," *Financial Review* (v.27/2, 2005); Sally Cheong, *Changes in Ownership of KLSE Companies* (Corporate Research Services, 1995); Mohd Azlan Hashim, "Kuala Lumpur Stock Exchange: Ensuring Competitiveness in the New Millennium," in Michael Yeoh, ed., *21st Century Malaysia: Challenges and Strategies in Attaining Vision 2020* (ASEAN Academic Press, 2002); Alowi Ismail, *The Capital Market and the Economy* (Bank Negara Malaysia, 1993); Annuar Md Nasir, *The Efficiency of the Kuala Lumpur Stock Exchange: A Collection of Empirical Findings* (Penerbit Universiti Pertanian Malaysia, 1993); Hong Rim and Rosle Mohidin, "On the Dynamic Relationship between Exchange Rates and Industry Stock Prices: Some Empirical Evidence from Malaysia," *Journal of Applied Business Research* (v.21/4, 2005); *The K.L.S.E. Moves into the Future 1870–1987* (Kuala Lumpur Stock Exchange, 1987); Othman Yong, *The Malaysian Stock Market and You: A Guide to Wise Investment in the Stock Market* (Leeds Publications, 1995).

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Koç Holding

The owner of Koç Holding, Vehbi Koç (1901–96), started his first company in 1926 and later established Koç Holding in 1963 by gathering all his companies together. Employing around 94,000 people and with the largest dealership network in Turkey, Koç Holding currently has operations in automotive and consumer durables (core groups of the holding), financial services, energy, food, retailing, tourism, and information technology industries. Koç Holding was ranked 190th in 2007, 358th in 2006, and 389th in 2005 in the Fortune Global 500 list. Therefore, the company has increased its worldwide performance in recent years.

The current business groups within Koç Holding are as follows. The energy group is very effective and includes many companies. The group holds 51 percent of the public shares of Tupras, the eighth largest oil refinery in Europe; a 50 percent stake in Opet, operating in retail sales, commercial and industrial fuels, lube oil, and shipping; full ownership of Aygaz, the largest liquefied petroleum gas distributor in Turkey; and many other companies including Mogaz, Opet-Aygaz Bulgaria, Entek, Akpa, Demir Export, and Koç Statoil Gaz. The consumer durables group has 15 production facilities in four countries, 16 brands (including the famous Arcelik and Beko), and 39 companies outside Turkey. The group is the market leader with 58 percent share in household appliances, 41 percent share in television sets, and many others in the heating and cooling market. Koç automotive group achieved 45 percent of both total motor vehicle production in Turkey and automotive export in 2006; Ford Otosan (partnership with Ford Motor of the United States), the leading company in the Turkish automotive industry, and Tofas (partnership with Fiat of Italy) are the two key companies of the group.

The finance group is also the leading one in Turkey; it includes Koç Financial Services Group, an equal partner with UniCredit of Italy, Yapi Kredi Bank, the fourth-largest bank of Turkey, Yapi Kredi Leasing, Factoring, Insurance, Koç Allianz Sigorta (insurance company), and Koçfinans. The food and retailing segment includes Migros-Tansas (retail chains), Koçtaş (an equal partnership with B&Q, the largest home improvement retailer in Europe), and Tat (the market leader in tomato paste, ketchup, and tomato products).

History

In the second half of the 1920s, construction activities began in Turkey after years of wars (World War I, 1914–18, and the Turkish Independence War, 1919–22); Vehbi Koç expanded his business toward building supplies and hardware (a strategic and visionary move). Koç decided to institutionalize the company as he believed that one-person companies could not develop much further. In 1938 he established Koç Trade Incorporated by organizing his businesses under one roof. He traveled abroad a lot and saw industrialized countries, which helped enlarge his vision and business abilities and made him understand the importance of partnership with foreign companies such as General Electric, Ford, Fiat, Allianz, Siemens, Yamaha, LG Electronics, and UniCredit Group. These partnerships provided know-how transfers through licensing.

In the 1950s, the corporation undertook its local manufacturing investments to replace imported goods and then produced the first of many locally produced goods in Turkey: light bulbs, cars, tractors, trucks, refrigerators, washing machines, and more. In the 1960s the corporation expanded its product range; such high growth and diversification of the corporation necessitated a new organizational structure. Thus, Koç Holding was established in 1963 and now serves as the decision-making authority that identifies, controls, and coordinates the firm's activities. The holding began exports during the 1970s and its success continues. Vehbi Koç gave his position in 1984 to his son Rahmi M. Koç, who retired in 2003 and was succeeded by his son Mustafa V. Koç, the current chairman.

Koç Holding is a good example of a successful worldwide company that was established, prospered, and thrived through pioneering strategic investments and partnerships enabled by the vision, leadership, and entrepreneurial abilities of its founder and his descendants. The 2006 acquisitions of Tupras, the biggest company in Turkey and the third-biggest oil refinery in the world, and Yapi Kredi Bank, the fourth-largest bank of Turkey, are two recent examples of these visionary strategic investments; the energy group may soon be another core business group of the holding in addition to the current core business groups of automotive and consumer durables.

See Also. Fiat; Ford Motor; Licensing; Strategic Alliance; Turkey.

Bibliography. C. Dundar, *Vehbi Koç* (Dogan Yayincilik, 2006); Koç Holding, www.koc.com.tr (cited March 2009); Vehbi Koç (1901–96), www.vehbikoc.gen.tr (cited March 2009).

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Korea, South

South Korea, whose official name is the Republic of Korea (ROK), is economically the fourth-largest in Asia, following Japan, China, and India, and 13th-largest in the world based on 2007 data. It is now an Asia-Pacific Economic Cooperation (APEC) and Organisation for Economic Co-operation and Development (OECD) member, defined as a High Income Nation by the World Bank and an Advanced Economy by the International Monetary Fund (IMF) and CIA.

South Korea's rapid modernization is evident in this view of the 14th-century Sungnyemun gate surrounded by development.

South Korea is located at the crossroads of northeast Asia. It lies between Japan to the east, the Russian Far East to the north, China to the west, and North Korea at the borders. Its total population is 48.5 million (2007) and it uses won (KRW) as a currency. Its capital and the largest city is Seoul (10.1 million population), the second-largest metropolitan city in the world. There are several other big cities in South Korea—Busan (3.5 million), Inchon (2.6 million), Daegu (2.5 million), Dajeon (1.5 million), Gwangju (1.4 million), and Ulsan (1.1 million).

The country's total area is 38,462.49 sq. mi. (99,617.39 sq. km) but only 19 percent is arable because of the mountainous and rocky terrain. Its official language is Korean (written form: Hangeul) and it has four distinct seasons a year, representing a humid continental climate. In Seoul, the average January temperature range is 19 degrees F to 33 degrees F, and the average July temperature range is 71 degrees F to 83 degrees F. As of 2005 approximately 46.5 percent of the South Korean population expresses no religious preference. Of the religious people, 29.3 percent are Christian (8.3 percent Protestants and 10.9 percent Catholics), 22.8 percent are Buddhist, and the rest adhere to various new religious groups.

South Korea was established in 1948 after World War II. With the Cold War, the Korean War began in 1950 and was expanded through the involvement of the

United States and the Soviet Union. South and North Korea were finally divided along the 38th parallel after the armistice signed on July 27, 1953. South Korea has since developed a successful democracy as well as a booming economy. Starting as one of the world's poorest agrarian societies in the 1950s and 1960s, Korea developed rapidly, fueled by high savings and investment rates, and a strong emphasis on education. From 1962 to 2007, Korea's gross domestic product (GDP) increased from US$2.3 billion to US$969.9 billion, with its per capita gross national income (GNI) soaring from $87 to about $20,045. Today, its success story is known as the "Miracle on the Han River," a role model for many developing countries.

The direction of Korea's industrial policy changed significantly every decade. From the 1960s, Korea started to promote exports by enacting relevant laws and regulations and establishing export-oriented development plans. The chemical industry was the center of the nation's industrial policy in the 1970s and there was industrial restructuring in the 1980s, aiming at promoting small and medium-sized enterprises (SMEs). In the 1990s South Korea was known as one of the four Asian Tigers with Hong Kong, Singapore, and Taiwan because they were relatively poor during the 1960s, but maintained high growth rates and rapid industrialization between the early 1960s and 1990s. They were evaluated as successful with the help of educational reform and with a cheap, yet productive workforce.

However, in 1997, an accumulation of corrupt business practices and bad loans led to a series of bankruptcies and a massive devaluation of South Korea's currency. In 1998 the Asian economic crisis bottomed out from South Korea. After the Asian financial crisis hit in 1997, Korea took on reforms to bring about a speedy recovery. Korean businesses took the initiative to increase transparency and meet global standards while policies to facilitate startups were put into place. The nation began rebounding in 1999. The country was able to continue its growth toward becoming a major economic power after a swift recovery. Since 2000, innovation has topped the national agenda. To bring about more innovation in industry, Korea has promoted business-friendly policies as well as policies enhancing cooperation between large companies and SMEs, continuing to focus on technology-intensive activities.

International Trade

Korea's trade volume in 2007 amounted to US$728 billion, in contrast to US$230 million in the end of 1948. Korea's export growth depended mostly on trade with advanced countries such as the United States, Japan, and the European Union (EU). With Korea gradually increasing its trade with developing countries, however, the reliance on trade with advanced countries has steadily declined. Korea has signed free trade agreements (FTAs) with 16 countries, including Chile, Singapore, the European Free Trade Association (EFTA), ASEAN, and the United States. Negotiations with the EU, Canada, and India were under way by the end of 2008.

Major import items include industrial raw materials such as crude oil and natural minerals, while major export items include semiconductors, automobiles, ships, consumer electronics, mobile telecommunication equipment, steel, and chemicals. Korea is the largest in shipbuilding, the third-largest in semiconductors, and the fourth-largest in digital electronics in the world. Korean textiles, steel, and petrochemicals are fifth in terms of volume, and automobiles are also fifth in the world. Korea's shipbuilding sector has been the industry leader since 2005, accounting for 40 percent of the world's total shipbuilding orders. With almost 11 percent of the global market share, Korea's semiconductor sector is at the forefront of the industry, particularly in terms of flash memory and DRAM (Dynamic Random Access Memory). In 2006, Korea's DRAM ranked first in the world, with a 49 percent market share and the flash memory chips took up 63 percent of global markets.

Infrastructure

South Korea has a very advanced and modern infrastructure and is a world leader in information technology such as electronics, semiconductors, LCD displays, computers, and mobile phones, led by Samsung and LG. It is the home of the world's third-largest steel producer, POSCO, and one of the world's top five automobile producers, headed by Hyundai and Kia.

South Korea is also the world's most connected "information society" with one of the top rankings in each for internet use, internet penetration, broadband penetration, mobile phone ownership, 3G mobile telecoms, WiFi hotspots, and WiBro (Mobile WiMax) coverage. The South Korean government has pushed very hard for eGovernment initiatives to provide most government services online. South Korea has strong digital infrastructure to support robust e-commerce with a 73.5 percent broadband penetration rate in 2006. It also boasts a thriving local e-commerce economy, with almost 34 million South Koreans online out of 48.5 million. Moreover, the volume of online spending was about $414 billion in 2006. South Korea was the first country in the world to provide high-speed internet access for every primary, intermediate, and high school. The internet is seen as a major facilitator of shopping in South Korea.

Education

Like other highly developed countries, the service sector has grown to comprise about two-thirds of GDP in South Korea. At the same time, living standards and in particular the educational level in South Korea has risen exponentially. Based on data from the United Nations Human Development Report 2007/08, South Korea is rated "High" with a 0.921 on the Human Development Index (HDI), and ranked 26th out of 177 countries. The index indicates a high level of life expectancy (males 75.7 years, females 82.4 years in 2006), literacy (99.8 percent adult literacy rate), education, and standard of living. Education in South Korea is regarded as crucial to success and thus competition is fierce. South Koreans have invested in education as a means toward economic progress.

According to the 2005 annual publication of comparisons in education systems produced by the OECD, South Korea is in first place in terms of the proportion of younger people who have completed an upper-secondary education in the world, with 97 percent reaching this level. In terms of the proportion of population entering higher education, South Korea had a similar pattern in the younger group, which is third behind Canada and Japan in the world.

South Korea is also working toward a peaceful reunification with North Korea. After the Korean War, North Korea and South Korea signed an agreement in 1953 to pursue peace. In June 2000, as part of South Korean president Kim Dae-jung's Sunshine Policy of engagement, a North-South summit took place in Pyongyang, the capital city of North Korea. On October 4, 2007, Roh Moo-Hyun and North Korean leader Kim Jong-il signed an eight-point agreement on issues of permanent peace. Despite the Sunshine Policy and efforts at reconciliation, progress has been slow.

See Also: Asia; Asian Financial Crisis; Asian Tigers; Chaebol; Hyundai Motor; Samsung.

Bibliography. Johngseok Bae and Chris Rowley, "Macro and Micro Approaches in Human Resource Development: Context and Content in South Korea," *Journal of World Business* (v.39/4, 2004); David Hundt, *Korea's Developmental Alliance: State, Capital and the Politics of Rapid Development* (Routledge, 2008); Internet Statistics Information System, "Internet Users and Usages by Province," isis .nida.or.kr (cited March 2009); O. Yul Kwon, *International Business in Korea: The Evolution of the Market in the Globalization Era* (Edward Elgar, 2008); Russell D. Lansbury, Chung-Sok Suh, and Seung-Ho Kwon, *The Global Korean Motor Industry: The Hyundai Motor Company's Global Strategy* (Routledge, 2007); Juan J. Palacios, *Multinational Corporations and the Emerging Network Economy in Asia and the Pacific* (Routledge, 2008); Hun Joo Park, *Diseased Dirigisme: The Political Sources of Financial Policy toward Small Business in Korea* (University of California, 2007); Republic of Korea, "Economic Bulletin," *Dynamic Korea* (v.30/7, 2008).

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Kuwait

Although very small in territory, Kuwait occupies an extremely important place in global geopolitical and economic discussions because of its natural resources. Kuwait has the world's fifth-largest proven oil reserves and, as such, is the fourth-richest (in per capita income) country in the world. Its importance has grown with rising worldwide demand for oil connected to the economic expansion of China, India, and other developing nations.

Kuwait is situated in the Middle East (southwest Asia). It lies at the northwest corner of the Persian Gulf and is surrounded by Iraq to the north and northwest, Saudi Arabia to the south and southwest, and the Persian Gulf to the east. The capital of Kuwait City serves as the country's political and economic center.

Other major cities are Ar Rawdatayn, Al Jahra, Ash Shuwaykh, As Salimiyah, Az Zawr, and Al Wafrah.

Kuwait is one of the smallest countries in the world (17,820 sq. km). It is mostly desert, with the exception of salt marshes around Kuwait Bay and coastal dunes in the eastern part of the country. It is the only country in the world without rivers, natural lakes, water reservoirs, or mountains. The warm tropical climate is typical of desert regions: Summer (from May to November) is extremely hot and dry with temperatures exceeding 113 degrees F, while winter (from December to February) is cool with average temperatures around 56 degrees F.

Kuwait's population is estimated to be between 3 and 3.5 million people. Interestingly, Kuwaitis are a minority in their own country since approximately 2 million residents of Kuwait are non-nationals. Although they are in the minority, Kuwaitis control political and business life through a freely elected legislature. Approximately 57 percent of the population are Arab, 39 percent are Asian, and 4 percent are classified Bidoon (stateless Arab residents of Kuwait). The population in Kuwait is relatively young, with a median age of 26 years and a population growth rate of 3.6 percent.

Independent Kuwait is a relatively young country. Although evidence shows that Kuwaiti territory has been used as a trading post for centuries, the modern history of Kuwait begins in the 18th century when Kuwait City was established. Ottoman Turks and other Arab groups threatened Kuwait in the 19th century, so Kuwait's ruling Al-Sabah family requested protection from Great Britain. Great Britain protected Kuwait and oversaw its foreign relations from 1899 until 1961, when on June 19, Kuwait became an independent nation. The Al-Sabah family ruled Kuwait from its inception with the exception of Iraq's invasion of Kuwait in the early 1990s (August 1990 until February 1991). Today, Kuwait is a constitutional emirate ruled by princes (emirs) from the Al-Sabah family.

Kuwait has a small and relatively open economy that is dominated by the oil industry. It is a highly industrialized country with per capita income of $55,300. Due to the escalating prices of oil, Kuwait's gross domestic product (GDP) has been growing at around 6 percent, which makes Kuwait one of the fastest-growing economies in the region.

Petroleum accounts for half of Kuwait's GDP and 95 percent of export revenues. The majority of the petroleum industry is state owned and accounts for 80 percent of government income. Although Kuwait has not been diversifying its sources of income as quickly as some of its neighbors (for example, the United Arab Emirates), it has pursued significant investments in construction, banking and financial services, logistics, and telecommunications.

See Also: Middle East; Saudi Arabia.

Bibliography. CIA, "Kuwait," *World Factbook*, www.cia.gov (cited March 2009); Paul D. Kennedy, *Doing Business with Kuwait* (Kogan Page, 2004); Ali H. Muhammad, "Antecedents of Organizational Politics Perceptions in Kuwait Business Organizations," *Competitiveness Review* (v.17/4, 2007); U.S. Department of State, "Background Note: Kuwait," www.state.gov (cited March 2009); Anver Versi, "Kuwait Mobile Giant Looks to Africa for Growth," *African Business* (v.334, 2007).

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Kyoto Protocol

The Kyoto Protocol to the United Nations Framework Convention on Climate Change is an agreement signed by a coalition of countries worldwide that are committed to reducing emissions and pollution in an international effort to stop the growing threat of global warming. Ratified in 2002, the legally binding agreement will try to accomplish a 5.2 percent cut in emissions without the participation of one of the leading nations on the planet, the United States.

Global warming is an increase in temperature of the Earth's atmosphere that can lead to changes in global climate. While greenhouse gases are necessary to keep Earth at a livable temperature, global warming prevents the heat from these gases from bouncing off the Earth's surface and back into space. Instead, it keeps the heat bouncing back and forth and thus raises the overall temperature of the planet to unsafe levels. These levels could cause terrible storm systems or disrupt the seasons. In the long term, it could lead to flooding of coastal regions of the world.

Noticing the growing problem, leaders of nations from around the world met in Kyoto, Japan, to address this issue. They developed an accord that required each nation to cut its emissions and gases significantly, depending on its own emission levels. The cuts would be apportioned with 8 percent cuts by Switzerland and most of the European Union, 7 percent by the United States, and 6 percent by Canada, Hungary, Russia, Japan, and Poland. These goals were agreed to be met between 2008 and 2012. This would lead to a 5.2 percent cut in emissions by the entire industrialized world. To be a valid treaty, the accord needed to account for 55 percent of the world's emissions. With Russia signing the accord in November 2004, the treaty was validated.

The United States chose not to sign the treaty on the grounds that "the changes would be too costly to introduce and the agreement is flawed." Many nations expected the United States, as a world leader, to sign the accord, President George W. Bush instead created voluntary incentive-based programs for companies to reduce emissions and has created programs to enhance and further climate technology.

President Bush defended his position against the Kyoto Protocol by explaining that complying with its strict rules would result in a loss of $400 billion to industry and 4.9 million jobs to U.S. citizens. Businesses would be forced to retool their factories or simply shut them down, which would both hurt shareholders and the factory workers who lose their jobs. Also, Bush stated that he would not sign a treaty that required only the United States to make some cuts that would, in the end, give smaller countries more power and raise the cost of living for Americans. Following a Reagan-style government, Bush decided that instead of telling American businesses when and how to cut pollution, he would give them a deadline and a goal. He would let them find their own innovative ways to make their cuts so that they can do it in a way less harmful to the interests of their companies.

While much of the industrialized world is adhering to the Kyoto Protocol, some maintain that the Protocol nevertheless will ultimately fail to achieve its objectives if the United States remains uninvolved. Its predictions for a future following the guidelines of the protocol will not be met. If any international effort is made against climate change post–Kyoto Protocol, it will be fashioned in a way that sustains, if not increases, U.S. power throughout the world. Bush set in motion some research in new technology, and when advancements are made, the information needs to be shared with other less prosperous nations.

See Also: Environmental Standards; United States.

Bibliography. Niels Anger, "Emissions Trading Beyond Europe: Linking Schemes in a Post-Kyoto World," *Energy Economics* (v.30/4, 2008); BBC News, "Kyoto Protocol Comes into Force," February 16, 2005, news.bbc.co.uk (cited March 2009); European Commission, "The Kyoto Protocol," 2007, ec.europa.eu/environment (cited March 2009); Xuemei Liu, "The Monetary Compensation Mechanism: An Alternative to the Clean Development Mechanism," *Ecological Economics* (v.66/2–3, 2008); Hans-Werner Sinn, "Public Policies against Global Warming: A Supply Side Approach," *International Tax and Public Finance* (v.15/4, 2008); United States Senate, *Kyoto Protocol: Assessing the Status of Efforts to Reduce Greenhouse Gases: Hearing before the Committee on Environment and Public Works, United States Senate, One Hundred Ninth Congress, first session, October 5, 2005* (GPO, 2005); Christophe P. Vasser, *The Kyoto Protocol: Economic Assessments, Implementation Mechanisms, and Policy Implications* (Nova Science Publishers, 2008).

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Labor Standards

Labor standards are multidimensional and vary from country to country depending on national institutions, economic interests, income level, stages of development, openness to trade, and economic, social, political, and cultural conditions. International labor standards refer to those labor principles, norms, conventions, and recommendations that do not depend on national circumstances, and that are intended to be universally applied. These standards cover issues in the areas of employment, work, social security, human rights, and social policy.

International labor standards are generally considered institutional mechanisms for raising the quality of economic growth in developed and developing countries. For that reason, the issue of international labor standards has been given a high profile in regional and multilateral policy discussions and negotiations. In 1996 the Organisation for Economic Co-operation and Development (OECD) published a policy brief that defined and limited a set of core labor standards: (1) prohibition of forced labor; (2) freedom of association; (3) the right to organize and bargain collectively; (4) elimination of child labor exploitation; and (5) nondiscrimination in employment. In 1998 the International Labour Organization (ILO) adopted the Declaration of Universal Principles and Rights at Work, which consists of (1) freedom of association and the effective recognition of the right to collective bargaining; (2) the elimination of all forms of forced or compulsory labor; (3) the effective abolition of child labor; and (4) the elimination of discrimination in respect to employment and occupation. International frameworks, such as the global corporate citizenship initiative Global Compact have adopted the four principles of the ILO declaration adopted in 1998. The rationale behind the adoption of the ILO international labor standards by the Global Compact initiative is that responsible practices by the business community, such as assuming at least a minimum of universal norms in working conditions, are essential for promoting social justice, peace, and prosperity.

Since creation of the ILO in 1919 more than 190 Recommendations and over 180 Conventions have been adopted by the International Labour Conference. The ILO classifies international labor standards into 22 subjects: (1) freedom of association, collective bargaining, and industrial relations; (2) forced labor; (3) elimination of child labor and protection of children and young persons; (4) equality of opportunity and treatment; (5) tripartite consultation; (6) labor administration and inspection; (7) employment policy and promotion; (8) vocational guidance and training; (9) employment security; (10) wages; (11) working time; (12) occupational safety and health; (13) social security; (14) maternity protection; (15) social policy; (16) migrant workers; (17) seafarers; (18) fishermen; (19) dockworkers; (20) indigenous and tribal people; (21) specific categories of workers; and (22) final articles conventions.

Concerns regarding labor issues at the international level, especially in exporting countries, have generally two dimensions: humanitarian and economic. At the humanitarian level, the arguments are around the promotion of universal moral working and living conditions and the search for fairer trade circumstances that include the development of social, labor, and political provisions. At the economic level, the arguments are based on the premise that countries that do not guarantee and enforce at least minimum international labor standards may have an illegitimate competitive advantage in their exports and may result in a global "race to the bottom" in labor and social standards.

Historical Background

The relationship among trade, development, and labor standards has long been interrelated. Generally, in more advanced countries labor standards are policy articulated and legally enforced. The issue of trade and international labor standards precedes the creation of the ILO in 1919. Indeed, the objective of the ILO was to undertake shared actions at the international level to improve labor conditions worldwide. This objective is reflected in the preamble to the constitution of the ILO, which begins:

> Whereas universal and lasting peace can be established only if it is based upon social justice; and whereas conditions of labour exist involving such injustice, hardship and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperilled.... Whereas also the failure of any nation to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve the conditions in their own countries.

The pioneer of the idea of international labor legislation and the precursor of the ILO was the French manufacturer Daniel Le Grand (1783–1859). Le Grand repeatedly appealed to several European governments for joint legislation on working life and conditions, which are seen as predecessor of the international labor Conventions of the ILO.

Between 1856 and 1857, the private initiative by industrialists that aimed at the protection of workers known as the International Benevolent Congress adopted the motion in favor of collectively drafting international measures for the regulation of industrial labor, which together with the labor movement were the beginning of the internationalization of labor regulations. In 1889 the Swiss Federal Council called on the support of 13 governments to consider a proposal for a convention to internationally regulate working conditions.

Simultaneously the German government organized an international mine and labor conference, known as the Berlin Conference, that took place for two weeks in March 1890. This conference set the recommendations for the prohibition of child labor, Sunday work, regulation of mine labor, women, and young persons' labor. Although no international assurances were formalized, this Berlin Conference was the first time that multilateral recommendations were discussed collectively by governments regarding labor issues.

In August 1897 delegates from 14 countries sat together in Zurich in the first International Congress of Labour Protection, and passed among others a resolution for the creation of an international labor office. Between 1897 and 1919, other meetings with similar objectives took place in both Europe and America. In 1919 at the Paris Peace Conference, the trade unions demanded appointment of a tripartite Commission on International Labour Legislation. The International Labour Organization was brought in effect by Part XIII of the Treaty of Versailles, and declared that "universal and lasting peace can be established only if it is based upon social justice."

The Labour Charter set in the Treaty of Versailles (1919) consisted of nine principles to guide the policy of member states of the ILO regarding labor issues: (1) labor should not be regarded merely as a commodity or an article of commerce; (2) the right of association; (3) the payment of an adequate wage to maintain a reasonable standard of living; (4) an eight-hour day or a 48-hour week; (5) a weekly rest of at least 24 hours; (6) the abolition of child labor; (7) equal pay for equal work; (8) equitable economic treatment of all workers in country; and (9) an inspection system to ensure the enforcement of the laws for workers' protection.

These nine principles were extended in the Declaration of Philadelphia in 1944, giving particular emphasis to (1) labor is not a commodity; (2) freedom of expression and association are essential to sustained progress; (3) poverty anywhere constitutes a danger to prosperity everywhere; and (4) the war against want must be carried on with unrelenting vigor within each nation, and by continuous and concerted international effort in which the representatives of workers and employers, enjoying equal status with those governments, join with them in free discussion and democratic decisions with a view to the promotion of the common welfare.

The Declaration of Philadelphia asserts what is central criteria for national and international policies and measures: "all human beings irrespective of race, creed or sex, have the right to pursue both their material well-being and their spiritual development in condition of freedom and dignity, of economic security and equal opportunity."

Internationalization of Labor Standards

International organizations, such as the ILO and the OECD, have a critical role in setting international labor standards through social clauses in trade-related agreements. The inclusion of labor standards elements in trade agreements such as the European Union and the United States Generalized Systems of Preferences (GSP) are examples of initiatives at the bilateral level. Moreover, labor standards can also be addressed at the regional level through provisions such as the adoption of the "EU Charter of Fundamental Rights" and the labor "side agreement" of the North American Free Trade Agreement (NAFTA). At the multilateral level, examples of initiatives include the linking of World Trade Organization (WTO) membership to ILO membership. In this case, a country trading with another with better labor protections is required to meet the standards of its trading partner. Violators of this principle are subject to WTO sanctions.

Some authors agree that social clauses involving labor issues are best addressed in regional trade agreements such as NAFTA, the European Union, and Asia Pacific Economic Cooperation (APEC) rather than multilateral trade agreements due to the current limited influence of labor on multilateral organizations such as the WTO.

Skeptical views on labor standards as mechanisms to ensure quality of economic growth argue that the moral and humanitarian arguments behind the introduction of nontrade issues into trade agendas is a form of national protectionism and labor exploitation. The view is built on the argument that international labor standards prevent competition from imports from low-wage economies. Another argument, which rests credibility in the International Labour Standards approach, is that they rely on principles rather than rights, and therefore implementation and enforcement depend on voluntarism, consequently they are unaccountable and unstructured. In order to overcome this, there are suggestions for anchoring these principles on follow-up and monitoring mechanisms committed to both improve workers conditions and ensure legitimate competitiveness.

See Also: International Labour Office/International Labour Organization; Organisation for Economic Co-operation and Development.

Bibliography. Denis G. Arnold and Norman E. Bowie, "Respect for Workers in Global Supply Chains: Advancing the Debate Over Sweatshops," *Business Ethics Quarterly* (v.17/1, 2007); Nancy H. Chau and Ravi Kanbur, "The Race to the Bottom, from the Bottom," *Economica* (v.73/290, 2006); Vivek H. Dehejia and Yiagadeesen Samy, "Trade and Labour Standards: Theory and New Empirical Evidence," *Journal of International Trade & Economic Development* (v.13/2, 2004); Joshua C. Hall and Peter T. Leeson, "Good for the Goose, Bad for the Gander: International Labor Standards and Comparative Development," *Journal of Labor Research* (v.28/4, 2007); Bruce E. Kaufman, *The Global Evolution of Industrial Relations: Events, Ideas and the IIRA* (International Labour Office, 2004); Thomas I. Palley, "The Economic Case for International Labour Standards," *Cambridge Journal of Economics* (v.28/1, 2004); Piya Pangsapa and Mark J. Smith, *Responsible Politics: Bringing Together Labor Standards, Environment, and Human Rights in the Global Corporate Economy* (Palgrave Macmillan, 2008); Werner Sengenberger, *Globalization and Social Progress: The Role and Impact of International Labour Standards* (Friedrich-Ebert-Stiftung, 2005); Xiaomin Yu, "Impacts of Corporate Code of Conduct on Labor Standards: A Case Study of Reebok's Athletic Footwear Supplier Factory in China," *Journal of Business Ethics* (v.81/3, 2008); Matt Zwolinksi, "Sweatshops, Choice and Exploitation," *Business Ethics Quarterly* (v.17/4, 2007).

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Landed Cost

According to the Institute of Supply Management, landed cost is "the total accumulation of costs for an imported item, including purchase price plus freight, handling, duties, customs clearance and storage to a designated point of delivery." A firm that focuses on the item's initial purchase price alone may significantly underestimate the real cost of acquiring and bringing that item to its final delivery point. Accordingly, when making purchasing decisions, landed cost should be the basis of comparison between potential suppliers of a given item. Firms that do not consider total landed costs may pay potentially more for imported goods than for domestic goods, despite a less expensive purchase price abroad.

When calculating landed cost, a variety of cost issues should be considered. While their specific application will vary by organization and situation, these costs generally include the following:

1. Purchase Price: Base price of the item. This is the starting point for calculating landed cost.
2. Transportation: Additional costs to ship the item to the final point of delivery. This may involve inland transportation within the country of origin, ocean shipping or air freight, and inland transportation in the destination country. Freight forwarding and other handling charges also may apply. With the increased variability present in long, global supply chains, there may be an increased need for expedited shipments using air freight. An estimate of these costs should be included, as it is possible for one unexpected, expedited shipment to negate months of savings from international sourcing.
3. Insurance: Marine insurance or other insurance to cover loss or damage for the shipment. These costs may be higher for imported items due to the additional risk exposure inherent in international shipments.
4. Export and Import: The country of origin may impose export fees and taxes on the items. Similarly, the destination country may require customs duties that vary depending on the type of item and country of origin. Fees for customs brokers to facilitate customs clearance also may be involved.
5. Financial Transactions: Banking fees typically are higher for international transactions. Also, if payment is to be made in a foreign currency, currency exchange costs may be incurred. Furthermore, the buyer may be exposed to currency exchange risks from fluctuations in exchange rates.
6. Inventory and Warehousing: Because of the longer lead times and increased variability typically present in global supply chains, warehousing and inventory costs will increase for items from a foreign supplier. Each day of increase in transit time means a corresponding increase in inventory-in-transit, and larger inventory safety stocks will be needed to cover the higher risk of delays. The result is a significant increase in inventory carrying costs and a potential need for more warehousing space.
7. Administrative Costs: Various indirect costs may be higher for an imported item. There may be an increase in employee travel and communication expenses for evaluating and monitoring the foreign supplier. Foreign language documents may need translation. Additional information technology or software may be necessary for managing a more complex supply chain. Also, because international shipments are subject to increasingly strict security measures, the costs to comply with these measures also should be considered (e.g., the United States's advance manifest rule, and the Customs-Trade Partnership Against Terrorism [C-TPAT] program).
8. Impact on Competitiveness: Though difficult to quantify and include in landed cost calculations, there may be further impacts from working with a foreign supplier that the firm should recognize. The longer lead times from a foreign supplier may result in reduced responsiveness and flexibility in the supply chain. As a consequence, customers demanding fast, responsive service may choose to go elsewhere if their needs are not met by the firm.

Familiarity with International Commercial Terms (Incoterms) is useful for understanding and determining total landed cost. Incoterms are internationally recognized terms of sale that specify what is included in the supplier's quoted price. From this, the buyer is able to determine clearly which additional expenses, such as transportation or customs duties, must be incurred by the buyer in order to bring the item to a designated delivery point. In addition, many software applications are available to help a firm determine the landed cost for an item. Landed cost calculator is a common name for such software applications.

See Also: Export; Import; International Commercial Terms (Incoterms); Pricing; Supply Chain Management; Transportation.

Bibliography. F. Erhun and S. Tayur, "Enterprise-Wide Optimization of Total Landed Cost at a Grocery Retailer," *Operations Research* (v.51/3, 2003); Mary Lu Harding, "TCO and International Sourcing," *NAPM InfoEdge* (v.5/3, 2000); Institute of Supply Management, "Glossary of Key Supply Management Terms," www.ism.ws (cited March 2009); Sean P. Willems and Stephen C. Graves, "Optimizing the Supply Chain Configuration for New Products," *Management Science* (v.51/8, 2005).

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Late Mover

Also called a late follower or a later market entrant, a late mover is a firm that enters a market some time after both the market pioneer(s) and after early follower firms. While there are no set guidelines in terms of the passage of chronological time that clearly differentiate late movers from early movers, it is generally acknowledged that late-mover firms enter markets characterized by significant numbers of existing competitors and, as such, the markets are often relatively mature in terms of growth rate. Kodak, for example, was labeled a very late mover in the inkjet printer market when the company decided to enter this market with its own brand of inkjet printer many years after numerous other firms had established strong footholds in the market. Similarly, the Coca-Cola Company, with its Dasani brand of bottled water, entered the bottled water market quite late in terms of its earlier high growth but nevertheless has found such a timing strategy to be profitable for the firm and a valuable complement to the firm's portfolio of beverage products.

Given that market timing is an important element in firms' marketing strategies—since firms seek to make the most of their limited resources in relation to perceived market opportunities—late movers must often be concerned with being "too late" to market, which can reduce the opportunity available to the firm, as opposed to being "too early" to market, which can waste a firm's resources. The firm that either implicitly or explicitly pursues this particular type of market-follower strategy (where the other type of follower strategy is to be an early follower—entering the market soon after the market pioneer or pioneers) ultimately seeks opportunities to pursue and exploit some form of follower advantage. Specifically, this is typically where the firm's entry strategy enables it to obtain greater economic or behavioral benefits in comparison to those achievable by pioneering firms and earlier follower firms, such as lower-cost product development (as a result of evaluations of the pioneer's new product) or more-effective product positioning (as a result of learning from the pioneer's marketing mistakes).

At the same time, however, late movers must be sensitive to order-of-entry effects, where there are effects on marketing performance that are directly attributable to the sequence of entry of a firm into a market relative to that of competitors. For example, research on frequently purchased consumer goods has found that, as a firm's order-of-entry increases (e.g., the later it enters in relation to competitors), market share, probability of consumer trial, and probability of repeat purchase by the consumer are all observed to decrease.

Given the pros and cons of late following, it is not surprising then that research on follower firms indicates there are both late-mover success stories and stories of failure. Where late movers have been successful, characteristics of the market have often included that the market demand "explodes" around the same time as the late mover enters the market—suggesting that earlier firms, including the pioneers, were ultimately too early to market and/or that there is a technological change or development in the market that enables the late mover to capitalize on the change and introduce an innovative product rather than a me-too or imitation product.

On the other hand, where late movers have failed, there may have been any number of circumstances faced by such firms, such as being up against strong incumbents who, individually or collectively, have depleted the potential market to a point where it is not economically viable for a new entrant to enter. Alternatively, there may be psychological factors at work, such as where the market pioneer has become synonymous with the product category. Still other reasons include that one or more incumbent firms may have found ways to lock in existing customers to such an extent as to make the economic switching costs sufficiently high that they discourage customers from considering switching to the product of a new entrant.

The implication of such findings for late movers is that there are a great many risks associated with later market entry. There may or may not be profitable opportunities to enter a market depending on the characteristics of the market and the firms seeking to exploit them and, as such, it is critical that firms considering such a timing strategy evaluate the circumstances on an ongoing basis. For firms already in the market, there are also implications; such firms should be vigilant for openings in the market that may be profitably exploited by late movers who, by choice or circumstance, ultimately enter markets when such entries may be least expected.

See Also: Marketing; Markets; Market Share.

Bibliography. Scott G. Dacko, *The Advanced Dictionary of Marketing: Putting Theory to Use* (Oxford University Press, 2008); R. Zachary Finney, Jason B. Lueg, and Noel D. Campbell, "Market Pioneers, Late Movers, and the Resource-based View (RBV): A Conceptual Model," *Journal of Business Research* (v.61/9, 2008); Gurumurthy Kalyanaram and Glen L. Urban, "Dynamic Effects of the Order of Entry on Market Share, Trial Penetration and Repeat Purchases for Frequently Purchased Consumer Goods," *Marketing Science* (v.11, 1992); Steven P. Schnaars, *Managing Imitation Strategies: How Later Entrants Seize Markets From Pioneers* (Free Press, 1994); Venkatesh Shankar, Gregory S. Carpenter, and Lakshman Krishnamurthi, "Late Mover Advantage: How Innovative Late Entrants Outsell Pioneers," *Journal of Marketing Research* (v.25, 1998).

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Latin America

While broadly defined by many, Latin America commonly is the region of the world in the Americas where Spanish or Portuguese are the primary language(s). This includes the countries of Mexico, most of Central and South America, Cuba, the Dominican Republic, and Puerto Rico. Often in the United States (and worldwide) Latin America is generically applied to all of the Americas south of the United States.

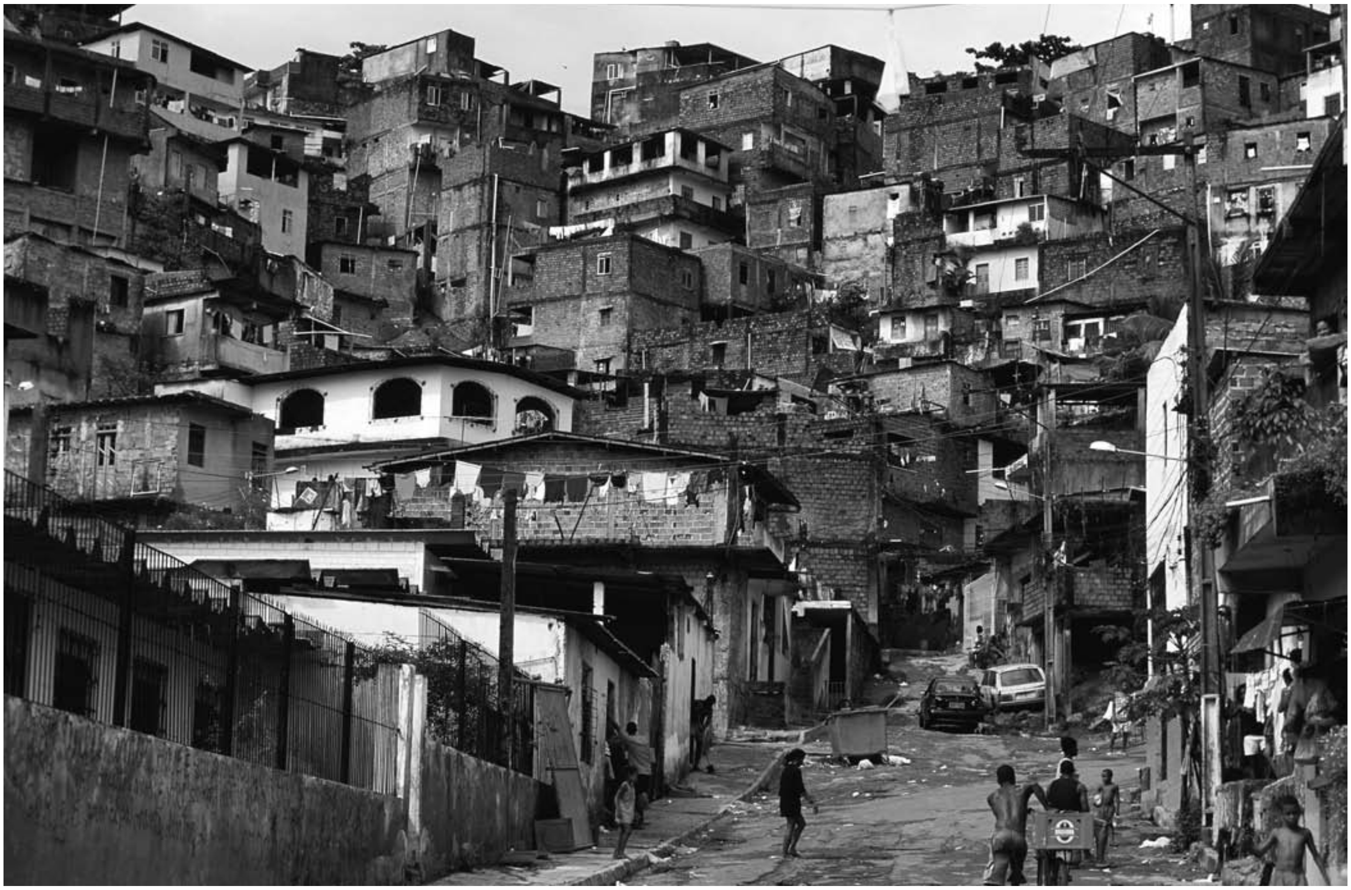
The economies of Latin American countries vary greatly; yet this mostly underdeveloped market is attractive to many multinational corporations. The Gross Domestic Product (GDP) of Latin America is approximately $3.33 trillion with a purchasing power of approximately $5.62 trillion. Marked by explosive growth, Latin America was projected to have an economic growth rate of 5.3 percent in 2006, which was the fourth consecutive year of growth greater than 4 percent.

While Spanish and Portuguese dominate the languages spoken in Latin America, Quechua and Aymara (languages traced to the Incas), Nahuatl and Mayan (languages traced to the Mayans), Guarani (an official language of Paraguay), English, French, Haitian Creole, Spanish Creole, and Dutch are also spoken. Most business transactions take place in Spanish, the most dominant language of the region.

Although official borders of the region are somewhat amorphous, it is commonly assumed that 21 countries and 10 dependencies make up the region. These countries are Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

French dependencies include French Guiana, Guadeloupe, Martinique, Saint Barthelemy, Saint Martin, Saint Pierre, and Miquelon. Netherlands dependencies are Aruba and Netherlands Antilles. The U.S. dependency is Puerto Rico.

Designed to improve the economic outlook in Latin America, ECLAC (United Nations Economic Commission for Latin America and the Caribbean) was established in 1948 and has its headquarters in Santiago, Chile. This is one of five regional associations created by the United Nations to encourage trade and mutually beneficial relationships among its members.



This favela *(slum) outside Salvador de Bahia, Brazil, is indicative of continuing struggles with extreme inequality even in the most rapidly growing economies of Latin America, which has been called the world's most economically unequal region.*

Several trade blocs also exist within the region. These include Mercosur/Mercosul (regional trade agreement among Argentina, Brazil, Paraguay, and Uruguay founded in 1991) and the Andean Community of Nations (CAN—comprised of Bolivia, Colombia, Ecuador, and Peru founded in 1969). The Caribbean Community, or Caricom, is a customs union for 15 Caribbean countries that provides for free trade in goods between member countries and a common external tariff against nonmember countries.

The Dominican Republic–Central America Free Trade agreement (DR-CAFTA) encompasses free trade among Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, the Dominican Republic, and the United States. DR-CAFTA and NAFTA (North American Free Trade Agreement) are bilateral free trade agreements that have varying levels of success and have come under some scrutiny in recent years. Although the level of effectiveness of these agreements has come into question, the reciprocal relationships with the United States continue to be fruitful for many multinational corporations.

Although these agreements are in place in an effort to improve the economies of the countries, the United Nations has marked the extreme inequality and poverty that exists in the region. ECLAC notes that this is the most economically unequal region on earth. This report notes that while industries such as technology and information systems have been booming in the region, much of the population does not have access to basic infrastructure and services such as food, water, and sanitation.

Finally, Latin America has been chastised by many for its environmental controls. While some unscrupulous multinational corporations choose to place their facilities in these countries to avoid environmental protection policies and high labor costs in other areas of the globe, there have been efforts in recent years to improve environmental standards. In fact, Uruguay (ranked 3), Argentina (9), Brazil (11), Peru (16), Paraguay (17), Costa Rica (18), Bolivia (20), Colombia (23), Panama (28), and Chile (42) all rank above the United States (45) in the 2005 Environmental Sustainability Index (ESI, developed and published by Yale's Center for Environmental Law and Policy), which tracks elements of environment sustainability including natural resources, pollution levels, and societal capacity to improve environmental performance over time. In 2006 the ESI was replaced by the EPI (Environmental Performance Index). The 2008 rankings show Colombia (ranked 9), Ecuador (22), and Chile (30) in the top 30. By comparison, the United States does not appear in the top 30.

The Latin American economy is incredibly fruitful, bearing $715 billion in 2007. The economy is marked primarily by its heavy focus on manufacturing (where it competes heavily with China) and has experienced rapid growth over the past decade. This period of prosperity is projected to continue through the next several decades.

While growing, the overall performance of the Latin American economy has not reached its potential. Mexico constitutes a huge percentage of the industrial activity attributed to the region. Exports are chiefly agricultural, though some countries (i.e., El Salvador, Costa Rica, Brazil, Mexico) export medium-to-high-technology manufactured products.

Studies on the sustainability of the Latin American economy are mixed. While it has firmly been established that the economies of these countries are growing as a bloc, there remain outside threats (i.e., China's manufacturing prowess) and internal weaknesses (i.e., retention of talent and development of employees) facing the region.

See Also: Argentina; Bolivia; Brazil; BRICs; Central America; Chile; Colombia; Company Profiles: Central America and Caribbean; Company Profiles: South America; Costa Rica; Dominican Republic; Ecuador; El Salvador; Guatemala; Mexico; Panama; Uruguay; Venezuela.

Bibliography. Jorge Chami Batista, "Latin American Export Specialization in Resource-Based Products: Implications for Growth," *The Developing Economies* (v.42/3, 2006); Esteban R. Brenes, Mauricio Mena, and German E. Molina, "Key Success Factors for Strategy Implementation in Latin America," *Journal of Business Research* (v.61/6, 2008); John Burdick, Philip Oxhorn, and Kenneth M. Roberts, *Beyond Neoliberalism in Latin America?: Societies and Politics at the Crossroads* (Palgrave Macmillan, 2009); Forrest Colburn, *Latin America at the End of Politics* (Princeton University Press, 2002); W. Ketelhohn, "Strategic Management Practice in Latin America," *Journal of Business Research* (v.59/3, 2006); Bernardo Kosacoff, Andrés López, and Mara Pedrazzoli, *Trade, Investment and Fragmentation of the Global Market: Is Latin America Lagging Behind?* (CEPAL, 2008); Sylvia Maxfield, "Linking Business's Gender and Diversity Practices With Corporate Citizenship: Implications for Latin America," *Academia-Revista Latinoamericana De Administracion* (v.38, 2007); Rodrigo Suescun, *The Size and Effectiveness of Automatic Fiscal Stabilizers in Latin America* (World Bank, Latin America and the Caribbean Region, Office of the Chief Economist, 2007); UNDP Human Development Report 2007/2008, www.hdr.undp.org (cited March 2009); Yale Center for Environmental Law & Policy, "Environmental Performance Index 2008" (Yale Center for Environmental Law & Policy, 2008).

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Latvia

Originally founded in 1918, the Republic of Latvia possessed one of Europe's most modern economies and highest standards of living prior to World War II. Upon regaining independence in 1991, Latvia underwent a rapid transition from the centrally planned economy of the Soviet era to a highly modern, free-market, Western-style economy. Developments in the Latvian economy include rapid growth of all economic sectors, particularly the service sector that has become dominant, increased trade and market orientation toward the West, increased foreign investment, and a privatization program that is largely completed.

Latvia became a member of the World Trade Organization in 1999 and a member of both the North Atlantic Treaty Organization and the European Union (EU) in 2004, granting Latvia access to some of the largest markets in the world. Even prior to EU accession in 2004, Latvia had experienced rapid economic growth. Facilitated by stable internal processes and expanding trade, Latvia has led the EU with an average annual growth rate of 8.1 percent since accession. Rapid growth has led to inflation, but increases in income, including minimum salary requirements, and price/interest stabilization have allowed significant growth in standard of living and consumer spending. Approximately 75 percent of Latvia's foreign trade is with other EU members and the importance of EU trade has been consistently expanding. Significant trade also exists with Russia and the United States. Trade between Latvia and its Baltic neighbors Estonia and Lithuania has increased exponentially since entering the EU.

Latvian exports in 2007 exceeded $8.1 billion and consisted primarily of wood products, machinery/equipment, metals, textiles, and agricultural products. Latvia's most important export partners are Lithuania (14 percent), Estonia (12 percent), Russia (12 percent), Germany (10 percent), and Britain (8 percent). Industrial output has been expanding consistently in Latvia, averaging increases of 7.6 percent each year between 2001 and 2005. Important industrial products include vehicles, railroad cars, agricultural machinery, synthetic fibers, appliances, electronics, pharmaceuticals, and processed foods. Leading agricultural products include grain, beets, potatoes, vegetables, meat, dairy products, and fish. The Latvian government is striving to increase exports, a goal that is being realized in part through EU assistance.

Imports in 2007 exceeded $14.8 billion with leading imports including machinery, chemicals, fuel, and vehicles. Principal import partners include Germany (16 percent), Lithuania (13 percent), Russia (8 percent), Estonia (8 percent), and Poland (7 percent). With few natural resources, Latvia is typical of most European countries in its dependency on imports for energy and raw materials. To reduce dependency on energy imports, Latvia has been supportive of exploring alternative energy options including the possible construction of a new regional nuclear power plant in the Baltic States. A negative balance of trade is one of the most pressing issues facing the Latvian economy, but demand for imports including consumer goods is likely to remain high as the discretionary income of Latvians continues to rapidly increase.

Latvia was recently ranked as having the fifth-highest travel and tourism growth rate in the world and the country's transport infrastructure has undergone significant modernization and expansion to better facilitate trade and tourism. Reflecting Latvia's importance as a trade entrepot and break-of-bulk point, the country has three major ports—Ventspils, Riga, and Liepaja—each of which is also a special economic zone offering incentives including lowered taxes and free customs regimes. Ventspils Free Port is one of the busiest in the Baltic Sea region and is among Europe's leading ports in cargo turnover. Latvia is also an increasingly important airline hub with Ryanair, state-owned AirBaltic, and other airlines opening new air routes to an ever-increasing number of major cities globally. Direct flights between Riga International Airport, the leading airport in the Baltic States, and the United States are being planned pending the establishment of visa-free travel between the two countries.

Latvia enjoys many economic strengths. The World Bank ranks Latvia as one of the best countries in the world in which to do business. It is the hub for banking and finance within the Baltic region. Its currency, the lats (LVL), has proven to be one of the most stable in the world since its inception in 1993 (Latvia plans to adopt the euro). The Latvian government has among the lowest levels of general debt within the EU. Volume of foreign investment, mainly from other EU countries, in all sectors of the Latvian economy is increasing, accounting for around 34 percent of annual GDP volume at the end of 2006. Perceived as a stable and hospitable atmosphere for business and as a gateway between Europe and Russia, the Latvian economy is poised for continued growth.

See Also: European Union; Privatization; Trade Balance; World Trade Organization.

Bibliography. Investment and Development Agency of Latvia, www.liaa.gov.lv (cited March 2009); Latvian Embassy to the United States, www.latvia-usa.org (cited March 2009); Latvian Institute, www.li.lv (cited March 2009); Sanda Liepina, Jacqueline G. Coolidge, and Lars Grava, *Improving the Business Environment in Latvia: The Impact of FIAS Assistance* (World Bank, 2008); Ministry of Economics of the Republic of Latvia, www.em.gov.lv (cited March 2009); Baiba Savrina, Dainora Grundey, and Kristine Berzina, "Cooperation: The Form of Sustainable Tourism Industry in Latvia," *Technological and Economic Development of Economy* (v.14/2, 2008).

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Leadership

Leadership is the process whereby an individual influences a group of individuals to achieve a common goal. Leadership may be defined as a person embodying the will of a group; as a combination of special traits or characteristics that individuals possess enabling them to induce others to accomplish tasks; or as the things leaders do to bring about change in a group. The leadership process involves leaders, those who engage in leadership, and followers, those toward whom leadership is directed.

It is difficult to find one overall definition of leadership, but most definitions of leadership contain the elements found in Ralph M. Stogdill's classic definition of leadership as the process (act) of influencing the activities of an organized group in its efforts toward goal setting and goal achievement. Leadership is a process involving three key elements: influencing others to behave in a certain way; working with people in a group context; and influencing group members in the direction of goal accomplishment. More recent discussion of the notion of leadership tends to highlight the leader as a manager of meaning, focusing on how leaders engage in "sense-making" in the organization. In both cases leadership is seen as a process whereby the leader identifies what is important in the organizational context.

Leadership is in many ways similar to management. Leadership and management both involve influence, entail working with people, and are concerned with goal accomplishment. Nevertheless, the functions of leadership may also be seen as quite different from management. While management produces order and consistency, leadership produces change and movement. In this perspective the primary functions of management are concerned with planning, organizing, staffing, and controlling. The primary functions of leadership are concerned with establishing direction, aligning, motivating, and inspiring people.

Throughout history, several different approaches to leadership have been proposed. An early systematic attempt to study leadership was the trait approach that dominated the scene up to the late 1940s. The trait approach seeks to determine the personal qualities and characteristics of leaders and suggests that leaders are born with special traits that make them great leaders. Among the many traits contributing to leadership identified in this tradition are intelligence, self-confidence, determination, integrity, and sociability.

In contrast to the trait approach, the skills approach emphasizes the competencies needed for effective leadership. While the trait approach implies a belief that leaders are born rather than made, the skills approach implies that leadership competences could be learned. An early work in this tradition is the three-skills approach, distinguishing between three basic personal skills: technical, human, and conceptual. It is important for leaders to have all three skills, but at different levels of the management structure, some skills are more important than others. The important skills for top management are human and conceptual skills, for middle management all three skills are important, and for supervisory management technical and human skills are important. Later models point furthermore to the importance of problem-solving skills, social judgment skills, and knowledge.

A change of focus from the personal characteristics of leaders to their behavior as leaders led to the development of the style approach that was important during the late 1950s and 1960s. In the early work on leadership behavior by a group of researchers from Ohio State University, the empirical studies showed that responses clustered around two general types of leader behavior: initiating structure and consideration. Initiating structure behaviors include organizing work, defining role responsibilities, and scheduling work activities. Consideration behaviors are relationship-oriented behaviors and include building respect, trust, and liking between leaders and followers.

Generally the style approach suggests that leaders engage in two primary types of behaviors: task behaviors, such as facilitating goal accomplishments, helping a group get organized, and giving directions, and relationship behaviors, including taking an interest in workers as human beings and recognizing accomplishments. These two types of behavior may be combined differently by leaders.

Instead of focusing on the leader, the contingency approach shifts the focus toward how situational factors affect leadership. Typically researchers in this tradition will seek to specify the situational variables that will moderate different leadership approaches. Following this perspective, effective leadership is contingent on matching a leader's style to the right setting.

A more recent perspective on leadership can be summarized under the label "new leadership approach," referring to a number of approaches to leadership that emerged in the 1980s that focus on similar themes, although applying slightly different terms to describe the new kinds of leadership with which they are concerned: transformational leadership, charismatic leadership, visionary leadership, or simply leadership. Together these labels reveal a conception of the leader as someone who defines organizational reality through the articulation of a vision, based on a reflection of the organization's mission and the values that will support it. The new leadership approach then depicts leaders as managers of meaning rather than in terms of an influence process.

An important intellectual impetus for the ideas associated with the new leadership approach derives from James M. Burns's distinction between transactional and transformational leadership. Transactional leadership refers to the exchanges that occur between leaders and their followers in which the former offers rewards for compliance with his or her wishes. In Burns's view the effectiveness of such leadership is limited to the implicit contract between leader and followers. The transformational leader raises the aspirations of his or her followers such that the leader's and the followers' aspirations are fused. Transformational leaders are able to engage their followers to achieve something of significance and also to morally uplift them. Charismatic leadership is often described in ways similar to transformational leadership. Charismatic leaders act in unique ways that have specific charismatic effects on their followers. The personal characteristics of a charismatic leader include being dominant, having a strong desire to influence others, being self-confident, and having a strong sense of one's own moral values.

It has been argued that transformational and charismatic leadership were constructs of the late 20th century. The increasingly distributed nature of leadership combined with concerns about the dark sides of charisma has led to attempts to reconceptualize the notion of leadership. Important elements in these post-charismatic and post-transformational leadership models are truly distributed leadership in teams, learning from experience and failure, and leadership practice as more consciously made public and open to challenge and testing.

See Also: Commitment; Empowerment; Management.

Bibliography. B. M. Bass, *Bass and Stogdill's Handbook of Leadership: A Survey of Theory, Research and Managerial Applications* (Free Press, 1990); B. M. Bass, *Transformational Leadership* (Ertbaum, 1998); Dail Fields, "Leadership Style: Developing a Leadership Style to Fit 21st-Century Challenges," in *21st Century Management: A Reference Handbook,* Charles Wankel, ed. (Sage, 2008); Beth Fisher-Yoshida and Kathy Dee Geller, *Transnational Leadership Development: Preparing the Next Generation for the Borderless Business World* (American Management Association, 2009); Elizabeth Kelley and Kevin Kelloway, "Remote Leadership," in *21st Century Management: A Reference Handbook,* Charles Wankel, ed. (Sage, 2008); P. G. Northouse, *Leadership: Theory and Practice,* 4th ed. (Sage, 2007); K. W. Parry and A. Bryman, "Leadership in Organizations," in *The Sage Handbook of Organization Studies,* 2nd ed., S. R. Clegg, C. Hardy, T. B. Lawrence, and W. R. Nord, eds. (Sage, 2006); Patrizia Porrini, Lorene Hiris, and Gina Poncini, *Above the Board: How Ethical CEOs Create Honest Corporations* (McGraw-Hill, 2009); Angel Saz-Carranza, Sonia Ospina, and Alfred Vernis, "Leadership in Interorganizational Networks," in *21st Century Management: A Reference Handbook,* Charles Wankel, ed. (Sage, 2008); J. Storey, ed., *Leadership in Organizations: Current Issues and Key Trends* (Routledge, 2004); G. Yukl, *Leadership in Organizations*, 5th ed. (Prentice Hall, 2001); A. Zaleznik, "Managers and Leaders: Are they Different?" *Harvard Business Review* (1977).

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Lebanon

Lebanon has a liberal economy with free transfer of capital and goods. It is a small and service-based

A technician repairing mobile phones in a shop in Beirut in 2002. Such small businesses are a mainstay of the economy.

economy—services account for approximately 71 percent of its gross domestic product (GDP), which was estimated at $24.6 billion in 2007. The main economic sectors are financial services, tourism, commerce, manufacturing, and agriculture. In particular, agriculture is the main source of employment in rural areas, but it is relatively underdeveloped with inefficient production techniques. As a result, the sector represents only a small portion of the GDP. Main agricultural products include vegetables, potatoes, tobacco, and fruits.

The majority of Lebanese industrial firms are small family-owned entities, concentrated in the capital city of Beirut. Food and beverages are the main industrial subsector, with the highest workforce and number of firms. Other industrial sectors are furniture, textiles, clothing, leather, wood products, and metal goods. Although the industrial sector has significantly recovered since the civil war (1975–90) and regained some of its regional competitiveness, it was badly hit during summer 2006, when a conflict with Israeli forces resulted in the destruction of many factories including dairy, steel, and glass facilities.

As a result of civil war, Lebanon suffered serious physical and infrastructural damage. This led to a boost in the construction sector in the postwar era. One of the major projects was the redevelopment of downtown Beirut. The massive reconstruction program was funded by a substantial amount of external and internal funds, which led to the accumulation of a huge debt. This debt still represents a major drain on public resources. In an effort to reduce the burden of public debt, successive governments sought support from existing creditors and the country's foreign allies. Nevertheless, despite these efforts from the Lebanese government, public debt represents a long-term problem.

Lebanon was regarded as the regional financial hub during the 1960s and early 1970s due to its developed banking sector and particularly its banking secrecy law. However, the sector suffered a slowdown during the civil war, with capital moving outside the country. The sector recovered in the postwar period, with 131 commercial banks operating in the country under license from the central bank (Banque du Liban). These banks are supervised and regulated by the Banking Control Commission. Commercial banks are the main creditors to the Lebanese government, buying high-yield treasury bills and Eurobonds to fund the government reconstruction plan, which makes them highly exposed to public debt. Lebanese commercial banks are expanding regionally in the Middle East and north Africa.

Many investment houses and brokerages were established during the 1990s, offering investment opportunities to wealthy individuals, but they had limited success. The Beirut Stock Exchange, which closed in 1975 due to the outbreak of the civil war, reopened in 1995, and trading started in January 1996. The liquidity is low, and six banks are among the only 11 listed companies. Despite the efforts to regain Beirut's role as a financial center in the region, the process has had limited success due to the growth of many financial centers in the region such as Bahrain and Dubai.

The mild climate of Lebanon and its location on the Mediterranean coast make Lebanon a popular tourist destination, particularly among Arabs from the Gulf region. Tourism, which played a vital role in the Lebanese economy before the civil war, is one of the fastest-growing sectors.

Due to limited agricultural and manufacturing machinery, and lack of mineral resources, Lebanon depends on imported products for economic activities. Main imports include mineral products, machinery, vehicles, chemicals, and oil. According to the Ministry of Economy and Trade, imports were estimated at $11.815 billion in 2007. At the same time, Lebanon's main exports are fresh and processed food, textiles, finished jewelry, paper, and paper products. Exports were $2.816 billion in 2007.

With a reputation for little intervention in economic activities, the Lebanese government always encourages private investment initiatives (local or foreign). In its effort to boost investment in Lebanon, the government created the Investment Development Authority in Lebanon (IDAL) under the Investment Development Law 360. IDAL is entrusted to identify investment opportunities in Lebanon, to assist local and foreign investors in their investment projects, and to provide them with a wide range of investment incentives. Under the Lebanese Commercial Law, companies can be formed either as partnerships or limited liability entities; all Lebanese companies and branches of foreign firms must be registered with the Registry of Commerce. In this respect, Lebanon offers a wide range of investment opportunities across all sectors of the economy, coupled with a moderate corporate tax rate and a multilingual, skilled, and well-educated labor force.

See Also: Middle East; Syria.

Bibliography. Byblos Bank, "Lebanon This Week" (v.64, 2008); Julian Di Giovanni and E. H. Gardner, *A Simple Stochastic Approach to Debt Sustainability Applied to Lebanon* (International Monetary Fund, 2008); Dima Jamali and Ramez Mirshak, "Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context," *Journal of Business Ethics* (v.72/3, 2007); Axel Schimmelpfennig and E. H. Gardner, *Lebanon: Weathering the Perfect Storms* (International Monetary Fund, Middle East and Central Asia Department, 2008); Philippe W. Zgheib, "Managerial Ethics: An Empirical Study of Business Students in the American University of Beirut," *Journal of Business Ethics* (v.61/1, 2005).

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Legal & General Group

Legal & General Group is one of the United Kingdom's leading financial services companies. According to the Fortune Global 500 ranking for 2007, Legal & General Group is the ninth-highest ranked insurance company, although ranked only 162 overall. The company's ordinary shares (stock) appear in the Financial Times Stock Exchange 100 Index (in fact, the company is among the top 50 most traded companies).

The company, with headquarters in London, offers various types of insurance as well as providing pensions. Although British-based, Legal & General has an interest in various European countries as well as in the United States (Metropolitan Life Assurance Company of New York was acquired in the 1930s). It withdrew from Australia in 1998. Nevertheless, approximately 90 percent of Group operating profit (£1,233 million in the last available year) comes from its United Kingdom activities. In addition to its own direct sales through its consultants, the company (as is common in the United Kingdom insurance market) sells its products through its association with numerous banks and building societies. Some interesting statistics regarding the company are that 5.75 million people worldwide rely on Legal & General for their life insurance, pension, investments, or general insurance plans; and almost £250 billion is invested on behalf of investors, policyholders, and institutions.

Personal financial products sold by the company include, on the insurance side, annuities, endowments, and household, auto, health, and life insurance. But the company also offers various types of investments (unit trusts [mutual funds], investment trusts, and investment bonds) and arranges mortgage finance. This last activity is merely one aspect of Legal & General's interest in the property market, since the company also operates one of the largest (110 branches operating nationwide) estate agency/letting franchise businesses in the United Kingdom. Pension interests span pension fund investment management services and group pension bulk purchase annuities.

The company's history is somewhat unusual. Founded in 1836 (the date appears in the corporate logo) by six lawyers in a coffee shop in the City of London (the London Stock Exchange had similar humble beginnings), the business was originally registered as a society, and the fact that its membership was restricted to members of the legal profession was reflected in its chosen name—the New Law Life Assurance Society. When policies became available to the general public (even if membership remained in the same restricted hands as before), the name changed to Legal & General Life Assurance Society, and it became a wholly-owned subsidiary of Legal & General Group plc in the 1970s (following a United Kingdom corporate law initiative aimed at making clearer the distinction between "public" [henceforth a plc] and "private" companies).

In 1999 Legal & General announced an ambitious plan to link up with NatWest (formerly National Westminster) Bank in what would, had it been successful, have been the United Kingdom's first "bank-assurance" company. However, though market reception to the deal was so poor that the initiative had to be abandoned (NatWest was subsequently taken over by the Royal Bank of Scotland), the subsequent acquisition of the Scottish Widows' Life Assurance Society by another United Kingdom High Street bank (this time Lloyds/TSB) indicated there was nothing wrong with the underlying concept per se.

Like many other companies, Legal & General is today anxious to establish its sustainability credentials. It is thus a member of the Dow Jones Sustainability World Index, the FTSE4Good Index, and (since 2006) the Dow Jones Sustainability STOXX Index. The company has also been placed in Business in the Community's Corporate Responsibility Index and was second in its sector in the 2006 Business in the Community Index. Legal & General's marketing paper now exceeds half recycled content (saving over 10,000 trees per year) and the company's corporate social responsibility engagement program now includes social and ethical issues, and supporting guidelines, to influence its key suppliers. More than one in eight employees now contributes to the company's Give As You Earn charity support scheme.

Legal & General has been judged Best Life Assurance Provider (by *Professional Advisor* magazine); Life Assurance Provider of the Year (in the *Financial Advisor* Life & Pensions Awards); and Best Service Provider (the *Lifesearch Protection* Awards). The company attributes its outstanding success to its

> clear and consistent strategy and … a wide range of value-for-money products backed by strong technical skills, excellent administration, multi-channel distribution and a customer service ethic.

See Also: FT Index; FTSE; HBOS.

Bibliography. Legal & General Group plc, *Annual Reports and Account* (2008); Joanne O'Connor, "Legal & General in Review of its UK External Advisers," *Lawyer* (v.18/34, 2004).

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Legal Environments

Firms, as societal entities, operate in particular economic, political, and legal environments. The legal environment is a result of legislative intervention by the government (state) and the positive practices that are recognized and sanctioned by the positive law. Historically, the legal environment has usually been nationally defined, although scholars have tried to group legal systems into various groups, based on their similarities and dissimilarities.

A student of this topic would usually argue that there are two basic groups of legal systems, which traditionally have been opposed: the Anglo-Saxon (Anglo-American) model and the continental European law. However, although both main systems of law may have their distinctive features listed, in fact there are far too many convergences in recent times. In the past the common law (Anglo-Saxon) model would be predominantly based on the precedents, and the continental European law would be primarily based on the codifications. But, there is ever-increasing legislative activity in the Anglo-Saxon countries, with a number of codifications taking place as judiciary may uphold the consistency of court practice. In either system, a judge may take a stance to create a precedent, but the sources of precedent would differ significantly.

Anglo-Saxon Versus Continental European Models

Growing empirical literature has attempted to prove the overall superiority of the Anglo-Saxon model. Although it is evident that economies of Anglo-Saxon countries may be doing comparatively better than the others in the long run, it is not empirically corroborated that the growth sustained over a period of time may be directly attributed to the features of the legal system (legal environment). Legal systems, although they may be classified into larger groups, are basically heavily influenced by national colors and experiences of legal development, especially in revolutionary environments (when there is abrupt change in the development).

Scholars studying legal environments would focus more, nowadays, on judiciary independence from the state and the politicians. It is believed that if the judiciary protects consistently property rights, even from the state, the results of development will be better, and in the case-law system, judges historically have been more prone to uphold the sanctity of private property rights. Ex post judging is far better in responding to local information, rather than the application of abstract law, regulating the principles.

However, increasingly the common law countries are resorting to promulgating laws and codices, in order to better capture different areas of law. In the United States, the Uniform Commercial Code (UCC) is probably the best example. The growth in legislative activity may also be seen as a sign of upcoming struggle between judiciary and legislative power for predominant societal influence. Most recently the discussion on "political delegation" would suggest that it is necessary to subsume, at least formally, all institutions of the state to the highest democratically elected body in the country (assembly, parliament, etc.), although that body is controlled exclusively by the politicians. The literature has also defined a common law system as one in which judges exercise discretion to decide cases in independent and/or adaptive lawmaking ways, while in continental European countries the state would control judicial outcomes and the content of law as well.

The basic premise of change between the two wider legal groups has been the perception as to what extent the judicial practice may influence the future legal decision taken by the court. It is a fact that in Anglo-Saxon countries precedents are a source of law and they have to be regarded in the future when the act is required in a similar situation. However, although in the continental European legal system judiciary practice is not a formal source of law, judges take into consideration the prior practice in order to ensure consistency in acting in the court and the country.

In comparative law, the literature is quite often focused on a set of five parameters, like (1) judicial incentives; (2) exogenous legal human capital; (3) the processing of litigant information into judicial error–reducing legal human capital; (4) the cost of producing evidence and legal arguments; and (5) the penalties (damages) levied in adjudication.

Judicial incentives may be influenced by the way their independence is defined. Often in the analysis judicial independence features highly, especially as it is believed to be an important feature of the Anglo-Saxon model, which contributed to its better results. In the U.S. model, over 80 percent of serving judges are subject to some kind of election, reelection, or recall voting. But even in the United States the upper echelons of judiciary are dependent on politicians who decide on their promotion to the highest offices. Similarly, in the continental European countries, the government may have a strong say in appointment of judges, especially in the case of higher courts. However, the very path of professional progression differs between European (especially French) and U.S. judges. In Europe, judges are often career civil servants, who have opted for the judiciary profession almost immediately upon graduation from the university; in the United States, judges are appointed from among practicing lawyers who have had more than 10 years of professional experience.

Comparative analysis of independence has shown more than a puzzle—judges should be independent, but the question is from whom? And, if one is independent, does it mean that he or she is also unbiased (objective)? Often it is assumed that judges, if not appointed by the government directly, will be critical of the government and look at the breaking of law made by the government in an unbiased manner. However, empirical research does not corroborate this claim. Some judges are more independent and unbiased in the way they operate than others, but it cannot be generalized as to what contributes to that.

Another important feature is the relationship between precedents and statutes. Anglo-Saxon law is believed to be based on a set of more or less harmonious precedents (*stare decisis*), while the continental European legal practices are based on the interpretation of law and the application of the abstract legal (statutory) rule to a concrete situation. However, even in the latter case there is a high level of consistency in judiciary practices, as the higher courts have the right of cassation and therefore for the performance of judges it is important that their decisions not be annulled and/or modified by the higher court. Therefore, even in the continental European legal systems, court practices are consistent, that is, *jurisprudence constante*.

At the far end, the issue is primarily behavioral—whether the judges will be expansive or rather conservative (narrow) in their apprehension of laws. Some recent empirical research has clearly shown consistency of judicial behavior across various systems. However, de jure legal practice is not a formal source of law in continental European legal systems, but, as already pointed out, will be seriously considered in the process of application of law. In both systems the vast majority of judges will opt not to rock the boat.

Career Paths

Another important feature of these two main groups of legal systems that has already been mentioned is the career path in either of the systems. In the continental European system the judges follow the clear career path from a judicial trainee in lower courts to the position in the higher courts, including the Supreme Court. Although there are mid-career entrants from the legal profession, it is fairly rare to have those transfers. However, transfers from the judge's chair to the bench are more frequent, especially in the situations where there is a public distrust in the judicial system or endemic economic crisis. There are attempts in both systems to objectivize the appointment of judges and base their direct promotion on merit. In France, a complex panel decides on the appointments of judges, and the panel is chaired by the president and consists of the corresponding ministers and others, mainly appointments from the judiciary.

In contrast, in both the United States and Canada, judges are appointed only after a somewhat long and distinguished professional career, usually as a practicing lawyer. In either system the politicians are still in a position to influence the appointment of new judges/justices, with more or less interference, However, it seems that the principles of political delegation are gaining good soil, and it is to expect that judges will be more often appointed by "independent" panels, and their promotion will be based upon their performance results and personal zeal to succeed. One feature certainly remains to be noted. In the Anglo-Saxon practice there is a well-established process where judges are exposed to collegial referee procedures (peer review).

Courts

In various jurisdictions the courts are organized in their own way—for instance, in France, specialization for particular court cases (administrative court, family court, etc.), while generalization is more specific for the United States, although the situation is changing. Nevertheless, there are opportunities to reconcile these two factions. In the United States, it is believed that appellate specialization has, in fact, led to a somewhat biased position of the court, especially in patent cases, where this specialization in the Federal Circuit has led to an overly pro-patent orientation. More generalized courts may be more active in the competition for cases, that is, attracting jurisdiction and therefore ensuring more effective and efficient behavior under the outside influence.

Further on, the systems differ in how they handle court-released information. It is possible to have an environment in which all the interested parties disclose much information or simply feed the judge with the information he or she may need. A judge who is more under (immediate) public scrutiny may behave in a manner that he or she will carefully weigh the need for changes in the existent practices before committing to the change in the practice and new precedent being deliberated. In contrast, the judge or a Supreme Court justice who is not known to the broader public may be more enticed to make a decision that would depart from the current practice, especially if the welfare loss or gain is a zero-sum game.

Procedural elements are also very important in contrasting legal regimes. Namely, procedural elements do influence judicial incentives and direct engagement in the procedure before the court. An Anglo-Saxon, i.e., Anglo-American, model of adversarial justice requires a judge to be an unbiased referee as both sides present the facts and try to establish the truth. The judge in turn is not expected to actively look for other evidence. In contrast, the continental European model requires a judge to be an active participant in the procedure and to actively seek truth, and may require the presentation of facts in order to establish proof.

Similarly, the use of jurors differs between the systems, although in principle jurors are used almost exclusively in criminal cases. In the Anglo-Saxon model the jury decides guilt, while the judge as a professional does the sentencing, usually well after the case before the jury has been completed. In the continental European model, jurors often sit with the presiding judge as a member of the panel and decide on the major issues by majority vote. Even the concept of the jury has changed over time. In the past jurors were chosen because they were familiar with the case, and nowadays the court looks for full impartiality of jurors.

Legal environments/legal systems differ from country to country and to a large extent they may have shown some signs of convergence, but in fact they remain largely national, belonging more or less consistently to the legal groups we have outlined here.

See Also: Cultural Norms and Scripts; Regulation.

Bibliography. Jeffrey F. Beatty and Susan S. Samuelson, *Legal Environment* (Cenage/South-Western College Publishers, 2007); T. Beck, A. Demirgüç-Kunt, and R. Levine, “Law and Finance: Why Does Legal Origin Matter?” *Journal of Comparative Economics* (v.31/4, 2003); Ash Demirguc-Kunt, Inessa Love, and Vojislav Maksimovic, “Business Environment and the Incorporation Decision,” *Journal of Banking and Finance* (v.30/11, 2006); G. K. Hadfield, “The Levers of Legal Design: Institutional Determinants of the Quality of Law,” *Journal of Comparative Economics* (v.36/1, 2007); R. La Porta, F. Lopez-de-Salines, C. Pop-Eleches, and A Shleifer, “Judicial Checks and Balances,” *Journal of Political Economy* (v.112, 2004); R. La Porta, F. Lopez-de-Salines, A. Shleifer, and R. Vishny, “Law and Finance,” *Journal of Political Economy* (v.106, 1998); R. La Porta, F. Lopez-de-Salines, A. Shleifer, and R. Vishny, “Legal Determinants of External Finance,” *Journal of Finance* (v.52, 1997); Min-Dong Paul Lee, “A Review of the Theories of Corporate Social Responsibility: Its Evolutionary Paths and the Road Ahead,” *International Journal of Management Reviews* (v.10/1, 2008).

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Lenovo

Lenovo, originally known as Legend Group, is one of the largest personal computer (PC) manufacturers in the world. It employs more than 25,000 people and has more than 66 overseas branches, operating in more than 166 countries across six continents. Lenovo is the best-known brand in China and Asia, with $164 billion annual turnover in 2007.

Legend was originally established in 1984 by 11 Chinese computer scientists with initial capital outlay of RMB 200,000 (US$25,000), headed by Lenovo’s founding chairman Liu Chuanzhi. In 2003 the company changed its official business name from Legend to Lenovo. As the most respected Chinese technology company, Lenovo offers a range of product categories, including personal computers, networking products, software and peripherals, mobile handsets, and other digital products. Its award-winning Think products (Thinkpad notebooks, Think-Certer desktops, etc.) have been ranked as premium-brand leaders in the global PC industry. As the leading technology company in China’s information technology (IT) industry, Lenovo commands more than one-third of the PC market in China, 7.6 percent of market share in the world. According to Gartner’s marketing report, Lenovo is ranked the fourth PC seller in the world compared to HP, Dell, and Acer, with market shares of 18.3 percent, 14.9 percent, and 9.5 percent, respectively, in 2007.

Lenovo’s development can be divided into three significant stages: initial development (1984–93), domestic growth (1994–2003), and going international (2004–). In the early 1980s, China experienced significant changes both politically and economically. Information systems and technology development became the fastest growth areas in China. With 11 employees, Lenovo began selling foreign computers to Chinese customers. Its initial entrance into the PC market was as a sales agent of IBM. Slowly, the company began to grow by developing and commercializing its own IT products. In 1988 Lenovo launched its own brand of personal computer and established its Hong Kong branch. After nearly 10 years of initial development, Lenovo completed its role change from a sales agent to a computer manufacturer.

Between 1994 and 2003, Lenovo entered its rapid domestic development era. The company realized that the Chinese PC market was not yet captured by major international players, such as IBM, Compaq, or even Acer. Very quickly, Lenovo decided to develop and retail PCs at a low cost to Chinese customers. This strategy made Lenovo a huge success. In 1996 Lenovo became the market share leader in China for the first time and commanded 27 percent share of the PC market in China by 2003. In 1994 Lenovo was listed on the Hong Kong stock exchange and became a constituent stock of the Hang Seng Index in 2000. After 20 years of development, Lenovo successfully became a leading brand in the IT industry and an important player in China and Asia. In 1999 the company was ranked in the Chinese national top 100 electronic enterprises and became the top PC vendor in the Asia-Pacific region. In 2000 it was ranked in the top 10 of the world's best-managed PC vendors.

After holding the leader position in Chinese and Asian markets, Lenovo aims to expand its business internationally to succeed in the long term. Acquiring IBM's Personal Computing Division was a milestone in the history of Lenovo's international expansion that made it China's "go global" star. On December 8, 2004, Lenovo announced acquisition of IBM's PC business with US$650 million in cash and US$600 million common stock. This strategic alliance gave Lenovo's customers preferred access to IBM's world-class customer services and enabled Lenovo to take advantage of IBM's powerful worldwide distribution and sales network. The business transaction with IBM made Lenovo the world's third-largest PC business with approximately US$12 billion annual revenue for 2003.

The success of the company is also highly correlated with its emphasis on technology innovations. Lenovo is the first Chinese company to introduce PCs to households in China and first developed the Legend Chinese Character Card that could be used to translate English operating software into Chinese characters. This pioneering innovation has affected the lives of millions of Chinese and received the highest National Science-Technology Progress Award in China. Additionally, Lenovo's three research centers—China, Japan, and the United States—have produced many world-class advanced PC products. The company now holds more than 2,000 patents and has won hundreds of technology and design awards. Its extraordinary research and development capability has distinguished Lenovo from its competitors.

See Also: Acquisitions, Takeovers, and Mergers; China; Dell; Hewlett-Packard; International Business Machines.

Bibliography. Jerry Biediger et al., "Strategic Action at Lenovo," *Organizational Dynamics* (v.34/1, 2005); IBM Press Room, "Lenovo to Acquire IBM Personal Computing Division," www.ibm.com (cited March 2009); Lenovo Company History, www.lenovo.com.cn (cited March 2009); Gua Hua Sun, "Lenovo's Annual Profit Double Increased," *Hexun News* (May 23, 2008); Wie Xie and Steven White, "Sequential Learning in a Chinese Spin-Off: The Case of Lenovo Group Limited," *R and D Management* (v.34/4, 2004).

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Leontief Paradox

Wassily W. Leontief (1905–99) was the first scholar to empirically test the predictions of the Heckscher-Ohlin (H-O) theorem, one of four main results of the H-O model (credited to Eli Heckscher and Bertil Ohlin). This theorem establishes a relationship between a country's abundance of factors of production, the intensity with which these factors are used in production, and the country's trade patterns. It builds on the principle of comparative advantage and states that countries will tend to export those goods that use relatively intensively their relatively abundant factors of production. In other words, a country that is relatively abundant in, say capital, will tend to export goods that are relatively capital intensive.

Leontief conducted a test in 1953 of the predictions of the H-O theorem, for which he utilized 1947 input-output data for approximately 200 industries in the United States. A stylized fact about the post–World War II economy, and 1947 in particular, was that the capital-to-labor ratio in the United States was higher than in any other country. According to the H-O theorem then, U.S. exports in 1947 would, on average, be more capital intensive than imports. In order to test this prediction, Leontief aggregated industries into sectors and used the input-output data to similarly aggregate factors of production in these sectors into two general categories: labor and capital. Using these data, he then calculated estimates of the capital and labor requirements for the production of the typical bundle of exports and imports in 1947.

What Leontief found was in contradiction to the trade pattern predicted by the H-O theorem: U.S. export industries were on average less capital intensive than import-competing industries in 1947. This contradiction became known as the Leontief paradox.

Responses

Since the publication of Leontief's paradoxical results in 1953, a voluminous body of both theoretical and empirical literature has emerged on the subject. From this literature, several responses to Leontief's paradox can be useful in interpreting the validity of the H-O theorem. The first of these criticizes the choice of data. The argument is that 1947 was not a normal year because the global economy was still recovering from World War II. Leontief's response to this criticism was to conduct a second investigation in 1956 using 1951 trade data. His paradoxical findings persisted.

A second response to the Leontief paradox is anchored in the classification of factors of production into two broad categories: labor and capital. This criticism has given rise to the generalized factor-endowment model that takes into account many subvarieties of capital, land, and human factors, and recognizes that factor endowments change over time as a result of technological endowments. Specifically, economists have argued that capital needs to be viewed more broadly to include highly skilled labor as a form of (human) capital. This can help to partly explain Leontief's results: exports that were relatively labor intensive can be reinterpreted as relatively human-capital intensive and not necessarily intensive in the use of unskilled labor.

Another response to the Leontief paradox has centered on the role of imperfect competition. The argument here is that trade provides a larger potential market for products, making higher production levels possible (economies of scale), which leads to increased efficiency and competitiveness. This can further help explain Leontief's paradox: even though the United States was capital abundant, imports of capital-intensive goods could have been the result of economies of scale achieved by foreign producers that gave them a comparative advantage even if their nation was actually labor (not capital) abundant.

Finally, the role of demand characteristics has also been identified as a potential response to the Leontief paradox. While the H-O theory does well in predicting trade driven by supply conditions (such as trade in natural resources), it does not do as well in predicting the patterns of trade in manufacturing goods that are influenced by domestic demand conditions. The Linder hypothesis (after Staffan Linder) expanded on the H-O theorem by distinguishing between supply and demand characteristics as determinants of trade. If nations have similar per capita income, then they have similar tastes, i.e., they will have overlapping demand structures.

Linder's hypothesis predicts that nations with similar demand structures are likely to both import and export similar types of manufactured goods. Linder's contribution can further explain the Leontief paradox: U.S. trade with similar-income countries implies trade in similar goods, i.e., capital-intensive goods made in the United States can be traded for capital-intensive goods made in other countries. For example, intra-industry trade describes much of U.S. export and import patterns today.

In conclusion, Leontief's paradoxical conclusion has inspired numerous attempts to replicate his work with data from other periods and countries. Modified forms of Leontief's test continue to be examined today and continue to be a standard method for the analysis of trade. Although the H-O theory has undergone many refinements, empirical tests have generally produced mixed evidence in support of this factor endowment theory (and the H-O theorem in particular). Thus the best way to think about the H-O theory is as one that explains a portion, rather than all, of the determinants of trade.

See Also: Economies of Scale; Factor Endowments; Heckscher-Ohlin Model; Linder Hypothesis.

Bibliography. Indian Economic Association, Inderjeet Singh, and Anil Kumar Thakur, *Growth and Human Development: Economic Thoughts of Wassily W. Leontief* (Deep & Deep Publications, 2008); Edward E. Leamer, "The Leontief Paradox, Reconsidered," *Journal of Political Economy* (v.88/3, 1980); Wassily W. Leontief, "Domestic Production and Foreign Trade: The American Capital Position Reexamined," *Proceedings of the American Philosophic Society* (v.97/4, 1953); Wassily Leontief, Erik Dietzenbacher, and Michael L. Lahr, *Wassily Leontief and Input-Output Economics* (Cambridge University Press, 2009).

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Less Industrialized Countries

Less industrialized countries are those that are also sometimes called developing countries, and can include emerging economies and failed states. These terms have essentially replaced the older Third World or Global South labels, but there is no strict agreement on the right way to distinguish between the advanced and industrialized nations and the rest of the world. Every framework of vocabulary used for such distinctions presents its own problems, or develops certain connotations that fall out of favor.

The First, Second, and Third World

As the new world order came into focus in the years following World War II, economist Alfred Sauvy coined the term *Third World*—echoing the *Tiers Etat* ("Third Estate"), the French commoners who "had nothing and wanted to be something" in the days leading up to the French Revolution—to refer to those nations that were neither U.S.-allied (the First World) or Soviet-allied (the Second World). As the term came into common usage, it was sometimes criticized for a perceived implication that this "third" world was an afterthought, one less important than the first two—when in fact the use of "third" in the term reflected only Sauvy's desire to compare those countries uninvolved with the Cold War to the politically active peasantry. A French writer writing in a French magazine (the August 14, 1952 issue of *L'Observateur*) for a French audience, he knew his meaning would be understood; as the phrase became adopted and used for decades outside the context of that essay, this "thirdness" came to seem less innocuous.

Though it was true that most of the countries that did not take sides in the Cold War—or at least had not done so in 1952—were less developed and less industrialized, than those of the First and Second World, Sauvy's emphasis was on their political neutrality. In time, that underdevelopedness instead became the key characteristic of anything referred to as "Third World," to such a degree that after the early 1960s, when Americans became aware of the devastating extent to which poverty had taken hold in parts of their own country, it became fashionable and politically expedient to refer to "Third World living conditions" when describing impoverished neighborhoods or social groups. While understandable, the usage further eroded the usefulness of the "Third World" category in discussions of global politics.

Attempts were made to rejigger the term, though. Hungarian-British economist Peter Bauer, wishing to update the term to reflect the conditions of the world around him in the 1980s, just as Sauvy had written of those conditions in 1952, defined the Third World not as a politically neutral segment of the globe or a political remainder, but as that part of the world that sought Western aid—regardless of the country's political sympathies or economic policies.

The North-South Divide

Another schema sometimes used to discuss the world and its groups of industrialized and less industrialized countries is the "North-South divide," which reflects the general tendency during the Cold War of the developed countries—the First World and much of the Second—being located in the Northern Hemisphere, while developing countries were in the Southern Hemisphere. This map only works if you ignore New Zealand and Australia, and the fall of the post-Soviet states has further muddied it, but for all its imperfections it is an interesting way to describe the world. Unlike the First/Second/Third World model,

Women hauling firewood in Bangladesh, where the female literacy rate was only 31.8 percent in 2003. Literacy is one of the factors used by the United Nations to determine a country's Human Development Index rating.

it describes not a political allegiance but a state of development.

It is true, even in the 21st century, that most of the countries with the highest scores on the Human Development Index are in the north; most of those with the lowest are in the south. Willy Brandt, the Chancellor of West Germany in the 1970s, proposed that the line dividing north from south was roughly 30 degrees north latitude, putting Africa and India in the south but dipping in order to include New Zealand and Australia in the north.

Developing Countries and the Human Development Index

The term *developing country* came into use to refer more or less to the same countries as the Third World did, those of the "global south," and is used more or less synonymously with "less industrialized." While "less industrialized" describes a current state, "developing" describes an ongoing process, as well as the implication that developing countries are in the process of becoming developed ones, and that those countries that are already developed represent a sort of goal or role model.

Development entails industrialization, stability, infrastructure, and a reasonable standard of living. Developing countries fall behind the curve in one or more of these areas. The United Nations developed the Human Development Index (HDI) as a way to measure development, by looking at education, gross domestic product per capita, literacy, and life expectancy and converting these into a single figure. The index has been used since 1990, and its prevalence has helped fuel the popularity of the "developed/developing" description of the world's countries. It has been criticized from the start, though, for not really offering much information; it is debatable whether an HDI rating correlates strongly with a high quality of life, and if not, exactly what it reflects.

Least Developed Countries and the Fourth World

The French Revolution etymological origins of Sauvy's *Third World* coinage were completely shorn off when the term *Fourth World* came into currency in the 1970s, though the original usage did stay consistent with his use of *Third World*. As originally coined, the Fourth World consists of stateless nations: those nations, peoples, and ethnic groups that have no autonomy but exist under the thumb of other nations. Native Americans were the notable example in the 1970s, a time when the success of the civil rights movement had led to activism for improved rights and living conditions for the Indian reservations in the United States, and other reforms in the government's dealings with native tribes. Indigenous and aboriginal peoples in other countries may also be included, as well as the Palestinians displaced by the creation of Israel, and the Roma.

In time, the Fourth World usage was extended by some to include the Least Developed Countries, a United Nations designation for those countries that suffer from significantly low income ($900 per capita), profound economic vulnerability in the form of instability or other problems, and weak human resources as indicated by poor average health, nutrition, and education. Only two countries classified as Least Developed have ever graduated from the list—Botswana in 1994 and Cape Verde in 2007—a testament to the difficulty of escaping pronounced poverty with insufficient resources. A decision on the graduation of Samoa has, as of 2009, been pending for several years.

The Least Developed Countries often have some special vulnerability that has been holding them back and prevents or slows what those in developed countries would consider the normal pace of development. Political corruption can have extensive consequences in this area, for instance, and easily becomes an institution that the "man on the street" is so accustomed to that he no longer objects to it to a degree proportionate with the real harm it causes. The type of government may be hostile to development, particularly in the case of dictatorships or rule by warlords, a condition that still persists in much of sub-Saharan Africa. Unresolved civil wars and prolonged ethnic fighting are similarly destabilizing. Often many of these conditions are simultaneously true, in addition to extreme poverty, special challenges because of the physical conditions of the country, and a poverty of natural resources.

Currently the 49 Least Developed Countries are: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, São Tomé and Príncipe, Senegal, Sierra Leone, the Solomon Islands, Somalia, the Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, and Zambia.

Landlocked Developing Countries and Small Island Developing States

The United Nations recognizes two special categories of less industrialized countries, classes of countries that face special challenges: the Landlocked Developing Countries (LLDCs) and Small Island Developing States (SIDS). Because of their lack of access to the sea, the high cost of transportation, and their resulting isolation from the world, LLDCs are more constrained in their options than other developing countries. They must move their goods through other countries just to reach a port—still a critical trading concern even in the age of the airplane and the automobile. Sixteen of the 30 LLDCs, just over half, are also on the Least Developed Countries list. In many cases, the route to the sea is perilous and unreliable, for reasons of terrain, banditry, or both. LLDCs spend twice as much of their export revenues on transport as other developing countries (on average), and three times as much as developed countries. It does not help that most LLDCs—as opposed to the landlocked countries of Europe—are surrounded by other developing countries, and thus the transportation infrastructure in use to reach the sea is resource-intensive and inefficient.

SIDS face the opposite problem. As islands, their access to resources is narrow, and their transportation costs extremely high, putting the benefits of economies of scale out of reach and making import goods prohibitively expensive while simultaneously making it difficult to offer competitive prices on export goods. Because of import costs, it is especially difficult for SIDS to export manufactured goods that require nondomestic components. The cost of energy and basic infrastructure is also high, and most islands are especially vulnerable to natural disasters. SIDS tend to experience more economic growth volatility than other countries, and are highly reliant on the public sector.

The UN's list of LLDCs is: Afghanistan, Armenia, Azerbaijan, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi, the Central African Republic, Chad, Ethiopia, Kazakhstan, Kyrgystan, the Lao People's Democratic Republic, Lesotho, Macedonia, Malawi, Mali, Moldova, Mongolia, Nepal, Niger, Paraguay, Rwanda, Swaziland, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Zambia, and Zimbabwe. Until the graduation of Botswana, Swaziland was the only African LLDC which was not also a Least Developed Country. The list of SIDS is American Samoa, Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Bahrain, Barbados, Belize, the British Virgin Islands, Cape Verde, the Commonwealth of Northern Marianas, Comoros, the Cook Islands, Cuba, Dominica, the Dominican Republic, Fiji, French Polynesia, Grenada, Guam, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, the Marshall Islands, Micronesia, Mauritius, Montserrat, Nauru, the Netherlands Antilles, New Caledonia, Niue, Palau, Papua New Guinea, Puerto Rico, Samoa, São Tomé and Príncipe, Singapore, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Seychelles, the Solomon Islands, Suriname, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu, the U.S. Virgin Islands, and Vanuatu.

Heavily Indebted Poor Countries

The International Monetary Fund and the World Bank have since 1996 maintained a Heavily Indebted Poor Countries program that makes low-interest loans available to countries with unsustainable levels of external debt. To be eligible for the program, a country must be in a situation of unsustainable external debt and have an established track record of poverty reform.

As of 2009, the program recognizes 41 countries as "potentially eligible" based on their debt situation. Of those, 23 are at the completion point: Benin, Bolivia, Burkina Faso, Cameroon, Ethiopia, Gambia, Ghana, Guyana, Honduras, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Tanzania, Uganda, and Zambia. Eleven are at the decision point: Afghanistan, Burundi, the Central African Republic, Chad, the Democratic Republic of Congo, the Republic of Congo, Guinea, Guinea-Bissau, Haiti, Liberia, and Togo. Seven are pre-decision point: Comoros, Eritrea, the Ivory Coast, the Kyrgyz Republic, Nepal, Somalia, and the Sudan. These "points" refer to the stages the program takes a country through. Pre-decision point countries are not yet ready to enter the program but have the potential to become eligible if they initiate a system of legal, economic, and financial reforms. Decision point countries receive debt relief funding while carrying out those reforms, which they must do satisfactorily while maintaining economic stability, in order to reach the completion point, at which point benefits extended to the countries become permanent.

The program has been criticized for adopting too arbitrary a definition of "unsustainable"—at inception, it was defined as debt which exceeded 200 percent the amount of the country's exports or 280 percent of the government's revenues (later changed to 150 percent and 250 percent respectively). Originally intended as a six-year program of two three-year phases, it quickly became clear that not enough time had been allotted to get these countries back on track. The international organizations' expectations may have been too heavily informed by the administrators' own experiences as citizens of wealthier, healthier nations. Impoverished countries, like impoverished people, do not easily spring back from debt, especially when the conditions that necessitated the debt persist.

Further, even low-interest loans can continue to contribute to the "poverty trap." As discussed at length by Columbia University economist Jeffrey Sachs, the poverty trap occurs when an entity reaches a certain level of poverty at which sustainable economic growth is impossible. Though potentially true of people, it is especially useful to describe the condition of significantly impoverished countries, in which sustainable economic growth is impossible both within that country—the poor remain poor, because no programs

The landlocked country of Mali in west Africa ranks among the world's 49 least developed countries. In 2008 the American company Hallmark placed one of Mali's largest handicraft export orders ever, employing this man and 220 other Malians.

exist to improve their station in a meaningful way or such programs are too corrupt or inefficient—and for the country as a whole. Such countries are unable to effectively provide health care, education, or basic social services, and typically have economies that are unfavorable to foreign investment.

Because the population increases so quickly, a country that is significantly impoverished will experience a decline of per-capita resources with each successive generation; debt relief and other foreign aid that is insufficient to counterbalance this has little long-term effect on a country's poverty and external indebtedness, and the lack of apparent improvement resulting from such aid can discourage organizations from extending further aid, since they can feel they are throwing money down a well. While charities rightly say that "every little bit helps," on a macroeconomic level, countries in need of aid that receive only a "little bit" will simply have their poverty prolonged rather than repaired. Citizens of wealthy nations tend to be intuitively unaware of this, in part because the poor of their own countries have access to significantly greater resources and there is more opportunity for economic mobility.

Sachs's solution to this is to make sure foreign aid is spent in specific, sustainability-focused, ways: on public health and nutrition, education, infrastructure (sanitation, water and power, roads), and "institutional capital" (to fight corruption in the government, judicial system, and law enforcement administrations). The HIPC program admits that it cannot guarantee sustainability and avoid the poverty trap, and puts the burden of doing so on the countries the program serves.

Failed States

A special type of developing country, the failed state is one which has ceased to develop or has significantly retarded development because of some critical failure of responsibility on the part of its government. Often this means an inability to participate as a member of the international community, either because of the distractions of internal strife or a simple unwillingness. Basic public services may not be provided by the government, or it may have become unable to make or enforce collective decisions. It may have lost control of its territory to paramilitary groups, civil war, bandits or warlords, or other forces.

At the end of 2008, the list of failed states maintained by the American think tank the Fund for Peace included 177 countries in some state of failure or at risk of failure. The twenty worst (in increasing order of severity of failure) were Sri Lanka, Nigeria, Lebanon, Ethiopia, Uganda, North Korea, Haiti, Myanmar, Bangladesh, Guinea, the Central African Republic, Pakistan, the Ivory Coast, Afghanistan, the Democratic Republic of Congo, Iraq, Chad, Zimbabwe, the Sudan, and Somalia. All of these except Sri Lanka and Lebanon had been in the 20 worst the previous year, and in most cases had been at the top of the list since its inception in 2005.

Millennium Development Goals

In 2001, the United Nations adopted eight goals of international development (with specific targets) which had been established at the Millennium Summit the previous year:

1. To eradicate extreme poverty and hunger, halving between 1990 and 2015 the number of people who earn less than a dollar a day or who suffer from hunger; and achieving full employment levels for all.
2. To achieve universal primary education by 2015.
3. To promote gender equality, and eliminate gender disparity at all levels of education by 2015.
4. To reduce child mortality, reducing mortality by two-thirds between 1990 and 2015 among children under 5 (such mortality in many parts of the world stemming from malnutrition and treatable illnesses).
5. To improve maternal health, by ensuring universal access to reproductive health care by 2015 and reducing by three quarters between 1990 and 2015 the number of women who die in childbirth or while pregnant.
6. To combat HIV, malaria, and other major diseases, by halting their spread by 2015.
7. To ensure environmental sustainability.
8. To develop a global partnership for development, a goal that should inform the design of the worldwide trade and financial system, and which should result in special assistance for the least developed countries.

192 United Nations member states and a score of international organizations made the pledge to pursue these goals.

See Also: Development Assistance; Economic Development; Emerging Economies; Emerging Markets; Fair Trade; Industrialized Countries; Millennium Development Goals; Newly Industrialized Countries; Regional Development Banks; Underdevelopment.

Bibliography. Peter Bauer, *Equality, the Third World and Economic Delusion* (Harvard University Press, 1981); Sarah Burd-Sharps, Kristen Lewis, and Eduardo Borges, *The Measure of America: American Human Development Report, 2008–2009* (Columbia University Press, 2008); Harinder S. Kohli, *Growth and Development in Emerging Market Economies: International Private Capital Flows, Financial Markets and Globalization* (Sage, 2008); Oliver S. Kratz, *Frontier Emerging Equity Markets Securities Price Behavior and Valuation* (Springer US, 1999); Michael Pettis, *The Volatility Machine* (Oxford University Press, 2001); Ken Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton University Press, 2001); Jeffrey D. Sachs, *The End of Poverty: Economic Possibilities For Our Time* (Penguin, 2005); United Nations Development Program, *Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided World* (United Nations Development Program, 2008); World Bank, *World Development Report 2009: Reshaping Economic Geography* (World Bank Publications, 2009).

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Letter of Credit

A letter of credit (LC) or documentary credit is a means of payment in a trade transaction that commits the issuer, usually a commercial bank, on behalf of its customer, a buyer, to pay a seller contingent on documentary evidence that the seller has met the terms and conditions of the letter of credit. A letter of credit is commonly used in international trade. A seller (exporter) who does not wish to risk nonpayment by a buyer (importer) may require the issuance of a letter of credit by the buyer's bank as a condition of the sale. In a letter-of-credit transaction, the issuing bank's credit risk is substituted for the credit risk of the buyer that is otherwise assumed by the seller whenever transactions are conducted on open account terms. The letter of credit serves as a method of payment when informational asymmetries exist about the buyer's capacity to pay.

Process

A commercial letter-of-credit transaction involves six steps: (1) after a sales contract has been negotiated that requires a letter of credit, the buyer or applicant applies to its bank to issue the letter of credit, committing the bank to pay the seller or beneficiary upon the receipt of specified documents, such as a bill of lading and a draft drawn by the seller demanding payment, before the expiration of the letter of credit; (2) the issuing bank then requests a correspondent bank in the seller's vicinity to advise the seller that a letter of credit has been issued in its behalf; (3) and (4) upon this advice from the advising bank, the seller arranges to ship the goods and then submits the required documents called for in the letter of credit to a local bank that serves as the negotiating bank, receiving and examining the documents for compliance with the terms and conditions of the letter of credit and then forwarding them to the issuing bank; (5) the issuing bank also examines the documents for compliance and then honors its commitment to pay once it is satisfied that the terms and conditions of the letter of credit have been met; and (6) the issuing bank arranges for repayment from its customer, the buyer, in return for the documents that allow the buyer to take possession of the merchandise. In practice, the negotiating bank may pay the seller immediately after confirming that the documents comply and either debit the issuing bank's account immediately or await its repayment.

The documents that a letter of credit requires the seller to deliver vary but commonly include a transport document, such as an ocean or marine bill of lading, issued by the shipping company to the seller. The billing of lading serves as a receipt for the goods and also conveys title to them. Another is a draft or bill of exchange that is drawn by the seller on the buyer or buyer's bank, demanding payment of the amount specified in the letter of credit. Other documents that may be required in a letter-of-credit transaction include a commercial invoice, certificate of origin, packing list, inspection certificate, and insurance documents.

Virtually all letters of credit are irrevocable; once issued, they cannot be changed or canceled without the agreement of the buyer and seller. Letter-of-credit payment terms vary according to the negotiated sales contract and are reflected in the draft drawn by the seller. A sight draft calls for immediate payment while a time draft defers payment into the future but rarely beyond 90 days. Additionally, the seller may wish to have added assurance of payment by requesting its local negotiating bank to commit to making the payment in the event the issuing bank does not by adding its confirmation to the letter of credit.

Governance

The use of letters of credit, which is estimated to account for 15 percent of the world's trade transactions, is governed by the Uniform Customs and Practice for Documentary Credits (UCP), established in 1933 by the International Chamber of Commerce to harmonize practices across member countries. The latest revision, UCP 600, effective in July 2007, was intended to simplify and clarify the practices governing the use of letters of credit, which continues to be critical to facilitate trade when informational asymmetries about the creditworthiness of customers persist.

See Also: Bill of Lading; Certificate of Origin; International Commercial Terms (Incoterms).

Bibliography. *A Basic Guide to Exporting* (U.S. Department of Commerce, 1998); M. Bellardine, "The New UCP 600: Rules to Better Facilitate International Trade," GTNews.com (2007) (cited March 2009); James E. Byrne, *LC Rules & Laws: Critical Texts* (Institute of International Banking Law & Practice, 2007); Citi, "Documentary Credits; No More Ambiguity," GTNews.com (2003) (cited March 2009); Jaephil Hahn, "Governing Laws on Letters of Credit Under Uniform Commercial Code," *Journal of Korea Trade* (v.11/3, 2007); A. McCombs, "Export Letters of Credit Still Yield Multitude of Benefits," GTNews.com (2008) (cited March 2009); P. Oppenheim, *International Banking*, 6th ed. (American Bankers Association, 1991); R. Pike et al., "Trade Credit Terms: Asymmetric Information and Price Discrimination Evidence From Three Continents," *Journal of Business Finance & Accounting* (2005); Susan Warner, *The Letter of Credit* (Gardners Books, 2007).

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LG

LG is a leading family-owned business conglomerate, called a *chaebol*, in South Korea. It was the first chaebol to adopt a holding company structure in 2001. The member companies carry out varied businesses including electronics, chemicals, and telecommunications. LG Electronics is the central company, placing special emphasis on overseas markets, and has established a global network of production and marketing.

LG is the fourth-largest chaebol, with 36 member companies and assets of 57.1 trillion Korean wons (some $57.1 billion) as of April 2008. Since its inception in 1947, LG has been controlled by the Koo and Huh families, and, from 1995, governed by Bon-Moo Koo, the third-generation owner and group chairman. The member companies numbered 50–63 in 1987–95, but they have gradually decreased since 2005, to less than 40. This was because, in the process of LG's transformation into a holding company in 2001–05, many member companies constituted two separate chaebols, called GS and LS, which were controlled by, respectively, the Huh family and part of the Koo family.

At the top of the new LG is LG Corporation, the holding company that was created to take over the shareholding function from LG Chemicals in 2001. In December 2007, LG Corporation had 14 "son" companies, including three main companies—LG Electronics, LG Chemicals, and LG Telecom—which, in turn, had 16 "grandson" companies. The holding company supervises its subsidiaries regarding performance, investments, long-term strategies, and other key managerial decisions, and has the ownership of the "LG" brand, which replaced "Lucky-Goldstar" in 1995. The company is fully controlled by Bon-Moo Koo, who is the dominant shareholder, a representative board member, and the chief executive officer.

Subsidiaries

The member companies of LG invested worldwide to establish a total of 176 subsidiaries for manufacture and sale in 49 countries by 2007. There are 89 subsidiaries in 15 Asian countries (including 49 in China; five each in India and Taiwan; four each in Indonesia, Japan, and Singapore), 48 in 20 European countries (12 in Netherlands; six in Poland; four each in Germany, Russia, and the United Kingdom), 34 in 10 American countries (18 in the United States; five in Mexico; four in Brazil), and five in four African countries. Sales generated in 2007 by 150 domestic and foreign affiliated companies of LG totaled some $76.3 billion, 52 percent of which was foreign sales.

The flagship company in LG is LG Electronics. Its sales for 2007 amounted to some $23.5 billion, which was more than double that by LG Chemicals and more than five times that by LG Telecom. LG Electronics earned 37 percent of the sales from mobile phones alone, among more than 25 products, and 24

LG's leading company, LG Electronics, had 2007 sales of $23.5 billion, of which 72 percent was in exports.

percent from three others—television (10 percent), air conditioners (8 percent), and refrigerators (6 percent). The majority (72 percent) of the total sales was by export, and 85 percent of mobile phones and 42–57 percent of the other three products were sold in foreign countries.

International Sales

LG Electronics has increasingly become interested in world markets and, by 2007, created 74 subsidiaries in 42 countries, which accounted for 42 percent of all the group's member companies. Among them are one holding company in the Netherlands, 34 subsidiaries for manufacture or research in 13 countries (13 in China; three each in Thailand, Vietnam, Mexico; two each in India, Indonesia, Brazil; six in France, Kazakhstan, Poland, Turkey, Egypt, Morocco), and 39 subsidiaries for sales or service in 34 countries (three in the United States; two each in China, the Netherlands, and Ukraine; 15 in Europe; seven in the Americas; six in Asia; and two in Africa). The company also has 28 offices or centers for sales, service, or research in 21 countries.

Sales generated in 2007 by LG Electronics and its 112 domestic and foreign affiliated companies amounted to some $53.4 billion, 81 percent of which was foreign sales. LG Electronics has put emphasis on new technology and, recently, design, and increasingly spent money on research and development (R&D): 4–4.2 percent of sales in 2002–03; 5–5.4 percent in 2004–05; 4.2 percent in 2006; and 6.6 percent (some $1.6 billion) in 2007. For R&D, the company operates 17 centers in Korea and 18 organizations in 10 countries (four each in China, United States; two each in Japan, Russia; six in India, Israel, France, Germany, UK, Brazil).

See Also: Chaebol; Hyundai Motor; Korea, South; Samsung Electronics; SK.

Bibliography. LG Corporation, LG Electronics, *The 2007 Annual Report*, March 31, 2008, dart.fss.or.kr (cited March 2009); LG Corporation, www.lg.net (cited March 2009); Yasho V. Verma, *Passion: The Untold Story of LG Electronics India* (Biztantra, 2007).

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LIBOR

LIBOR, or London Interbank Offered Rate, is the interest rate at which banks in London will lend large-denomination Eurocurrency deposits to other banks for specific maturities. LIBOR is the ask price in a bid/ask spread interest rate quotation. The bid price is LIBID, or London Interbank Bid Rate. LIBOR can refer to any interbank lending rate offered on short-term Eurocurrency deposits but generally the term refers to the reference rate established by the British Bankers' Association (BBA).

Since January 1986 the BBA has set a daily reference LIBOR or BBA LIBOR. Each London business day, interbank offered rates from eight to 16 reference banks, as determined by the BBA, are assembled for 10 major currencies. To calculate BBA LIBOR, the middle two quartiles of the compiled quotations lending rates for a specific currency and maturity are averaged. The averaged rates are then distributed each morning to market participants through such business news services as Reuters and Bloomberg.

For the various maturities LIBOR is quoted on the basis of a 360-day year except for quotations for British pounds, which use an actual 365-day year. Currently the BBA distributes 150 daily rates each day reflecting 15 maturities that range from overnight to one year in the 10 currencies. BBA LIBOR serves as a benchmark or base rate for the pricing of an estimated $350 trillion in loans, derivatives, and other financial products around the world, including interest rate swaps, floating rate notes, syndicated loans, and adjustable rate mortgages.

Origins and Development

As a rate on Eurocurrency or offshore deposits, LIBOR originated with the Eurodollar market in the post–World War II era. Avoidance of U.S. government regulation that then prohibited the payment of interest on short-term dollar deposits and placed ceilings on interest paid on longer-term deposits is credited with spurring the development of the Eurodollar market. Subsequent restrictions on capital outflow from the United States in the 1960s led to its further growth.

The oil shocks in the 1970s and the resulting increase in offshore dollars are also cited as important contributors to the emergence of the Eurodollar market. Because the interbank market for Eurodollars became centered in London, the world's leading financial center second only to New York, the term LIBOR arose for quotations in this market. Subsequently similar terms have arisen for interbank offered rates in other international financial centers, such as SIBOR in Singapore and BIBOR in Bahrain.

One explanation for the growth of the Eurocurrency market is greater efficiency in that market because of less regulation and lower deposit intermediation costs as well as significant economies of scale in operations. As a result, LIBOR is a competitive funding rate or cost of funds for banks. Arbitrage, profit-seeking through the simultaneous buying and selling of (near) equivalent financial instruments to exploit price discrepancies across markets, ensures that LIBOR on U.S. dollars tracks such close equivalents as the overnight U.S. federal funds rate and U.S. certificates of deposit. However, these rates are not complete equivalents. Lower LIBOR costs due to greater operational efficiency in the Eurocurrency markets may be offset by the risks inherent in an unregulated banking market without a lender of last resort or deposit insurance.

The Treasury-Eurodollar Spread

U.S. dollar LIBOR has also been found to have a long-term equilibrium relationship with rates on U.S. Treasury bills (T-bills) for equivalent maturities with LIBOR exceeding T-bill rates by a relatively stable spread due to the existence of greater risk on LIBOR borrowings. This difference between LIBOR and T-bill rates, specifically 90-day rates, is a financial market indicator known as the TED (Treasury-Eurodollar) spread that is used to measure financial market liquidity and credit risk. Historically the TED spread tends to average below 0.5 percent or 50 basis points, with greater spreads seen as indicators of a lessening of confidence in banks and the financial system.

In 2007–08 during the subprime financial crisis, the accuracy of BBA LIBOR as a benchmark rate was called into question. There were reports that reference banks had been understating their LIBOR rates in order to appear more liquid than they were in reality. The BBA agreed to investigate and subsequently announced measures to better ensure the reliability of BBA LIBOR.

See Also: Arbitrage; Basis Points; Bid/Ask Spread; Bloomberg; Interest Rates; Interest Rate Swaps; Risk.

Bibliography. British Bankers' Association, "BBA Announces Steps to Strengthen LIBOR" (2008); British Bankers' Association, "City Speak: Taking the Mystery Out of Money" (2008); J. M. Clinebell et al., "Integration of LIBOR and Treasury Bill Yields Over Different Monetary Regimes," *Global Finance Journal* (2000): M. Goodfriend, "Eurodollars," in *Instruments of the Money Market,* T. Cook and R. Laroche, eds. (Federal Reserve Bank of Richmond, 1993); Mark Joshi and Alan Stacey, "New and Robust Drift Approximations for the LIBOR Market Model," *Quantitative Finance* (v.8/4, 2008); Fabio Mercurio, *LIBOR Market Models and Smile: Latest Extensions and Their Applications* (John Wiley, 2007); C. Mollenkamp, "LIBOR Fog: Bankers Cast Doubt on Key Rate Amid Crisis," *Wall Street Journal* (2008); P. Oppenheim, *International Banking,* 6th ed. (American Bankers Association, 1991); B. Solnik and D. McLeavey, *International Investments* (Pearson Addison-Wesley, 2003).

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Libya

After two decades of isolation, Libya has reemerged as an extremely fertile investment opportunity for several reasons. First, Libya has historically been Europe's gateway to Africa and an ideal steppingstone to enter emerging markets on the African continent. Second, after years of isolation, Libya is making investments in its infrastructure an attractive scheme for foreign investors. Third, Libya has great potential to become a leading tourist destination, with the longest coast on the Mediterranean (1,700 km), a great historical heritage, and a very attractive climate. Finally, Libya holds the largest oil reserves in Africa and the ninth-largest oil reserves in the world. This is essential in the context of geopolitical and economic discussions occurring around the world since the demand for oil is high.

Libya is officially known as the Great Socialist People's Libyan Arab Jamahiriya and is situated in north Africa. It lies south of the Mediterranean Sea, between Egypt to the east, Sudan to the southeast, Chad and Niger to the south, and Algeria and Tunisia to the west. The capital city of Libya is Tripoli on the coast of the Mediterranean Sea. Other major cities are Banghazi, Surt, Zawarah, Ghadamis, Sabha, Tobruk, and Al Jawf.

Libya is the fourth-largest country in Africa with almost 700,000 sq. mi. (1.8 million sq. km). Ninety percent of Libyan territory is desert with a dry and hot climate. Climate along the Mediterranean coast is warm during the summers and rainy during the winters.

Libya is one of the least densely populated countries of the world, where 90 percent of the population lives in less than 10 percent of the area. Most inhabited areas are along the coast and urban centers, with more than 50 percent of the population residing in Tripoli and Benghazi. Approximately 6 million people—indigenous Berbers and Arabs—live in Libya. The population in Libya is young with a median age of 23 years and more than 50 percent of population younger than 15. Population growth rate is 2.2 percent.

Independence

Until fairly recently the peoples of Libya have been subjected to the control of foreign powers. Phoenicians, Greeks, Romans, and Ottomans left their imprint on the history and landscape of Libya. During the first half of the 20th century (1911–43) Libya was controlled by Italy. After Italy was defeated in World War II, Libya was put under the protectorate of the United Nations. Libya declared independence on December 24, 1951.

In 1969 a small group of military officers led by Muammar Al-Qaddafi overthrew King Idris, abolished the monarchy, and proclaimed the new Libyan Arab Republic. Al-Qaddafi emerged as the chief of state, a political role he still occupies today. Libya's confrontational foreign policies and support of terrorism in the 1980s led to increased tensions and consequent sanctions by the West. In 1999 Libya surrendered two suspects in the 1988 Pan Am 103 bombing and in 2003 publicly announced its wish to stop producing and storing weapons of mass destruction. These two events contributed to lifting the sanctions against Libya, with the West once again seeing it as a potential political partner and a recipient of future foreign investments.

Economy and Liberalization

The discovery of large oil reserves in 1959 enabled Libya to transition from one of the world's poorest countries to one of the wealthiest in Africa (per capita gross domestic product [GDP] is $13,100 [PPP]). Today the Libyan economy depends almost exclusively on revenue from the oil sector. Oil sector revenues contribute around 95 percent of export earnings, 60 percent of public sector wages, and 25 percent of GDP.

Libya is on a path to liberalize its command economy and transition to a market economy by applying for World Trade Organization (WTO) membership, reducing subsidies, and starting a privatization process. However, the liberalization process is not without obstacles. Despite efforts to encourage private sector participation, extensive controls of prices, credit, and trade constrain growth in Libya. Access to food and water are additional problems. Currently Libya imports 75 percent of all food and only around 30 percent of the population have access to safe drinking water. Despite these obstacles, Libya's potential is immense. It is home to a welcoming and well-educated population, valuable natural resources, and natural beauty that could assure growth in years to come.

See Also: Africa; Algeria; Company Profiles: Middle East; Egypt; Embargoes; Eni; Italy; Middle East; Terrorism; Trade Sanctions; Tunisia.

Bibliography. CIA, "Libya," *World Factbook*, www.cia.gov (cited March 2009); International Monetary Fund, *Socialist People's Libyan Arab Jamahiriya: 2008 Article IV Consultation: Staff Report, Public Information Notice on the Executive Board Discussion, and Statement by the Executive Director for the Socialist People's Libyan Arab Jamahiriya*. IMF Country Report (n.8/302, 2008); M. Lorenzetti and J. M. Stell, "Libya Says It Is 'Open for Business' to US Firms," *Oil and Gas Journal* (v.102/19, 2004); U.S. Department of State, "Background Note: Libya," www.state.gov (cited March 2009); Dirk J. Vandewalle, *Libya Since 1969: Qadhafi's Revolution Revisited* (Palgrave Macmillan, 2008); Jonathan Wallace and Bill Wilkinson, *Doing Business With Libya* (Kogan Page, 2004).

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Licensing

Licensing is generally considered a contractual arrangement or transaction in which one organization, called the licensor, permits the use of its intellectual property by another organization, called the licensee, in return for a fee or royalty payment. To grant a license is to permit the use of intellectual property. The term *license* also refers to the legal document detailing the grant and usage of the license. The British term for license is spelled differently: *licence*.

The exchange process in licensing involves the sharing of intellectual property. The World Intellectual Property Organization defines intellectual property as the creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Intellectual property has two categories: industrial property and copyright. Industrial property includes inventions that are patented, trademarks, industrial designs, etc. Copyright relates to literary and artistic works such as novels, films, music, or architectural designs. Generally, intellectual property includes copyrights, patents, and trademarks but could also refer to specialized creations of the mind such as circuit layout or plant breeding.

Copyrights, patents, and trademarks are actually three different types of creations, each having its own legal framework. Intellectual property is a generalized term commonly used to denote all of these by lumping them together, but care should be taken to differentiate among them as they have separate legal frameworks, connotations, and implications.

Intellectual property draws its legal implications from physical property. Just like physical property can be owned legally and the owner can derive benefit by using that property, intellectual property can also be owned and the owner can derive benefit from his or her effort. When an individual, group, or agency invests in the creation of something new that could have commercial implications, they have a right to exploit the advantages of their efforts. Licensing provides the legal framework for letting the creator of intellectual property possess the exclusive legal right to derive benefit from his efforts and for the user of that intellectual property to pay for its usage. Thus licensing becomes the legal instrument to enable the creator and user of intellectual property to enter into a mutually beneficial arrangement. When anyone uses somebody else's intellectual property without having a license to use it, then it is illegal because that infringes upon the rights of the creator. However, critics of the concept of intellectual property argue against granting exclusive rights to creators, suggesting that it results in intellectual monopoly and intellectual protectionism leading to harming of public interest at the expense of individual rights. Further, the critics cast doubt on the claim that protection of intellectual rights really benefits the creators.

Licensing becomes especially important in the case of high-technology industries such as information technology, telecommunications, pharmaceuticals, or power generation. There are several reasons for this importance: high technology accounts for a substantial share of economic activity, many low-technology industries such as agriculture turn into high-technology businesses as technology advances, and high-technology products are entering into a wide range of businesses. Ownership of technical standards in high-technology industries becomes a source of competitive advantage for companies in those industries. Battles to set and control technical standards in high-technology industries are known as format wars.

Companies hope to gain competitive advantage against their rivals by having the ability to develop high-technology products and processes. This can happen only if they have exclusive rights over the high-technology products and processes they create. Licensing provides the legal means of ownership of the intellectual property that goes into creating those high-technology products and processes. By possessing the legal rights of ownership over standards and formats, companies can license them to other companies. The company that helped to pioneer those standards and formats stands to gain economically through the license fees that flow back to it. An example of the use of licensing in high-technology industries is that of Dolby, which used its ownership of the technological standards in noise-reduction technology for the music and film industries. It charged a small licensing fee for letting recording companies use its technology and foregoing such fees on media recorded using Dolby technology. This helped the company keep out rivals who could have developed their own, possibly superior, technology.

Licensing is of special importance to organizations that operate internationally. International licensing is a contractual arrangement in which a foreign organization, the licensee in this case, purchases the rights to utilize another organization's (the licensor in this case) intellectual property for a negotiated fee or royalty payment. If the intellectual property in this case is the product design, then the licensee can buy the rights to produce that product in its own country. The royalty payment can be negotiated on the basis of the number of products sold in that country.

Organizations contemplating implementation of international strategies think of an option to enter a foreign market. These options are the several modes of entry such as exporting, franchising, joint ventures, strategic alliances, and wholly-owned subsidiaries. Licensing is also considered among the significant modes of international entry and is an important element of the strategies of many international companies.

When used as a mode of entry into foreign markets, licensing involves little cost. This is so because an organization that has already invested in the creation of intellectual property only has to look for more opportunities outside one's own country to utilize it. If it can license that intellectual property to some other organization and earn revenue, then it is additional income at practically no extra investment. By licensing, an organization extends the usage of its intellectual property without any significant risks.

There are four basic issues in international licensing: (1) specifying the agreement boundaries; (2) determining compensation; (3) establishing rights, privileges, and constraints; and (4) specifying the duration of agreement. When entering into the licensing agreement, the detailed contract should specify these four issues unambiguously. The parties to the contractual agreement should both be clear on the limitations imposed upon them, detailing what they can and cannot do. For instance, if the agreement limits the rights of either the licensee or licensor or both, then they should remain within such limits. The compensation to the licensee under licensing agreements is generally in the form of royalty payments. The royalty is paid in the form of a flat fee, a fixed amount per unit sold, or as a percentage of the sales of the licensed product or service. The licensor and the licensee must be clear about their rights and responsibilities toward the contractual arrangement. This prevents disputes over the terms and conditions of licensing arising later. The time period for which the licensing arrangement is entered into must be specified clearly. This period can be anywhere between a short-term arrangement, say, of one year to a long-term arrangement of even 100 years. The period depends on the time that the licensee thinks is appropriate to amortize its investments and the licensor perceives to be enough for it to learn the technology involved or the perceived benefits to accrue.

Risks and Benefits

There are several benefits of licensing to both the parties involved. The licensee benefits in terms of added revenue streams with relatively little additional investment. They get the opportunity to make and sell products based on their intellectual property in markets that they themselves are unwilling or unable to enter. The licensor does not have to bear the development costs and risks associated with creation of intellectual property and gets to use a tried and tested technology or product. For organizations that lack the technological ability, licensing offers a convenient, less risky way to utilize the intellectual property created by other more capable organizations.

At the same time, there are some drawbacks to licensing. Both parties forego opportunities that they could have used if they were not part of a mutually binding agreement. For instance, if the licensing agreement prevents one company from entering a foreign market so long as it is in an arrangement with some local company, it cannot do so. Similarly, the local company is constrained to use the technology provided and cannot use some other technology or sell some other products of another company at the same time if the agreement prohibits them to do so. Another problem with licensing is that it is based on a written contract. However carefully it may have been drafted, there is always scope for disagreement, especially if there is lack of mutual trust between the licensor and licensee. Often, disagreements may result in costly litigation. To an organization that offers technology through licensing, there is the risk of losing that technology to unscrupulous parties who may not honor the agreement and pass on that technology to others. An opportunistic licensor may also learn the technology and access the confidential information associated with it, and then could terminate the contract to deprive the licensee of further royalty payments. From the strategic viewpoint, a licensee who grants a license to the licensor may not have full control over how the intellectual property is ultimately used. For instance, if the licensee uses inferior quality materials to make products based on the licensor's technology to augment its profits, then the impact may be felt on the licensor's reputation and image.

Despite the drawbacks, licensing offers a good way for entry into foreign markets provided steps are taken to reduce the risks of some of the drawbacks. For example, the parties involved in the licensing agreement could enter into a two-way rather than a one-way arrangement. Transfer of technology from the licensor to the licensee can be reciprocated by reverse transfer of technology that is the intellectual property of the licensee, making it a cross-licensing arrangement. This binds both the parties to respect each others' rights and reduces the risks of facing the drawbacks described above.

Related Terms and Other Uses

There are some terms related to licensing that also need to be understood. Franchising, like licensing, is another mode of entry into foreign markets. Franchising has many similarities to licensing and is often considered a special form of licensing. Franchising involves not only sharing intellectual property but also brand name, business model, and operating system along with support services such as advertising, training, and quality control. The party that grants the franchise is called the franchisor while the party that accepts or solicits it is the franchisee. Franchising is also generally a longer-term commitment compared to licensing. The application of licensing is usually in the transfer of technology for manufacturing industries, while franchising is generally used for a package of facilities and information for service industries. International franchising, quite similar to international licensing, is a popular form of international business activity. There are similar arrangement like legal contracts and royalty payments.

Licensing is used in several different contexts apart from its application to organizations and international business. A very familiar document is the driving license that is legal permission to drive a vehicle. Character and entertainment licensing constitutes the biggest segment of licensing, generating billions of dollars in revenue every year. Popular characters like Mickey Mouse are licensed to users by movie studios and broadcasting services such as Walt Disney. Designer names such as those of apparel manufacturers are licensed in the form of fashion licensing. Professional sports licensing is another fast-growing area where sports events such as the Olympic Games, professional organizations such as the National Basketball Association, and teams market their brand names for usage by businesses. Art licensing is a niche area where licensed artwork and artist-brand properties are licensed, bringing much-needed revenue to museums and artists.

See Also: Branding; Contracts; Copyright Infringement; Cross-Licensing; Entry Mode; Franchising; Intellectual Property Theft; Internationalization; Patents; Plagiarism; Reverse Engineering; Technology Transfer; Trademark Infringement.

Bibliography. Richard Christou, *International Agency, Distribution and Licensing Agreements* (Sweet & Maxwell, 2008); John D. Daniels, Lee H. Radebaugh, and Daniel P. Sullivan, *International Business: Environments and Operations* (Prentice Hall, 2009); Lee Davis, "Licensing Strategies of the New 'Intellectual Property Vendors,'" *California Management Review* (v.50/2, 2008); Marcel Halpern, Susan Progoff, and Ian Feinberg, *Understanding the Intellectual Property License, 2007,* Intellectual Property Course Handbook Series, no. G-915 (Practising Law Institute, 2007); Adam Jolly and Jeremy Philpott, *The Handbook of European Intellectual Property Management: Developing, Managing and Protecting Your Company's Intellectual Property* (Kogan Page, 2007); John A. Pearce II and Richard B. Robinson, *Strategic Management* (McGraw-Hill Irwin, 2009).

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Lifestyle Research

Lifestyle research stands at the boundary between a number of traditional academic disciplines, developing expertise from sociology and the social sciences in areas as distinct as business, retailing, marketing,

A new area of lifestyle research uses information about internet use patterns and consumption.

understanding of consumers, and health and social care. The very diversity of fields and disciplines with an interest in lifestyle research creates complexity in an already dynamic and fast-changing area of research. Multifaceted approaches are used, alongside a variety of academic and business conventions, but typically, lifestyle research focuses on subgroups within the general population defined by age, occupation, religion, sexuality, medical conditions, or behaviors.

In terms of business research, this market segmentation of the consumer market is a key use for lifestyle research. As the importance of the consumer in determining the success of business operations has become increasingly clear to businesses, so the importance of lifestyle-based market segmentation has increased and the importance of ongoing cultural change has been recognized. Ongoing social and cultural change, both in purchasing dynamics, in related group behavior, and in lifestyle decision making are illuminated by lifestyle research but also act as a key source of information for strategic planning within business and for the ongoing development of successful corporate strategy. The links between lifestyle research and the development of successful marketing strategies are currently being discussed within the academic literature, both from a management perspective and from a social science perspective. The development of an increasing understanding of the diverse research that contributes to this area of study is key to the ongoing development of successful and strategic business development.

Typically, research in this area is grounded first in the concept of lifestyle and relates this to various aspects of an individual or group lifestyle. Key themes that may influence lifestyle include activities/behavior, values and attitudes, individuals versus groups, group interaction, coherence, recognizability, and choice. Within this definition, lifestyle research may focus either upon the implications of belonging to a certain group or upon the implications of certain lifestyles, including areas such as the role of lifestyle in the management of clinical conditions or the impact of a voluntarily adopted lifestyle on other areas of an individual's life. In business terms, lifestyle research is used both to classify consumers in terms of patterns of behavior, purchasing, etc., and as a way of looking at lifestyle as a key factor in the generation of new products, services, etc.

One important distinction lies between research that attempts to identify causal relationships between a lifestyle and the development of certain patterns of health and behavior and an alternative pattern of lifestyle research that evaluates the impact of lifestyle changes. Both have considerable implications for business, being directly linked to the development and promotion of goods and services. The lifestyles assessed may be proscriptive—and much of the research in this area lies in health—or broader changes that reflect the development of society, the economy, and the workplace. Business research generally focuses upon this latter scenario, where the intertwining of cause, effect, and incremental change provides fruitful ground for research.

One useful example of this intertwining is the relationship between the availability of processed ready-meals and the lack of availability of time for cooking. Does a lack of time trigger the demand for ready-meals? Or does the availability of ready-meals facilitate broader changes in lifestyle that tend to mitigate against the "ring fencing" of time to devote to cooking? The answer to such questions is unlikely to be simple—and in this example the ongoing development of skills within the consumer group would play a contributing role—but this example illustrates the complexity of cause, effect, and contributing factors within lifestyle research.

Lifestyle retailing is an additional important area of study, where the promotion of a "lifestyle package" linked to a brand, a group of products, or a service forms part of the marketing strategy for many companies. The creation of aspirational brands within a consumer economy—be they products or services—is a key driver for many businesses. Typically, however, this builds upon initial market-segmentation work, and successful lifestyle retailing strategies tend to indicate a very well-researched and clearly identified market-segmentation strategy.

Building upon this, so-called subcultures of consumption have been a focus for some additional study focusing around ideas and theoretical frameworks from general consumption literature and applying these in a variety of servicescapes. A more recent approach to segmentation, for example, has included Web-based-related lifestyle research, where access, enthusiasm, and propensity to use internet resources formed a key defining a part of an individual or group lifestyle and hence the basis for recent research.

See Also: Consumer Behavior; Consumer Needs and Wants; Consumer Surveys; Focus Groups; Marketing; Market Research.

Bibliography. M. Brengman et al., "Segmenting Internet Shoppers Based on the Web-Usage-Related Lifestyle," *Journal of Business Research* (v.58/1, 2005); D. Cahill, *Lifestyle Market Segmentation* (Haworth Series in Segmented, Targeted, and Customized Market, 1991); C. Haslop, H. Hill, and R. A. Schmidt, "The Gay Lifestyle: Spaces for a Sub-culture of Consumption Marketing Intelligence and Planning," *Marketing Intelligence & Planning* (v.16/5, 1998); R. D. Michamn, *Lifestyle Market Segmentation* (Praeger, 1991); Joel M. Podolny, *Status Signals: A Sociological Study of Market Competition* (Princeton University Press, 2008); A. J. Veal, "The Concept of Lifestyle: A Review," *Leisure Studies* (v.12/4, 1993).

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Linder Hypothesis

The Linder hypothesis states that countries with similar per capita incomes tend to trade more intensively with each other. The claim originated in 1961 with Swedish economist Staffan Linder, who observed that countries with similar incomes also tend to have similar preferences. Domestic manufacturers that primarily produce for the domestic market will seek out export markets in countries whose citizens have similar incomes and preferences. Thus, high-income countries will specialize in different versions of high-quality goods for trade among themselves. As a result, trade in similarly capital-intensive goods flourishes among countries with similar capital-labor ratios (e.g., automobile trade between the United States, Europe, and Japan). Though considerable anecdotal evidence of the Linder hypothesis exists, systematic research on the subject has yielded mixed results.

The Linder hypothesis is one attempt to reconcile the Heckscher-Ohlin model of international trade theory with empirical evidence on trade flows. In the Heckscher-Ohlin model, comparative advantage is a result of differences in factor endowments. Countries with more capital per worker should, according to the theory, export goods that use capital more intensively than they use labor and import goods that use labor more intensively. If trade flows follow the predictions of the Heckscher-Ohlin model, one would expect to find that the developed (capital-rich) countries such as the United States export capital-intensive goods and import labor-intensive goods.

However, empirical studies have not always confirmed the Heckscher-Ohlin predictions. Using input-output data for the United States for 1947, economist Wassily Leontief showed that the capital/labor ratio in imports was higher than the capital/labor ratio in exports. This is the opposite of what the Heckscher-Ohlin model predicts and became known as the Leontief paradox. The Linder hypothesis, which can be an equilibrium in theoretical models if capital intensity is related to income elasticity of demand, can partially explain this paradox by producing the requisite amount of trade in capital-intensive goods between similarly developed countries. This could explain the higher capital/labor ratio present in imports for some developed countries. While the Linder hypothesis and the Leontief paradox are related in this way, the

Linder hypothesis is not a complete resolution of the paradox, nor is it a necessary component of any proposed solution to the paradox.

Indeed, as Edward Leamer points out, the Leontief paradox can be resolved in an extension of the Heckscher-Ohlin model to more than two goods (the Heckscher-Ohlin-Vanek model). In the same way, if confirmation of the Linder hypothesis is to be found, it will be in the context of a multigood model of trade. This is fundamentally a consequence of the fact that the Linder hypothesis is directly linked to intraindustry trade—that is, trade in similar goods or goods with subtle differences in variety or quality. A model explaining this feature of trade must have more than two goods.

The empirical validity of the Linder hypothesis itself has been at issue since its first exposition. Studies that use highly aggregated categories of goods have not always found statistical evidence of the hypothesis. Disaggregated studies have had more success as the hypothesis may hold better for individual subsets of goods whereas the effect is harder to detect on average, a situation known as aggregation bias.

In general, explaining the high level of intraindustry trade is a challenge for basic models such as the Heckscher-Ohlin model. Confirmation of the Linder hypothesis and explanation of intraindustry trade both require a further level of detail capable of allowing a connection between trade patterns and domestic consumer preferences.

See Also: Heckscher-Ohlin Model; Leontief Paradox.

Bibliography. Robert E. Baldwin, "Determinants of the Commodity Structure of U.S. Trade," *American Economic Review* (v.61/1, 1971); Changkyu Choi, "Linder Hypothesis Revisited," *Applied Economics Letters* (v.9/9, 2002); Catherine Y. Co, "Factors That Account for the Large Variations in US Export Prices," *Review of World Economics* (v.143/3, 2007); Muhammed Dalgin, Vitor Trindade, and Devashish Mitra, "Inequality, Nonhomothetic Preferences, and Trade: A Gravity Approach," *Southern Economic Journal* (v.74/3, 2008); Juan Carlos Hallak, "A Product-Quality View of the Linder Hypothesis," NBER Working Paper W12712 (December 2006); Linda C. Hunter and James R. Markusen, "Per-Capita Income As a Determinant of Trade," in *Empirical Methods for International Trade*, Robert C. Feenstra, ed. (MIT Press, 1988); Edward E. Leamer, "The Leontief Paradox, Reconsidered," *Journal of Political Economy* (v.88/3, 1980); Staffan Linder, *An Essay on Trade and Trans-formation* (Almqvist and Wiksells, 1961); James R. Markusen, "Explaining the Volume of Trade: An Eclectic Approach," *American Economic Review* (v.76/5, 1986); Jerry G. Thursby and Marie C. Thursby, "Bilateral Trade Flows, the Linder Hypothesis, and Exchange Risk," *The Review of Economics and Statistics* (v.69/3, 1987).

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Liquidity (or Market Liquidity)

Liquidity (or market liquidity) is the ease with which financial market participants can quickly execute large trades without significantly impacting prices. An investor buys a financial instrument in a liquid market with confidence that there will be a ready prospect for its sale in the future. In the absence of market liquidity, an investor faces liquidity risk or the financial risk that an asset cannot easily be sold. A financial instrument that trades in a highly liquid market carries less liquidity risk, which both encourages greater investment and reduces the funding costs of the issuer.

Another benefit of market liquidity is rapid price discovery. New information is an important driver of market trading. Dispersed beliefs of traders on an asset's equilibrium price as a result of any new information may converge toward a consensus more quickly in a more liquid market. Alternatively, on liquid stock exchanges characterized by the participation of many uninformed liquidity or noise traders, informed speculators may be able to trade more profitably on private information, which, in turn, increases both the returns to monitoring management and the informational content on management performance in a stock's price.

The benefits of market liquidity may also be seen as a public good that may justify a role for government in its maintenance. The significance of sound financial markets for stable economic growth and the reliance on them to guide and transmit monetary policy have also led to increased concern for the maintenance of market liquidity. Illiquidity in financial markets may have serious consequences for overall economic activity. With responsibility for the safety and soundness of financial systems and in their role as lender of last resort, central banks are critical to the provision of liquidity to illiquid markets.

There is no one universally accepted measure of market liquidity. The degree of liquidity found in any market is most commonly assessed in terms of tightness, depth, and resiliency. Tightness refers to the relative divergence of trade prices from mean prices reflected in bid-ask spreads or the market's capacity to align supply and demand at minimal cost. Depth reflects the number of trades or the size of trades that can be completed without impacting current prices. Alternatively, depth may be reflected in the turnover or trading volume in a market, which is a commonly used measure of liquidity. It is generally assumed that tightness and depth are positively correlated with narrower spreads found in more actively traded markets. A third common measure of market liquidity is resiliency or the speed at which prices and order volume return to their equilibrium values subsequent to a large trade.

The determinants of market liquidity in any one market can result from the interaction of various factors including financial instrument design, market microstructure, and the behavior of market participants. The design of financial instruments determines their substitutability, which, if high, may result in higher concentration and measured liquidity in one among the alternatives. Such preferences would then induce investors preferring greater liquidity to also invest in that one financial product. Alternatively, substitutability may lead to greater liquidity for all as one substitutable product may more easily serve as a hedge for another.

Market microstructure can also significantly influence market liquidity. One distinction is between trade execution systems: auction-agency or order-driven markets, such as most organized stock exchanges, and quote-driven or dealer markets, such as the foreign exchange market. Price discovery is believed to be enhanced by the former while the latter allows faster execution of trades but reserves for the dealer a monopoly on information about order flow. Such systems vary around the world and are not necessarily determined by the particular financial instrument traded. They are often the result of historical or institutional legacy. In general, market liquidity is enhanced by the existence of competitive trading structures for market makers and participants. For example, the ability to trade a stock on both an organized exchange and over-the-counter (OTC) or on more than one exchange increases the market liquidity for the stock. Competition between exchanges and markets can increase liquidity by increasing trading efficiency. Other microstructure elements can also affect market liquidity. For example, lower transaction costs and the standardization of trading and settlement practices appear to increase market liquidity. Finally, market participant behavior and composition are other factors affecting market liquidity. An increase in investors' risk aversion reduces it as does the loss of confidence in their forecasts of future prices. Greater heterogeneity of financial market participants, including cross-border participants, increases liquidity through the enhanced prospect of matching buyers and sellers in the market.

Although greater market liquidity is generally considered a public and private good, there is also the possibility of excess liquidity. Financial crises often follow the collapse of asset price bubbles that are generally believed to be created by excess liquidity resulting from the expansion of credit in one or more markets. Following the collapse of a bubble, credit tightens as the value of bank assets falls and liquidity may evaporate in markets throughout the financial system. Ultimately, the liquidity of financial instruments in a market depends upon the confidence of market participants in their ability to assess their value and trade them at will. Excessive confidence can lead to excess liquidity and asset bubbles. The loss of investor confidence can lead to illiquidity and the collapse of markets. In such cases financial markets look to central banks to restore liquidity.

See Also: Bid/Ask Spread; Central Banks; Foreign Exchange Market; Hedging; Mortgage Credit Crisis of 2008; Risk; Stock Exchanges.

Bibliography. F. Allen and D. Gale, "An Introduction to Financial Crises," *Wharton Financial Institutions Center*, Working Paper No. 07-20 (2007); Bank for International Settlements, *Market Liquidity: Research Findings and Selected Policy Implications* (1999); M. Fleming, "Measuring Treasury Market Liquidity," *Federal Reserve Bank of*

New York Economic Policy Review (2003); Kristian Hartelius, Kenichiro Kashiwase, and Laura E. Kodres, *Emerging Market Spread Compression: Is It Real or Is It Liquidity?* (International Monetary Fund, Monetary and Capital Markets Department, 2008); B. Holmström and J. Tirole, "Market Liquidity and Performance Monitoring," *Journal of Political Economy* (1993); Jennifer Huang and Jiang Wang, *Market Liquidity, Asset Prices and Welfare* (National Bureau of Economic Research, 2008); A. Kyle, "Continuous Auctions and Insider Trading," *Econometrica* (1985); A. Marès, "Market Liquidity and the Role of Public Policy," BIS Papers No. 12 (2002); Josephine Berry Slater, *Living in a Bubble: Credit, Debt & Crisis* (Mute Pub, 2007).

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Lithuania

The southernmost of the Baltic States, in medieval times Lithuania was a powerful kingdom in eastern Europe, and as part of the Polish-Lithuanian Federation, was one of the largest and most powerful entities during the 16th century. It became a part of the Russian Empire in the 18th century (mainly with the Third Partition of Poland in 1795), and gained its independence in 1918. However, it was invaded by the Soviet Union in 1940, by Nazi Germany in 1941, and then reoccupied by the Red Army in 1944. It remained a part of the Soviet Union until independence in 1991.

Traditionally the Lithuanian economy was heavily dependent on agriculture, although the traders from the Hanseatic ports also were interested in minerals such as iron ore and coal sourced from near Memel (Klaipeda). Napoleon gained many of his supplies from the region before his invasion of Russia in 1812, and from independence until World War II, the republic's main products were rye, wheat, barley, oats, and potatoes. Its exports included bacon, dairy products, cellulose, timber, flax, and also livestock, with the major imports being herring, coal, cement, metals, textiles, and machinery. Although most of the trade was with Poland, Germany, Latvia, and Scandinavia, there was also trade farther afield.

In 1939 when war broke out, Benjamin Kagan, a Lithuanian textile manufacturer, was in England on a Lithuanian-government buying mission. His son, Joseph Kagan (1915–95), was later to move to Britain himself, where he set up a textile business and developed Gannex, which was used in the Gannex coats that were much favored by statesmen and politicians around the world. This was one of many economic successes of Lithuanians overseas, with Joseph Kagan being named a Lord prior to his disgrace.

During the Soviet and then the German occupation of the country, Lithuania was devastated. From 1944, the entire economic life of the country was placed under state control, and Lithuania became a part of the Soviet Union with all major decisions being made from Moscow, and the vast majority of people in the country working for state-owned enterprises or on collective farms. During this period the infrastructure of Lithuania, much of which had been destroyed in World War II, was rebuilt, and the economy was integrated with the rest of the Soviet Union. As a result, after independence in 1991, Lithuania struggled economically. It introduced rapid privatization of the economy and of land ownership, but did suffer from rampant inflation of 225 percent in 1991, rising to 1,100 percent in the following year, 409 percent in 1993, and then dropping to 45 percent in 1994. In February 2002, the local currency, the litas, was pegged to the U.S. dollar, and inflation now stands at 3.6 percent.

Lithuania now shares borders with Latvia, Belarus, Poland, and the Russian Federation; it maintains a large number of export industries, and also imports much from overseas. Machinery and equipment make up 22 percent of the country's exports, and 18 percent of Lithuania's imports. Other exports include mineral products, chemicals, textiles, clothing, and foodstuffs, with imports also including mineral products, chemicals, textiles, clothing, and foodstuffs, as well as transportation equipment. There is now a sizable tourist sector with many people, including Germans and also Jews whose families lived there before World War II, visiting Lithuania.

Because of its history, Lithuania was keen to engage with western Europe, partly as a guarantee against future invasion. This led to Lithuania joining the North Atlantic Treaty Organization (NATO) on March 29, 2004, and negotiating for membership in the European Union, which was granted in May 1, 2004.

See Also: Eastern Europe; Privatization; Russia.

Bibliography. Darius Furmonavicius, *Lithuania Rejoins Europe* (Columbia University Press, 2008); International Monetary Fund, *Republic of Lithuania: Financial System Stability Assessment Update* (International Monetary Fund, 2008); Sigitas Mitkus, "Formalism in Contractual Business Relations in the Context of Transformation: The Case of Lithuania," *Transformations in Business and Economics* (v.7/2, 2008); Franziska Ohnsorge and Kingsley Obiora, *Republic of Lithuania: Selected Issues* (International Monetary Fund, 2008); Manuela Tvaronaviciene and Mantas Degutis, "If Approach to Innovations Differs in Locally and Foreign Owned Firms: Case of Lithuania," *Journal of Business Economics and Management* (v.8/3, 2007).

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Lloyds TSB Group

The Lloyds TSB Group came from a merger of Lloyds Bank and the Trustee Savings Bank. Lloyds Bank itself was one of the oldest banks in the United Kingdom and was established as a company in 1765—at that stage providing a private banking service—called Taylors and Lloyds in Dale End, Birmingham, in central England, taking its name from its founders John Taylor, a button maker, and Sampson Lloyd II, an iron manufacturer and dealer. Two sons of the original partners established Barnetts Hoares Hanbury and Lloyd in Lombard Street in London. It was not until 1864 that the bank opened its first public bank branch in Oldbury, then six miles west of Birmingham (but now a suburb of Greater Birmingham).

Gradually Lloyds Bank grew, started taking over other businesses, and formed Lloyds Bank (France) in 1911 from Armstrong and Co., which they had just bought out. In 1914 they took control of the Wilts and Dorset Bank, and four years later bought the Capital and Counties Bank. They also took over Fox, Fowler and Company of Wellington, Somerset, the last private firm in Britain to issue its own banknotes (which it did for the last time in 1921). Lloyds Bank had deposits of £1,094 million in 1951, and £1,654 million in 1966.

In 1918 Lloyds Bank expanded into South America with the purchase of the London and River Plate Bank, which was later merged with the London and Brazilian Bank to form the Bank of London and South America, which in 1986 was fully merged into Lloyds Bank. This saw Lloyds Bank have a heavy financial interest in Argentina as well, being largely used by its British community that controlled many of the businesses, at least until the 1940s. Lloyds Bank, through the National Bank of New Zealand, and the Rural Bank, which it took over in 1994, also had an important role in New Zealand. By this time it had already established its life assurance company, Lloyds Abbey Life, and in 1995 it bought the Cheltenham and Gloucester Building Society, making it a major lender in the British mortgage market. From 1930 until 1987, the *Lloyds Bank Review* provided generations of high school and university students with information on banking and economic reform proposals.

By contrast, the Trustee Savings Banks had been established from 1810 as part of the framework encouraged in Britain during the Napoleonic Wars to promote thrift. However, in the early 19th century many banks were not stable, and investors were worried about their funds. As a result, the Trustee Savings Banks established a system of independent trustees to guarantee the management of the bank, which was how it had achieved its name. In 1919 the banks had £100 million in deposits, which rose to £162 million by 1929, and £292 million by 1939. After World War II, plans were introduced to help unify the system. With changes being made in the inter–savings bank clearing in 1955, by 1973 there were 73 different savings banks with 1,549 branch offices. Finally merger arrangements were made, and in 1975 the network was whittled down to 19 independent banks, which in 1985 were finally merged to form the TSB Bank plc.

In 1995 the Trustee Savings Bank merged with Lloyds Bank and they formed Lloyds TSB. It still uses the black horse set in a green frame that has been the symbol of the bank for many years. It currently employs 74,000 people and has a revenue of £16,874 million (2007), with net income of £3,321 million (2007), making it the fifth-largest banking group in the United Kingdom. As well as banking through Lloyds TSB Bank in England and Wales, and Lloyds TSB Scotland in Scotland, and through Cheltenham and Gloucester Building Society, it also runs the Scottish Widows Bank. In insurance and investments, it runs its own Lloyds TSB Insurance Services Ltd. and Scottish Widows; and in wholesale and international banking, it runs the Lloyds TSB Corporate Markets, Lloyds TSB Commercial Finance, Blackhorse, and an offshore banking arm. Involved in sponsorship of many events and charities, Lloyds TSB was appointed the first Official Partner for the 2012 Olympic Games to be held in London. In late 2008 Lloyds TSB looked forward to its merger with HBOS, which was to create Britain's biggest High Street bank called Lloyds Banking Group.

See Also: Company Profiles: Western Europe; HBOS; United Kingdom.

Bibliography. Great Britain, *Lloyds TSB Group Union (LTU) Technology Modernisation Project: Case Study* (BERR, 2007); J. Kelly, "Breaking the Code: An Interview with Sir Brian Pitman, Chairman, Lloyds TSB Bank," *Long Range Planning* (v.33/1, 2000); Roger Orsingher, *Banks of the World: A History and Analysis* (Macmillan, 1967); R. S. Sayers, *Lloyds Bank in the History of British Banking* (Oxford University Press, 1957); F. R. Winton, *Lloyds Bank 1918–1969* (Oxford University Press, 1982).

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Lobbying

Lobbying refers to attempts to influence policy decisions made by elected officials. The term originated in the political systems of the United States and United Kingdom during the 19th century when efforts to influence the votes of lawmakers were conducted in the entrance hall (or "lobby") of parliamentary chambers. In business, lobbying is an example of a nonmarket strategy. While market strategies involve decisions such as product positioning and pricing, nonmarket strategies are actions taken by individuals, firms, or special interest groups to influence the political, regulatory, and social environments in which they operate. Some companies and industries have found that lobbying is a crucial aspect of their business, and recent studies have shown that lobbying can effectively influence policy outcomes.

Different Types of Lobbyists

Different kinds of business actors lobby political decision makers. Individual businessmen and women, for example, can be important contacts for elected officials. In France, leading business and political figures commonly make informal contacts with each other during their studies at elite graduate schools. Later in life, business leaders can use these contacts to voice their policy preferences to government and administrative representatives.

Individual firms—especially large ones—can also participate in lobbying and public policy advocacy. Google provides a case in point: with a staff of 12 lobbyists including former communications directors, speechwriters, and policy advisers of the Clinton administration, Google has built a substantial presence in Washington.

If managers lack the time, resources, or contacts to influence public policy decisions themselves, they may delegate the task to an outside lobbyist. For instance, when it made its controversial bid to take over the U.S. petroleum company Unocal in 2005, the China National Offshore Company hired the services of the Washington-based lobbying firm Akin Gump Strauss Hauer & Feld to establish relationships and set up meetings with lawmakers.

In some cases, individual companies may feel they have a better chance to influence policy if they lobby as part of a wider group: In this instance, they may join professional associations. Germany, for example, has a dense network of special interest groups that are organized around specific industrial sectors (such as the German Association of the Automotive Industry), products (including the Association of Cigarette Manufacturers), or markets (such as the Federal Association of Exporting Companies). These groups maintain political offices in Berlin, establish strong connections with officials in the powerful Economics Ministry, and use these to influence policy so that it meets their members' specific requirements.

When attempting to influence general laws, trade associations and individual companies may form nationwide employers' associations. One such example is the U.S. Chamber of Commerce, whose 300 policy experts, lawyers, and communicators represent the interests of over three million businesses of all sizes and sectors, hundreds of trade associations, thousands of local Chambers, and more than a hundred American

Chambers of Commerce around the world. In the UK, the Confederation of British Industry (CBI) promotes the general interests of British business by contributing to debates on over 80 policy issues.

As business has become increasingly globalized, supranational associations have emerged to represent the interests of the business community above the nation-state level. For example, with the increasing number of economic directives introduced by the European Commission, it is estimated that 15,000 business lobbyists are now active in Brussels. Some, such as BusinessEurope and the European Roundtable of Industrialists, represent private employers at the interprofessional level. Others, including the European Federation of Pharmaceutical Industries and Associations (EFPIA) and the Committee of Professional Agricultural Organisations (COPA), represent the interests of specific industries.

Companies, organizations, and private citizens can lobby policy makers in numerous ways. More than one method is frequently used concurrently. Lobbyists and policy makers may meet informally. In the United States, lobbyists can legally invite policy makers out for dinner, to concerts and sporting events, and even on trips. For example, when Starbucks began lobbying in Washington, it flew members of Congress to its Seattle headquarters to introduce them to the company and educate them on its strategy and the coffee industry.

Another way of lobbying is to participate in formal meetings with policy makers. In some countries, governments establish advisory committees to gain private-sector input on policy issues. France, for example, has developed an extensive network of consultative organs, including the Economic and Social Council, designed to elicit advice and acquiescence from trade associations.

Companies often also use written communications to convey a particular point of view. In this way, Microsoft found letter-writing campaigns to be a useful form of advocacy when several states sued it for anticompetitive behavior. Lobbyists are now more than ever using the media to articulate their interests and influence public opinion so that it is sympathetic with their causes. The internet also provides lobby groups with a powerful tool for attracting the attention of specific target audiences and increasing the visibility of their specific concerns.

The Influence of Lobby Groups

Not all lobby groups have the same influence over policy makers; their ability to shape policy outcomes depends on both internal and external factors. Internally, lobby-group influence depends on financial resources, knowledge, and membership structures. In essence, groups are better placed to influence policy makers if they have large financial resources to fund their lobbying activities, if they possess the often highly technical expertise required by government officials to make policy, and if they possess a homogenous membership whose similar interests make it easier to reach common policy positions.

A major external factor affecting the influence of lobby groups is the structure of the political system in which they operate. In so-called corporatist systems (such as Austria, Germany, and Sweden), interest groups are guaranteed a voice in systems of institutionalized policy making: the representatives of employer and employee organizations are invited to participate in negotiations with state officials to reach agreements on policy issues and gain responsibilities for securing compliance with decisions.

Other countries (such as the United States or the United Kingdom) do not have such institutionalized lobbying practices. In these pluralist systems, power is more widely distributed among many autonomous lobby groups, each representing the social and economic forces in the wider society. These groups compete against each other to gain the attention of policy makers. The greater the organized opposition to a lobby group's policy demands, the weaker its ability to shape policy outcomes to the advantage of its members.

The acceptance of lobbying varies across countries. In the United States and the United Kingdom, lobbying has long tended to be considered as a legitimate aspect of the political process. In continental European countries, however, seeking to influence policy makers tends to generate largely negative connotations: Lobbying is seen as an opaque practice, giving an unfair advantage to those who can afford to carry it out. In response to these concerns, the European Commission launched an initiative in 2005 to make lobbying in Brussels more transparent.

See Also: European Union; Legal Environments; Nongovernmental Organizations; Regulation.

Bibliography. Gary J. Andres, *Lobbying Reconsidered: Under the Influence* (Pearson/Longman, 2009); Council of Europe, *Corruption and Democracy: Political Finances, Conflicts of Interest, Lobbying, Justice* (Council of Europe, 2008); Andreas Dürr and Dirk de Bièvre, "The Question of Interest Group Influence," *Journal of Public Policy* (v.27/1, 2007); Justin Greenwood, *Interest Representation in the European Union* (Palgrave Macmillan, 2007); Scott Kennedy, *The Business of Lobbying in China* (Harvard University Press, 2008); Christine Mahoney, *Brussels Versus the Beltway: Advocacy in the United States and the European Union* (Georgetown University Press, 2008); Alan L. Moss, *Selling Out America's Democracy: How Lobbyists, Special Interests, and Campaign Financing Undermine the Will of the People* (Praeger, 2008); Anthony Nownes, *Pressure and Power: Organized Interest in American Politics* (Houghton Mifflin, 2001); Felix Oberholzer-Gee, Libby Cantrill, and Patricia Wu, *Lobbying* (Harvard Business School Publishing, 2007); Cornelia Woll, *Firm Interests: How Governments Shape Business Lobbying on Global Trade,* Cornell Studies in Political Economy (Cornell University Press, 2008).

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Local Adaptation

All firms that operate in a single, domestic context have to design and implement product, pricing, promotional, and distribution strategies to compete effectively in their respective markets. On the other hand, firms that operate on an international scale face an additional challenge that must be tackled before they cross borders. The main dilemma for the marketing strategy of such multinational entities is the decision to either follow the same marketing program across all foreign markets or employ a different approach that corresponds to each foreign market's idiosyncrasies. This dilemma is the backbone of the global commercial policy of multinational corporations, and in the business literature it is called "standardization versus adaptation" of international marketing strategy.

In particular, local adaptation is the act of employing a marketing strategy that is unique for the market under scrutiny and thus different from the marketing strategy used in other countries. Such a difference denotes modifications in the marketing mix with the purpose of adapting to the cultural diversity of international markets. Local adaptation includes modifications on marketing elements such as the following: (1) the product's tangible elements such as size, taste, packaging, or ingredients used; (2) the product's intangible elements such as brand name and brand positioning; (3) the promotional message and promotional media; (4) pricing toward middlemen and final consumers; and (5) number and type of middlemen.

Locally adapted activities such as the use of different brand names or the use of different promotional efforts within retailing outlets across countries are numerous and have led firms to both success stories and major marketing blunders. For example, the ice cream unit of a giant firm like Unilever is called by different names (either Eskimo or Ola or Algida) in countries such as Sweden, the United Kingdom, Greece, or Spain. Additionally, large U.S. retailers have realized that successful types of promotional activities in the United States (such as "buy two extra-large sizes and get one free") have no equal appeal among consumers in a country like Germany, and so they have adapted their in-store promotional strategy.

The main purported advantage of an adapted strategy is that such local responsiveness meets local customers' needs more efficiently than a standardized strategy that employs a common marketing program for all countries and thus ignores local markets' specificities. On the other hand, though, local adaptation bears a major disadvantage compared to standardization. It is a very expensive task to undertake, since modifications for each country in which a firm operates increase costs enormously. As a result, the effect of such a strategy on typical performance measures such as profitability is debated. However, there are suggestions in the literature that firms that locally adapt their marketing strategy perform better in other measures such as total sales or market share due to their closer look at local markets' needs.

Thus, the decision as to whether firms should eventually employ a marketing program that is partly or wholly adapted to local idiosyncrasies is not an easy one and involves many considerations. These considerations influence the degree to which the firm will eventually adapt its marketing elements and include factors that have to do with both the intra- and extrafirm environment such as the delegation of decision making within the multinational enterprise and the market size, respectively. A synoptic categorization of factors, internal and external to the firm, distinguishes among influences that are either mandatory or discretionary and have to do with (1) characteristics of each market in which the firm operates (e.g., weather conditions, local ethical rules, and legal guidelines); (2) the synthesis of the consumer base the multinational firm addresses (e.g., demographic/psychographic characteristics of consumers and their attitudes toward foreign products); (3) the nature (price versus nonprice) and intensity (high or low) of competition; (4) the nature of the product (e.g., consumer versus industrial goods, luxury versus nonluxury products, culture versus noculture-bound products); and (5) organizational and managerial characteristics (e.g., openness of the firm toward international operations or international experience of business executives).

For example, legal restrictions in several countries necessitate a locally adapted promotional strategy on behalf of tobacco firms, which cannot advertise their brands on TV and thus must employ alternative means of advertising. Additionally, many multinational firms face increased competition by their local counterparts and may need to adapt their pricing strategies in order to become more attractive to local consumers. An example of an intrafirm influence is the polycentric orientation of the mother firm, which "forces" local subsidiaries to employ their own, locally adapted product policies that match local consumers' preferences.

Summarizing, it must be noted that the decision whether to adapt or not is not necessarily antithetical to the decision to standardize. A firm usually employs diverse reasoning before actual strategic decision making, and adapted elements may coexist with standardized elements in the same marketing strategy. It is therefore more appropriate to talk about the general degree of adaptation and not in terms of a dichotomy between adaptation and standardization.

See Also: Customization; Geocentric; Global Brand Strategy; International Marketing Research; Localization; Multidomestic Structure; Polycentric; Standardization.

Bibliography. Roger J. Calantone, Daekwan Kim, Jeffrey B. Schmidt, and S. Tamer Cavusgil, "The Influence of Internal and External Factors on International Product Adaptation Strategy and Export Performance: A Three-Country Comparison," *Journal of Business Research* (v.59/2, 2006); Subhash C. Jain, "Standardization of International Marketing Strategy: Some Research Hypotheses," *Journal of Marketing* (v.53/1, 1989); Masaaki Kotabe and Kristiaan Helsen, *The Sage Handbook of International Marketing* (Sage, 2009); David A. Ricks, *Blunders in International Business* (Blackwell Publishers, 2000).

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Local Competitors

The standard economic textbook treatment of competition gives the impression that production and consumption take place on the head of a pin, as if space did not matter. In reality, of course, space does matter, in ways that constrain the boundaries of competitive domains and the intensity of competition in those domains. The resources for which firms compete are not evenly distributed in space, but are geographically clustered, often independent of political-administrative boundaries. Agglomerations such as the wine industry in Southern California, the financial district of the City of London, the Indian film cluster in Mumbai, the surgical instruments cluster in southern Germany, or the boat building cluster in northern New Zealand all conjure images of highly localized business activities, supported by locally specific institutions and social structures.

Local competition may be understood from two perspectives, with different predictions for the nature of business transactions. Standard economic theory suggests that within a given locale barriers to entry are lower than elsewhere to the extent that labor skills, material and financial assets, information, and other inputs are more readily available locally. The presence of a large number of firms in the region is predicted to increase business entry rates into the region because potential business founders will view a large local business population as an indicator of market and investment opportunities. By contrast, the ecological approach to competition highlights the crowding effects of business populations. A large population of firms, which all draw on the same or similar resources, is predicted to depress firm entry rates. The more firms' market domains overlap, the more strongly they compete. The addition of a firm to an existing population has stronger competitive effects on firms in the same domain than on firms in more distant domains, reducing founding rates and increasing failure rates.

One way to reconcile these theoretical predictions is to consider the definition of competition that they assume. Economic theory views rivalry more as a form of competition among a narrowly defined population of firms, focusing on the social and cognitive aspects of competition. Local competitors, from this perspective, tend to orient their activities toward those firms they perceive as rivals. The ecological perspective, by contrast, subscribes to a less-social definition of competition. It highlights the more diffuse and indirect interdependence between firms that may or may not be directly aware of each other. Of course, economic rivalry and ecological competition may operate jointly in a given setting. For example, firms may compete globally in product markets, but locally in factor-input markets.

Research

Our understanding of local competition draws on substantial academic research that typically falls in one of three categories. One line of research focuses on the geographic distribution of resources. A second body of literature studies the flow of information across space. And a third body of research focuses on the level at which economic aggregates can develop competitive advantage. While each of these literatures has a distinct focus, they share the argument that the optimal location of a firm depends on the locations chosen by the firms with which it interacts. Local competitive processes reflect the resource interdependence of firms.

Research on the geographic distribution of resources suggests that the local availability of resources influences the location decision of firms, evident, for example, in the spatial concentration of new business foundings. Many of the resources that firms require to compete effectively are considered, from the perspective of the individual firm, more or less fixed in space. They include human capital, special-purpose equipment, and a range of specialized infrastructure services that are very difficult to transfer across large distances. The market is thus said to require local coordination and control of economic activities and a division of labor between independent but interlinked producers. Localized production systems are evident particularly in those industries that face significant uncertainty, such as software, design, fashion, and high-technology manufacturing. The negotiations involved in production and exchange in such industries are less easily carried out at a distance. Many firms, therefore, remain local, and they depend strongly on their immediate competitive and institutional environments for economic resources, public support, and customer demand. The intensity of competition among firms is a function of the similarity in resource requirements.

Interestingly, the location of a firm relative to its competitors can increase both the intensity of competition and the likelihood of cooperative behavior. The possibility of and need for collaboration with local competitors is the focus of analysis of a second body of research, which investigates flows of information across firms and related organizations. Geographic colocation of competitors makes it easier to observe and monitor competitors. Managers are generally more sensitive to the strategies and actions of local competitors because of their limited capacity to collect information on nonlocal competitors and the ambiguity of interpreting information from a distance. This suggests that managers focus on the actions and capabilities of competitors located in close vicinity.

Research shows that business networks tend to be localized because reliable information is usually best conveyed through direct, personal contacts. For this reason, information and knowledge tend to diffuse slowly through space away from the point of origin. This process can affect the spread of new strategies and products, the adoption of innovations, and the diffusion of organizational models. When combined with dependence on a common resource base and recruitment from a common labor pool, frequent business interactions tend to increase the level of information exchange among local managers, thus improving the awareness of the capabilities of local competitors.

A third line of research is concerned with the extent and form of local competition (and cooperation) as a source of competitive advantage, not for individual firms but for the business population in which they are located. Competitors outside the local production system do not have equal access to the cost advantages of local populations, and they struggle to maintain competitive parity with the clustered competitors. The central argument is that the sustained competitive advantage of local populations of firms is based on knowledge that limits the spread of such knowledge to other populations and regions. Such knowledge is often referred to as architectural knowledge, because it relates to the complex and intangible understanding of how the entire production system works. Such knowledge tends to develop as an inseparable part of the local production complex and is, therefore, not easily transferable to other locales.

In sum, research on local competition suggests that geographic distance continues to play an important role in economic life. While technological advances in communication have reduced the costs of economic transactions and cross-border trade agreements have led to the gradual softening of trade barriers, the transfer of outputs, labor, and information has not become instantaneous or frictionless. Local transactions are increasing in many regions around the world even more rapidly than global transactions. The increased sophistication and differentiation of goods and services in many industries requires an increasing number of transactions and creates local interdependencies that are nontradable. This explains why there will continue to be regional disparities in economic development.

See Also: Competition; Globalization; Localization; Locational Advantages.

Bibliography. Arindam Bhattacharya and David C. Michael, "How Local Companies Keep Multinationals at Bay," *Harvard Business Review* (v.86/3, 2008); Michael T. Hannan and John Freeman, *Organizational Ecology* (Harvard University Press, 1989); Gard Hopsdal, "The Far Side of International Business: Local Initiatives in the Global Workshop," *Journal of Economic Geography* (v.8/1, 2008); Paul R. Krugman, *Geography and Trade* (MIT Press, 1991); Michael E. Porter, *The Competitive Advantage of Nations* (Free Press, 1990); Baruch Shimoni, "Separation, Emulation and Competition—Hybridization Styles of Management Cultures in Thailand, Mexico and Israel," *Journal of Organizational Change Management* (v.21/1, 2008).

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Localization

Localization is an international strategy that some companies pursue in their international business operations. Companies pursuing localization try to modify their products and services so that products have local features demanded by local consumers and are suitable to laws and standards. The modifications needed to localize products can be as simple as translating the labels to the local language or can be as complex as changing and adding many features to the product. In short, a localized product has local features and looks. Localization is sometimes used interchangeably with adaptation, local adaptation, and local responsiveness. The opposite of localization is internationalization or global integration that refers to the efforts of companies to standardize their operations to capitalize on similarities across foreign markets. Therefore, localization is important for global business as it is one major strategy used in international operations.

Localization is a part of the integration–local responsiveness debate. The integration or global integration strategy is based on achieving efficiency and synergy by coordinating, integrating, and standardizing operations and products across foreign markets. Therefore, companies pursuing the global integration strategy expect to increase their performance capitalizing on coordination and integration. However, the local responsiveness or localization strategy (also called multidomestic or multilocal strategy) argues that markets differ and products should be localized rather than standardized to better serve local consumers and meet the local demand.

Localization or multilocal strategy has various advantages. Localized products may better serve local consumers. The headquarters will not be busy thinking about what needs to be done in individual foreign markets. In case of lack of experience in foreign markets, local managers can make better decisions. As well, localization is an opportunity to analyze the foreign market through different ways of producing and marketing products. Successful products developed and produced for foreign markets can also have potential in the domestic market as new products. Despite these advantages, localization has various disadvantages as well. Conflicts may arise when local divisions formulate their own vision, culture,

This Wal-Mart store in Mexico City was selling a variety of locally adapted and nonadapted products in 2007.

and way of doing business that may not be suitable to headquarters. The localization approach also lacks coordination and synergy among individual markets as affiliates are not much encouraged to share their knowledge and experience. This situation may cause duplication of activities and reductions in economies of scale. For example, affiliates can have the same production system for the same tasks, causing increases in production costs. Lack of coordination may also prevent knowledge transfer and may even cause competition among affiliates. In sum, although localization provides opportunities to better meet the local demand, it can cause inefficient manufacturing, duplication of resources, and thus cost increases.

Why do companies localize their offerings? Environmental, structural, and organizational factors can affect localization decisions. When the local business environment and culture is complex and different, localization is needed. For example, there may be differences in terms of payments, price sensitivity, marketing practices, and distribution. Therefore, foreign companies need to modify their practices to suit these local practices. In addition, structural factors, for example, competition and demand characteristics, may also necessitate localization. Last, companies have different goals, policies, and orientations toward doing business. Some companies can have a long-term orientation toward the foreign markets whereas others have short term. Long-term orientation requires a better understanding of and offering to the local market; localization is a good strategy to achieve this.

Some products are more suitable to localization than to standardization. However, even standardized products such as medicine are somewhat localized. For example, the same medicine to cure heartburn is sold for US$185 in the United States, whereas it is around US$40 in Mexico and Turkey. However, the medicine is sold as capsules in the United States but as tablets in Mexico and Turkey. This is an example of localization with respect to price and form of the product. Some other examples of localization are as follows: Wal-Mart in Mexico localized their operations by adjusting working hours, human resource management policy, product breadth, and marketing programs to better serve Mexican consumers. Products like food and clothing are very suitable for localization, as modifications are highly needed in such products. Electronics and other high-tech products tend to be standardized. Nevertheless, we also see localizations in such products. Refrigerators, for example, are highly localized to meet different market needs. In Spain, meat capacity is important, whereas in France vegetable and fruit capacity is important; in the United States, refrigerators are generally larger since consumers generally shop weekly for groceries rather than daily as done, for example, in Turkey.

In conclusion, localization is an international business strategy whose argument is that companies should localize or modify their offerings according to local tastes, preferences, and needs because markets are different in terms of consumer behavior characteristics, laws and regulations, socioeconomic conditions, economic, institutional, and competitive environments.

See Also: Customization; Global Brand Strategy; Internationalization; International Marketing Research; Local Adaptation; Multidomestic Structure; Standardization.

Bibliography. S. T. Cavusgil, G. Knight, and J. R. Riesenberger, *International Business, Strategy, Management, and the New Realities* (Prentice Hall, 2008); B. Esselink, *A Practical Guide to Localization* (John Benjamins, 2000); C. Hines, *Localization: A Global Manifesto* (Stylus, 2000); Y. Luo, "Determinants of Local Responsiveness: Perspectives From Foreign Subsidiaries in an Emerging Market," *Journal of Management* (v.27/4, 2001); C. K. Prahalad and Y. Doz, *The Multinational Mission: Balancing Local Demands and Global Vision* (Free Press, 1987); Darrell K. Rigby and Vijay Vishwanath, "Localization: The Revolution in Consumer Markets," *Harvard Business Review* (v.84/4, 2006); K. Roth and A. J. Morrison, "An Empirical Analysis of the Integration-Responsiveness Framework in Global Industries," *Journal of International Business Studies* (v.21/4, 2002).

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Local/National

Local nationals (or locals) are the citizens that reside in a multinational corporation's host country. When an organization decides to venture out into global markets, it may elect to send some of its current employees to start the business with the intent of integrating local nationals into the process. However, the management team will have to address political, economic, and cultural issues that may arise in the designated country. In order to address the different types of inequities that may arise, those in the international business arena must develop policies and procedures that address these issues and create a sense of fairness for everyone involved. Many believe that that there should be standards for social responsibility and ethics in order to make sure that developing countries are not exploited. Having a formal global approach to these types of challenges can ensure a sense of fairness for everyone involved in the process.

Organizations need to decide if it is best to establish the international business function internally or externally. It is important for organizations to assess their current workforce to determine if they will need to rely on expatriates to establish a presence in the host company or whether it is more feasible to hire employees from the host country in order to minimize cultural and language barriers.

If the organization elects to start internally, it may assign a team to set the budget, ship products, and develop the international marketing plan. However, this can become expensive, so the organization may evaluate two other options. One option is to hire employees from the host countries. Many organizations elect this option in order to minimize cultural and language barriers and secure labor that is cheaper than its current workforce. If the organization elects to hire employees from the host country, it is important that it assimilates these new hires into its corporate culture so that they will have an understanding of what the organization values and how it operates.

Representational Approaches

In 2007 Farzad Khan introduced a conceptual framework that identified four representational approaches to understanding how social inequities surface in developing countries as they attempt to venture into international business. When the model was created, it was established that there are many parties involved in the process. Since representation ranged from local workers to international mass-media organizations, each party was defined in terms of geography. The two categories introduced are locals and foreigners. Locals were defined as individuals or entities that are primarily located in the developing countries. Locals are very diverse and have different perspectives and interests. Individuals falling into the "foreign" category are those that do not fit into the "local" category. Significant players in the foreign group would include international businesses that are directly involved in specific situations and their critics.

Both of these groups are considered to be "representers" as they work to resolve issues that arise. Each situation is analyzed and evaluated on the representers' role in the situation and the worldview of the situation. The approaches attempt to conceptualize the representation of the ethical issues involving international business in the developing world. The four different approaches are:

- Approach 1 (No-speak): Foreigners are the representers and the issue is expressed from a foreign world viewpoint. The local residents have no voice and they have no input into the worldview. Local worldviews have no place in the development of issues and the local experience is not considered relevant in social equity issues. Most of the international business research follows this approach (i.e., Hofstede's Culture's Consequence).
- Approach 2 (Us-speak): The commonality between this approach and the first approach is that the foreigners are the representers. However,

the difference is that the worldview incorporates the local experience. This approach attempts to represent local realities (local view) in a way that the local inhabitants understand the situation. In many instances, the representer places himself in the locals' position and attempts to articulate the viewpoint based on the locals' perspective.

- Approach 3 (Same-speak): The locals are the representers and the worldview is the same as the foreigner's perception. Locals represent themselves based on one or more worldviews that originate from the West (i.e., modernism, post-structuralism, secular nationalism). Many of the most influential representations of ethical issues that affect international business in developing countries are based on this approach.
- Approach 4 (Other-speak): Locals are the representers, and international business issues are explained in the context of local viewpoints. When evaluating this approach, representation is being explained by locals using local concepts.

The approaches provide an explanation as to how foreigners and locals perceive the severity of social issues, which is important to the interactions in the business community. Multinational corporations have to understand the culture and values of the countries where they do business. Otherwise, the corporation may suffer as a result of conflict on social and business ethics issues. There has to be some sense of social responsibility on the part of the multinational corporation.

Cultural Issues

George England and the Meaning of Working (MOW) International Research Team conducted a study that explored what work meant to people all over the world. Participants came from countries such as Japan, Yugoslavia, Israel, the United States, Belgium, the Netherlands, Britain, and Germany. The meaning of work was evaluated on three core concepts, which were work centrality, societal norms about working, and work goals. Work centrality measured the importance and value of work as it related to the individual's life. Societal norms about working addressed beliefs and expectations regarding special privileges and duties associated with work. Work goals explored the work-related outcomes that were preferred by the participants across the span of their career. The researchers discovered that the higher the mean work centrality score, the more motivated and committed the workers are in society. Looking from a global human resource planning initiative, the results of the study provide organizations information about why employees value work and what they need in order to be satisfied with their jobs.

However, management teams have to be cautious with these results and explore other research that deals with global workforces. One will need to assess the importance of work as it relates to having a quality of work life. For example, Americans are known to work the longest hours in a year and value job duties over family responsibilities. However, that practice is not the norm in all cultures. Therefore, organizations will have to determine what is important to the local nationals in each country that they desire to enter.

Staffing

There are different levels of international employees around the world. An expatriate is an employee who is sent by a company in one country to manage the operations of the same company in another country. There are three types of expatriates: parent country nationals (PCNs), host country nationals (HCNs), and third country nationals (TCNs).

Parent country nationals (PCNs) are employees who are born and live in the parent country. These employees tend to be responsible for starting up operations at locations in another country. A hiring manager is responsible for staffing these operations with employees who can adapt to the new environment and be self-motivated. Some of the highly desired characteristics of a candidate include work experience with other cultures, knowledge of multiple foreign languages, and extensive overseas travel. However, some multinationals are concerned about hiring too many PCNs given the additional expenses that are incurred by the company. For example, the multinational will have to consider costs such as relocation expenses, cultural training, housing assistance, taxation allowances, incentives and rewards, and family issues.

Host country nationals (HCNs) are employees who are born and raised in the host country. Multinationals have found that hiring managers from the host country is an opportunity to build good public relations with the natives of that country. This approach shows an economic commitment on the part of the multinational by providing locals with the opportunity to gain employment and fueling the local economy. Another incentive is that hiring an HCN is not as costly as hiring a PCN.

Third country nationals (TCNs) are employees who were not born or raised in either the host or parent country, but work in the host country. These candidates tend to be sought when there are jobs that require a certain level of expertise and skills to perform certain jobs.

Different countries will utilize different combinations of these employees to staff their international operations. Four of the major approaches utilized include the following:

1. Ethnocentric staffing approach: The staffing plan is dictated by the multinational's values, attitudes, practices, and priorities. The corporate office is responsible for establishing human resource policies and practices as well as selecting candidates who are equipped to provide leadership to the subsidiaries in other countries.
2. Polycentric staffing approach: Although the corporate office may make all of the hiring decisions, there is consideration for the needs of the local subsidiaries. In addition, the policies and practices are developed at the local level to meet the needs of the locals filling the jobs. Although locals are selected for managerial positions, it is rare for these individuals to be promoted to the corporate office. These employees tend to be promoted to positions at the local level only.
3. Regiocentric staffing approach: Human resource policies and practices are dictated by the needs of the region. The approach utilized is similar to what occurs in the polycentric staffing approach. However, there is a broader territory—it is regional versus local. Therefore, there are opportunities to hire and promote workers to regional levels.
4. Geocentric or global staffing approach: The multinational's focus is to look at the "big picture" and develop a plan that provides optimal utilization of all resources, not just human resources. Local and regional concerns are not given priority; rather, they are given equal weight as some other factors in the decision-making process. Staffing practices are developed at the corporate level and the selection process is based on a global pool without regard to a person's country of origin or cultural background.

When considering these approaches, the organization must consider issues such as the following:

- National concerns: Multinationals are expected to work within the legal parameters of the host country. Therefore, it is essential to be aware of the local employment law policies and practices.
- Economic concerns: The multinational has to consider cost of living expenses (i.e., housing, food, incentives, and rewards).
- Technological concerns: Given the increased use of technology in business operations, multinationals need to determine if the host country's workforce has a skilled pool of potential candidates.
- Organizational concerns: The multinational's level of internationalization as well as the product life cycle are two important factors evaluated when determining staffing needs.
- Cultural concerns: It is imperative that the corporate office considers the differences between the corporate and subsidiary cultures when making staffing decisions and policies.

Compensation

Localization has different meanings depending on the audience. Some view the concept to mean the removal of expatriate allowances but retention of the home-country base salary and long-term benefits, whereas others believe that it means to remove expatriate allowances as well as shift the employee's base salary to the host-country levels while the long-term benefits remain the same as the home country's plan. When creating a compensation system for international employees, one must take four basic components into consideration: base salary, indirect monetary compensation (benefits), equalization benefits, and incentives.

The base salary is the foundation of an international compensation system because it represents the minimum rate at which a candidate will work for your company. Some organizations have elected to develop an international compensation system based on the policies and procedures of the parent company's country, whereas others have created an international compensation program based on the host country. Regardless of which practice is utilized, it is important for the compensation professional to consider what happens to the employee's pay once they leave that assignment. On average, the typical international assignment usually lasts from three to five years.

Indirect monetary compensation means benefits. Although most benefits packages are the same as what is offered in the home country, organizations must consider how to address situations where a host country may require certain benefits that are not offered in the home country. It may be in the organization's best interest to consider offering such benefits in order to keep employees motivated and maintain positive attitudes.

Equalization benefits are those benefits offered in an effort to minimize any financial hardships that an employee may experience as a result of considering an international assignment. Some of these benefits include housing allowances, educational allowances, language and culture training, employment opportunities for spouses, and emergency leave.

Some organizations have found that it is beneficial to offer incentives to expatriates. Some of these incentives include an assignment completion bonus, cash bonuses, stock options, and performance-based bonuses.

One of the most popular theories addressing the compensation field is equity theory. Equity theory implies that individuals evaluate whether or not they are being treated fairly by comparing their situation to others. In this scenario, it is common for an employee to compare his/her pay to the pay of other employees, especially those coworkers performing the same duties. Many researchers and practitioners in the field strongly believe that work attitudes and perceptions are based on whether or not an employee believes he/she is being fairly compensated in comparison to the perception of what other employees are being paid. This theory applies to both internal and external structures.

Organizations tend to address these concerns via market pay surveys (external equity) and job evaluations (internal equity). In order to ensure that external equity and internal equity issues are addressed, human resource professionals should consider the following tools when preparing an international compensation package: (1) an international compensation management grading system that is comparable to the domestic grading system; (2) a base salary delivery process that is integrated into the home country's base pay system but that also takes local country laws into consideration; (3) an incentive and reward system that motivates employees worldwide; and (4) a performance management system that rewards employees regardless of their geographic location.

See Also: Compensation; Culture-Specific Values; Ethnocentric Human Resource Policy; Expatriate; Geocentric Human Resource Policy; Multidomestic Structure; Parent Country National; Polycentric Human Resource Policy; Regiocentric Human Resource Policy; Third Country National.

Bibliography. N. Ando, D. Rhee, and N. Park, "Parent Country Nationals or Local Nationals for Executive Positions in Foreign Affiliates: An Empirical Study of Japanese Affiliates in Korea," *Asia Pacific Journal of Management* (v.25/1, 2008); M. Gowan and C. Ochoa, "Parent-country National Selection for the Maquiladora Industry in Mexico: Results of a Pilot Study," *Journal of Managerial Issues* (v.10/1, 1998); P. Herrmann and J. Werbel, "Promotability of Host-Country Nationals: A Cross-Cultural Study," *British Journal of Management* (v.18/3, 2007); F. Khan, "Representational Approaches Matter," *Journal of Business Ethics* (v.73, 2007); Robert T. Moran, Philip R. Harris, and Sarah V. Moran. *Managing Cultural Differences: Global Leadership Strategies for the 21st Century.* Managing Cultural Differences Series (Elsevier/Butterworth-Heinemann, 2007); S. Toh and A. DeNisi, "Host Country National Reactions to Expatriate Pay Policies: A Model and Implications," *Academy of Management Review* (v.28/4, 2003); C. Vance and Y. Paik, "Forms of Host-country National Learning for Enhanced MNC Absorptive Capacity," *Journal of Managerial Psychology* (v.20/7, 2005).

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Locational Advantages

Locational or location-specific advantages refer to various business opportunities present in individual foreign markets so that companies are encouraged to invest in such markets. Companies invest in a particular foreign market as long as this market has something to offer to the company so that investment in this particular market can be profitable for the company. For example, among other things, China and India offer location-specific advantages to apparel firms because labor cost in these countries is low and apparel is a labor-intensive product. So, apparel firms benefit from the cheap-labor opportunity that the Chinese market offers. Similarly, the Middle Eastern countries offer locational advantages to oil companies because they have large oil reserves; companies in search of oil can benefit from the locational advantages of large oil reserves by investing in these countries. Highly populated countries, assuming other conditions are also appropriate, can also be an example of locational advantages. Their high population may be an indication of a locational advantage (i.e., large market) for some firms. In sum, locational advantages are very important for global business because they explain to a certain extent why companies invest in a particular country rather than in others.

After companies have decided to internationalize their operations, a very important question is which foreign market(s) to invest in. Investment decisions in a particular foreign market (location) are made after careful and thorough analyses have been done. Companies analyze politics, laws and regulations, economy, geography, climate, taxation, market characteristics, and many other factors in a market, and unless a particular market offers some sort of advantage to foreign companies, this market will not be chosen as an investment location.

Companies generally internationalize their operations to get resources, to seek a market, to seek a strategic asset, and to increase the efficiency of their operations. Locational advantages also mainly refer to these four factors (resource, market, strategic asset, and efficiency). When companies lack resources (raw materials and intermediary materials, labor, know-how, and others) in their domestic markets, a logical option is to seek them in foreign markets that have appropriate resources. When the domestic market is saturated, meaning that there is not much possibility of further increasing demand in the domestic market, companies try to find markets in which there is still demand. When companies want to further strengthen and protect their ownership advantages or diminish those of their rivals, they seek appropriate strategic assets in foreign countries. Therefore, these four locational advantages play important roles for companies in deciding an appropriate location in their internationalization process.

Ownership Advantages

The term *ownership advantages* (also called competitive or monopolistic advantages) is closely related to locational advantages in the internationalization process. Ownership advantages mean that companies possess something valuable and/or unique that gives the company a competitive edge over its rivals; this may be a unique product, brand name, technological expertise, resources, and managerial and marketing skills. Locational advantages alone may not mean much unless ownership advantages are also present. That means that a particular country can offer some sort of locational advantage; however, it will be costly for a foreign firm to come to this foreign country and establish its operations rather than operating in its domestic market.

How, then, is it possible for a foreign firm to invest in a foreign country and be more successful than already-established domestic companies, given that it has additional costs of establishing operations, facilities, and factories when compared to domestic companies? The answer is related to ownership advantages; the foreign firm should have ownership advantages that will provide higher returns than domestic companies. For example, a company can have a well-known brand name, but it may lack a resource in its domestic market to produce the product, or the domestic market may be saturated. By investing in a foreign market that has the resource used in the production of the product and yet is saturated, the company can effectively produce the product and get a benefit from its well-known brand and the large size of the foreign market.

Examples

Some examples of locational advantages are as follows: Alcoa, the U.S.-based aluminum company, invested in Brazil because Brazil has large reserves of bauxite, the most important aluminum ore. Nike, the U.S.-based shoe company, relocated its production to low-wage Asian countries that offer low-labor-cost advantage. Many computer companies in the 1990s invested in the Philippines, which offered low-cost and well-educated and trained labor advantages. Some companies exporting to the United States relocated their operations in Mexico and export their products across the border. The reason for such production relocations is related to locational advantages that Mexico offers; companies that relocated their production to Mexico first benefited from cheap labor costs, and in addition, they benefited from duty-free export since goods manufactured and assembled in Mexico can be shipped to the United States without paying duty according to the North American Free Trade Agreement (NAFTA). Therefore, Mexico provided cheap labor and duty-free export locational advantages to foreign firms.

Locational advantages can include anything that individual markets or countries have and that companies utilize to increase their performance. Availability, quality, quantity, and efficiency of factors of production differ in countries. Companies in search of increased performance, new markets, new resources, and appropriate labor can relocate their operations toward locations having appropriate advantages.

See Also: Facilities Location Decision; Factor Endowments; Foreign Direct Investment, Horizontal and Vertical; Host Country; Internationalization Model.

Bibliography. G. Albaum, J. Strandskov, and E. Duerr, *International Marketing and Export Management* (Prentice Hall, 2002); S. T. Cavusgil, G. Knight, and J. R. Riesenberger, *International Business, Strategy, Management, and the New Realities* (Prentice Hall, 2008); J. Dunning, *Multinational Enterprises and the Global Economy* (Edward Elgar, 2008); J. Dunning, "The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions," *Journal of International Business Studies* (v.19/1, 1988); J. Dunning, "Toward an Eclectic Theory of International Production: Some Empirical Tests," *Journal of International Business Studies* (v.1, 1980).

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Lockheed Martin

Lockheed Martin is a multinational company established in 1995 through the merger of the Lockheed Corporation with Martin-Marietta. The Lockheed Corporation and the Martin Company were originally incorporated in California in 1912. Martin-Marietta was founded in 1961 through the merger of the Martin Company with the American-Marietta Corporation.

Lockheed Martin, along with its subsidiaries, is a leading aerospace and defense company and has held the number one position as the world's largest defense contractor by revenue since 1995. More than half of Lockheed Martin's revenue since 1998 was earned through contracts with the United States Department of Defense and other U.S. federal government agencies. The company operates in four principal segments: Aeronautics, Electronic Systems, Information Systems and Global Services, and Space Systems.

The Aeronautics segment provides military aircraft, air mobility, global communications, and surveillance systems. Some products of this segment include the F-2 defense fighter created primarily for the Japan Air Self-Defense Force (JASDF); the F-35 joint strike fighter; the F-16 multirole fighter that is currently operated by nations such as the United Arab Emirates, Pakistan, Bahrain, Venezuela, Belgium, Denmark, the Netherlands, Norway, Israel, Egypt, Korea, Turkey, Greece, Jordan, Italy, Chile, Oman, and Thailand; the F-22 for intelligence gathering, surveillance, and reconnaissance missions; P-3 maritime patrol aircraft for submarine detection; U-2 high-altitude reconnaissance aircraft; C-130J Super Hercules tactical transport aircraft; and the T-50 advanced military jet trainer. The aeronautics segment also provides transport management solutions for air, sea, and land traffic in the United States and internationally. This includes air traffic control, airport management, aviation management, navigation, and vessel traffic management.

Lockheed Martin's Electronic Systems division offers missiles and missile defense systems that include weapon fire control systems; air-air missiles, antiarmor missiles, fire support, precision strike, and strategic systems integration.

The company's Information Systems and Global Services segment provides services mainly to the federal government. There are six critical areas in which services are provided: Business Process Management; E-Government; Enterprise Architecture; Homeland Security; Information Assurance; and Systems Development and Integration. Although a major military

This structural engineer from the Lockheed Space Operations Company was working with the precision laser docking systems of the space shuttle Endeavor *in 1993. Lockheed Martin will build the next space shuttle,* Orion*, to replace the current shuttles in 2014.*

contractor, Lockheed Martin also provides civil government agencies such as the U.S. Postal Service with automated sorting systems that enable the efficient handling and delivery of mail to over 134 million addresses across the United States. Lockheed Martin is also the largest U.S.-based material handling systems company.

Lockheed Martin's Space Systems segment capabilities include ground systems; launch systems; space operations; space payloads; spacecraft, which include government and commercial satellites; and training and services that include astronaut and mission control training and premission testing.

Controversy

Unfortunately, Lockheed Martin has also been the subject of several controversies. In 2007 a jury in Albuquerque, New Mexico, awarded a security analyst approximately $5 million after he had been wrongfully dismissed from the company. In 2000 the company agreed to pay $13 million to the U.S. government after it was discovered that Lockheed Martin had passed top-secret technology to a Hong Kong–based company, AsiaSat (Asia Satellite Telecommunications Company Limited), in which the Chinese government is a major shareholder. Another disappointing moment for Lockheed Martin came when NASA lost its $250-million Mars climate-orbiter in September 2003. The Lockheed Martin–built spacecraft was reportedly incorrectly programmed with Imperial units instead of SI units. The company accepted partial blame for contributing to the fundamental cause of the crash.

In spite of these turbulent moments the company has generally reported a profit since the merger in 1995 with the exception of 2001 and 2002, when losses were approximately $520 million and $1.05 billion, respectively. However, since its merger in 1995, the company has been among the first 100 of the Fortune 500 companies in the United States and has recorded a profit of $2.53 billion in 2007, with a rank of 57 on the Fortune 500 companies listing. In 2005 the company owned over 2,300 patents, and in August 2006, Lockheed Martin won a multibillion-dollar contract to build the space shuttle *Orion*, which will replace NASA's space shuttles. This new space shuttle is expected to make its inaugural flight by 2014.

See Also: Company Profiles: North America.

Bibliography. Damian Grammaticus, "Lockheed Fined Over Secrets Breach," BBC News, June 15, 2000, news.bbc.co.uk (cited March 2009); R. Merle, "Lockheed Wins Contract to Build NASA's New Spaceship," *Washington Post*, September 1, 2006, www.washingtonpost.com (cited March 2009); D. Sorid, "Lockheed Martin Accepts Blame for Root Cause of Craft's Loss," *Space.com*, November 10, 1999, www.space.com (cited March 2009); N. Thornburgy, "A Security Analyst Wins Big in Court," *Time*, February 14, 2007, www.time.com (cited March 2009).

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Lombard Rate

The Lombard rate used to be a key interest rate in Germany, although such rate existed in France, Belgium, and Switzerland as well. The Lombard rate was the interest rate charged by the German central bank, the Bundesbank, for very short-term loans made to commercial banks against collateral securities that were marketable and easily convertible into cash. The loan helped commercial banks to deal with temporary shortage of funds. With the introduction of the euro in Germany, the Lombard rate has lost much of its importance and has since been replaced by the European Central Bank's marginal lending rate.

In effect, the Bundesbank had two rates at which it could make loans to banks—the discount rate and the Lombard rate, with the latter being higher than the former. For this reason, banks would first borrow at the discount rate. However, the extent of borrowing at the discount rate was limited by borrowing quotas. Hence, for additional financing, the banks would borrow at the Lombard rate.

In the past, the Lombard rate was a major instrument in Bundesbank's monetary policy. For example, following the era of German reconstruction after World War II, the Bundesbank increased the Lombard rate in the mid-1960s to curb inflationary pressures. Similarly, to curtail excessive currency speculation under the Bretton Woods system, the Bundesbank increased the Lombard rate in the early to mid-1970s to make it more expensive to borrow the German mark, the currency of Germany prior to 2002. However, in the mid- to late 1970s, the rate was cut appreciably to counter recession. During the 1992–93 exchange rate mechanism (ERM) crisis, the Bundesbank lowered the Lombard rate repeatedly to mitigate the effects of the crisis. Starting 1999, the Bundesbank does not report the Lombard rate.

Prior to the introduction of the euro, the Bundesbank was regarded as an important one in the European Community (EC), now the European Union (EU). Hence, changes in the Lombard rate would make headline news across Europe, and speculation about changes in the rate prior to Bundesbank meetings was rife. Changes in the Lombard rate would also affect stock prices and the German mark exchange rate. However, in the late 1990s and with the euro replacing the German mark in 2002, the significance of changes to the Lombard rate decreased considerably as the Bundesbank used other mechanisms to control the money supply, for example, using the security repurchase agreements. The frequency of changes to the Lombard rate declined in the 1990s, just like the implications of the changes. The changes were interpreted as being technical rather than nontechnical, i.e., the change did not convey information about the Bundesbank's stance on monetary policy, but served as a mere realignment, for example, to match the increase in the repo rate. With the advent of the euro, monetary policy powers were transferred from the Bundesbank to the European Central Bank (ECB). As a result, the ECB's marginal lending rate assumed the role of the Lombard rate. Accordingly, changes to the Lombard rate have not been set since 1999.

See Also: Central Banks; Discount Rate; Euro; Germany; Interest Rates.

Bibliography. G. G. Booth, F. R. Kaen, G. Koutmos, and H. C. Sherman, "Bundesbank Intervention Effects Through

Interest Rate Policy," *Journal of International Financial Markets, Institutions and Money* (v.10, 2000); F. R. Kaen, H. C. Sherman, and H. Tehranian, "The Effects of Bundesbank Discount and Lombard Rate Changes on German Bank Stocks," *Journal of Multinational Financial Management* (v.7, 1997).

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Lowe's

Lowe's (Lowe's Companies, Inc.) is the world's second-largest home improvement retailer (after The Home Depot, Inc.). It focuses on retail customers and commercial business customers. Lowe's offers a complete line of products and services for home decorating, maintenance, repair, remodeling, and the maintenance of commercial buildings. Lowe's is a North Carolina–based company, incorporated in 1952, and now employs around 160,000 people (as of January 1, 2008). Its headquarters is located at Mooresville, North Carolina. Lowe's is quoted on the New York Stock Exchange with the ticker symbol of LOW. It has approximately 32,000 shareholders (as of January 1, 2008).

Lowe's and its subsidiaries (Lowe's HIW, Inc., and Lowe's Home Centers, Inc.) operate as home improvement retailers in the United States and Canada. It is doing business in 1,534 stores throughout the United States and Canada in two different types of stores: a 117,000-square-foot store for bigger markets and a 94,000-square-foot store for smaller markets. The company's stores stock hundreds of thousands of items such as paint, lighting, flooring, doors, windows, and tools, and all are available through its special order sales system.

Lowe's targets three different types of customers: retail do-it-yourself customers (i.e., homeowners and rental customers), do-it-for-me customers (these require installation assistance), and commercial business customers (i.e., repair and remodeling contractors, electricians, landscapers, painters, plumbers). Lowe's owns and operates 11 regional distribution centers located in North Carolina, Georgia, Indiana, Pennsylvania, Texas, California, Ohio, Florida, Connecticut, and Wyoming. Each center serves 126 stores on average. Lowe's sources products from around 7,000 merchandise vendors worldwide, with no single vendor accounting for more than 5 percent of the total.

Lowe's was founded in 1946 as a typical, small-town hardware store. It was incorporated in 1952 as Lowe's North Wilkesboro Hardware, Inc. The company adopted its present name in 1961. It began trading on the New York Stock Exchange in 1979. Lowe's major business consisted of sales to professional homebuilders. However, the company changed its strategy to serve do-it-yourself consumers in 1980 when housing markets started to decline. Since then, Lowe's has become regarded as one of the industry leaders.

Lowe's executives include Robert A. Niblock (chairman, chief executive officer), Larry D. Stone (president, chief operating officer), Robert F. Hull, Jr. (chief financial officer), Gregory M. Bridgeford (executive vice president), Michael K. Brown (executive vice president), Charles W. Canter, Jr. (executive vice president), Joseph M. Mabry, Jr. (executive vice president), Matthew V. Hollifield (chief accounting officer), and Gaither Keener, Jr. (secretary, general counsel). Lowe's board of directors includes Leonard L. Berry, Peter C. Browning, Paul Fulton, Dawn E. Hudson, Robert A. Ingram, Robert L. Johnson, Marshall O. Larsen, Richard K. Lochridge, Robert A. Niblock, Stephen F. Page, and O. Temple Sloan, Jr.

One of Lowe's strengths is being independent of any single product. The company balances its product portfolio with various brands. Also, Lowe's has

With its 1,534 stores all located in the United States or Canada, Lowe's may suffer from overdependence on its U.S. operations.

a good customer service reputation, which makes it well known in the industry. Another reason for Lowe's success is its focus on the needs of its diversified customers. By offering its special order sales system, Lowe's provides its customers a choice from a wider collection of product options beyond what the store stocks.

The most important weakness of Lowe's is probably its U.S.-dominated presence. Lowe's is concentrated almost entirely in the United States. Although it has some stores in Canada and has announced plans to enter into Mexico, Lowe's is dependent on its U.S. operations. Lowe's is not utilizing the opportunities in other markets. For example, the Chinese market is massive, and contrary to the U.S. market, is expected to expand; Lowe's rival The Home Depot acquired The Home Way, a Chinese home improvement retailer, in 2006. Lowe's is still losing out on opportunities, and thus reducing its competitiveness against its rivals.

Another disadvantage of Lowe's is its limited control on the quality of the products. The company has recalled some of its products for quality reasons. This most likely occurs because of Lowe's many different worldwide vendors. This diversity results in fewer quality checks and some defective products. Such incidents affect operations and its brand image and consumer perception, in which Lowe's is investing heavily.

See Also: Home Depot, The; Quality.

Bibliography. Lowe's, www.lowes.com (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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Low Wage Production

Low wage production is one of the most controversial issues in business analysis. Low wages can be found in both advanced and poor economies. Conventional economic theory suggests that there is no problem so long as factors of production, including labor, are paid their marginal product. If wages are low, this is because there are large numbers of unskilled and low-productivity workers competing for jobs. Moreover, customers benefit from low prices for goods and services. Artificially increasing wages only subsidizes the few and increases the level of unemployment. Critics complain that low wages reflect the exploitation of workers in general and disadvantaged groups in particular. They boost the profits of companies and undermine conditions for everyone.

There is no objective definition of low wages. Wage levels can be measured in absolute terms or in relation to a national average. If wage dispersion increases, there is a greater chance of more workers falling into a low wage trap. Simple marginal productivity theory has difficulties explaining the scale of wage differences, whether at the top where quite extraordinary pay increases have been made or at the bottom. It is often argued instead that low wages are a product of labor market segmentation. Women, migrants, and ethnic groups get caught in secondary labor markets where employment relationships are more casual and wages lower. Such labor market segmentation builds on and reinforces discrimination.

Labor market institutionalists argue that employers also have a choice of strategies, and some choose to emphasize low wage production and pursue policies to sustain this, including opposition to worker organization and state regulation. In many developing countries, this argument can be extended to incorporate the informal sector. Less-regulated labor markets in these countries also encourage the use of child labor, which pulls the overall wage rate. Poor countries have often been seen as labor surplus economies where production is effectively based on unlimited supplies of cheap labor that can migrate in from the countryside.

Two main means have been used to improve the condition of low wage workers. Workers themselves have organized to form trade unions, but since their bargaining position is not always strong, governments have also been pressured to pass minimum wage laws and antidiscrimination laws. Despite prophecies of doom from some economists, both trade unions and legislation can be argued to have a positive effect on the situation of low wage workers and the economy as a whole by reducing abuses and exploitation and forcing employers to look for more efficient forms of production. Many countries now have a minimum wage law to provide a floor to low wages. Ironically, some of the longest lived of these are to be found in the different states of the United States. The value of such laws has also been evidenced when the removal of protection for the low paid has not led to the positive effects claimed by neoclassical economists. Under the auspices of the International Labour Organization (ILO), there has also been an attempt to set minimum labor standards embodied in the 1998 Declaration of Fundamental Rights at Work.

In recent decades globalization has been argued to have created a greater space for low wage production. It has dramatically increased the size of the world working class and brought workers into closer competition with one another through deregulation and falling transport costs. This enables footloose capital to choose where it locates and who works for it. Governments reduce labor protection in favor of "deregulatory beauty contests" to attract this capital. This has weakened the bargaining power of labor as a whole and led to a shift in returns to capital and labor across the world and increased inequality between skilled and unskilled workers who are trapped in low wage production.

The alleged threat from intensified low wage competition manifests itself in the advanced world in increased immigration and competition from imported low wage goods. Outsourcing enables multinationals to engage in "social dumping" by moving production abroad to less-regulated areas. Export processing zones with unregulated or less-regulated conditions have become common. Antisweatshop campaigners have also evoked the plight of low wage workers in the developing world. This leads to claims that labor is being forced into a "race to the bottom." But it is arguable that a greater threat exists in competition of the low wage producers within and between poor countries. The threat of cheap Chinese production is perhaps more evident in Mexico than in the United States or western Europe.

However, these pessimistic arguments need to be subject to cautious assessment. Free market economists, for example, see low wage production as a stepping-stone to more sophisticated forms of production. Empirically, while there is no doubt that labor's position in advanced countries has been weakened, it is not clear that migration and trade with poor countries are large enough factors to account for it. Other accounts focus on the internal relations in the advanced world and policy choices to weaken labor. No less in the low wage producers, it is not always that case that those at the bottom of the supply chain have no bargaining power.

Arguments about low wage production are often presented as if there is an inevitable conflict of interest between workers in advanced and poor countries, the skilled and the unskilled. But what has been called "the high cost of low wages" can be argued to link together the interests of low wage workers in poor countries, low wage workers in advanced countries, and higher paid workers who not only often face the same employers but also are forced to subsidize low wage companies that fail to pay their workers a living economic and social wage. This is sometimes called "the Wal-Mart effect" after the U.S.-based multinational that prides itself on low prices but is accused of not only benefiting from low wage production but failing to provide the mass of its workers with health insurance, etc., which then has to be paid for out of state funds.

See Also: Child Labor; China; Export Processing Zone; Labor Standards; Outsourcing; Salaries and Wages.

Bibliography. E. Appelbaum et al, *Low-wage America: How Employers are Reshaping Opportunity in the Workplace* (Russell Sage Foundation, 2003); Anita Chan and Robert J. S. Ross, "Racing to the Bottom: Industrial Trade Without a Social Clause," *Third World Quarterly* (2003); M. Gregory, W. Salverda, and S. Brazen, eds., *Labour Market Inequalities: Problems and Policies of Low-Wage Employment in International Perspective* (Oxford, 2000); I. Hurtado and P. Argerey, "Social Dumping: The Debate on a Multilateral Social Clause," *Global Economy Journal* (2008); Jozef Konings and Alan Patrick Murphy, "Do Multinational Enterprises Relocate Employment to Low-Wage Regions? Evidence From European Multinationals," *Review of World Economics* (2006); Leslie Lipschitz, Céline Rochon, and Geneviève Verdier, *A Real Model of Transitional Growth and Competitiveness in China* (International Monetary Fund, 2008); Marcus Taylor, *Global Economy Contested: Power and Conflict Across the International Division of Labor*, Rethinking Globalizations, 14 (Routledge, 2008); *Walmart. The High Cost of Low Price*, DVD (Brave New Films, 2005).

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Loyalty

Loyalty, or customer loyalty, means that customers exhibit a commitment to, or a relationship with, an organization such as a retailer, a leisure service provider, a bank, or an airline. Loyal customers mean that the organization has a higher level of customer retention and thereby a more stable customer base. The longer a customer "stays" with an organization, the greater their experience of, and engagement with, the organization. For the organization, this leads to lower customer price sensitivity, reduced expenditure on attracting new customers, and improved organizational profitability. A loyalty business model is a strategic approach in which resources are deployed with the aim of increasing the loyalty of customers.

Customers may exhibit behavioral or attitudinal loyalty. Behavioral loyalty is exhibited by staying with a provider and/or by increases in the number or frequency of their purchases or both, leading to increased customer spending. Attitudinal loyalty is associated with a positive identification with the organization, which may lead to customers acting as advocates for the organization and thereby influencing the decisions of others. Both types of loyalty can be exhibited in relation to a brand, a retailer or their organization, or to a specific service or retail outlet.

Scholars have proposed four different segmentations of loyalty orientation that can be used as a basis for segmentation: (1) loyalty, associated with high relative attitude and high repeat patronage; (2) latent loyalty, associated with high relative attitude, but low repeat patronage; (3) spurious loyalty, associated with low relative attitude, but with high repeat patronage; and (4) no loyalty, associated with low relative attitude, and with low repeat patronage. J. Rowley develops this segmentation recognizing that some staying behavior is based on inertia rather than positive engagement with an organization, and suggests the following loyalty categories: captive, convenience-seeker, contented, and committed.

Loyalty schemes are one of the ways by which organizations seek to enhance customer spending and advocacy. Members give basic demographic details when they register as members. In exchange, they receive a plastic loyalty card, rewards card, point card, club card, or discount card. This card is then used as a form of identification when purchases are made so that rewards or points can be registered to the member's account or discount granted. While these rewards are intended to incentivize members to exhibit behavioral loyalty, some organizations also capitalize on the opportunity to link purchase behavior to demographic data, which allows them to segment their customer base and thereby to better target their offers. Loyalty schemes have become a widespread feature of the retail and service landscape. Major categories are in retail and operated by single retailers (e.g., Boots Advantage Card, Tesco Clubcard, Priceline Club Card); travel, which reward travelers with discounts or enhanced service (e.g., AAdvantage Program, Hyatt Gold Passport); and financial services, typically associated with store or credit or debit cards (e.g., American Express Membership Rewards, HSBC Premier). Coalition schemes are where a managing agent operates a scheme on behalf of a number of retail and service sector partners (e.g., AirMiles, Nectar).

Tesco Clubcard, managed by DunnHumby, is a particularly sophisticated loyalty scheme that builds brand awareness and engagement with the Tesco brand. Tesco regards Clubcard as a "thank you card," which has an underlying contract and promise that if members join the Clubcard, they become a long-term stakeholder in the brand. The reward design is multidimensional and targets both behavioral and attitudinal loyalty. The quarterly mail-out with reward points is used as an opportunity to communicate with customers and to create a positive event with impact. Rewards, available through Tesco Freetime, include experiences delivered by a range of other organizations/brands. Tesco has invested considerable effort in developing data-mining algorithms that allow them to mine the data in order to improve both the offer to the customer and to inform strategic decisions associated with entry into online retailing and financial services.

Some have suggested that the term *loyalty scheme* is a misnomer, since such schemes do not generate loyalty, but rather simply offer low-level discounts. Some organizations have withdrawn schemes, but other schemes have been long established, lending credence to the belief that as with many other business strategies, success lies in implementation that aligns with business objectives and context.

See Also: Brand Loyalty; Consumer Behavior; Customer Relationship Management.

Bibliography. Suraksha Gupta, Susan Grant, and T. C. Melewar, "The Expanding Role of Intangible Assets of the Brand," *Management Decision* (v.46/5–6, 2008); Shep Hyken, *The Cult of the Customer: Create an Amazing Customer Experience That Turns Satisfied Customers into Customer Evangelists* (Wiley, 2009); Anand Kumar Jaiswal, *Examining the Nonlinear Effects in Satisfaction-Loyalty-Behavioral Intentions Model* (Indian Institute of Management, 2007); David Kean and Chris Cowpe, *How to Win Friends and Influence Profits: The Art of Winning More Business from Your Clients* (Marshall Cavendish, 2008); Timothy L. Keiningham, Lerzan Aksoy, Bruce Cooil, and Tor Wallin Andreassen, "Linking Customer Loyalty to Growth," *MIT Sloan Management Review* (v.49/4, 2008); J. Rowley, "The Four C's of Customer Loyalty," *Marketing Intelligence and Planning* (v.23/46, 2005); Doyle Yoon, Sejung Marina, and Dongyoung Sohn, "Building Customer Relationships in an Electronic Age: The Role of Interactivity of E-commerce Web Sites," *Psychology & Marketing* (v.25/7, 2008).

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LUKOIL

LUKOIL (LSE: LKOD; NASDAQ: LUKOY; RTS: LKOH) is a Russian leader and significant global player in exploration and production of oil and natural gas. In 2007 the company accounted for 18.6 percent of Russian oil production and 18.1 percent of Russian oil refining. Globally, the company reported having 1.3 percent of the world's oil reserves and 2.3 percent of the world's oil production. LUKOIL's proven hydrocarbon reserves make up 20.4 billion barrels of oil equivalent (BOE). This makes the company the second in the world (after ExxonMobil) among publicly owned oil and gas companies in terms of reserves. LUKOIL's daily production of hydrocarbons reaches 2.2 million BOE. In 2007 net profit was $15,388 million (an increase of 25.1 percent compared to 2006).

The ambition of LUKOIL is to become and remain a global energy company. The company declares that it aims to support long-term economic growth, social stability, prosperity, and progress in the regions where it operates, as well as to care for the environment and to ensure sustainable use of natural resources.

Although the major oil exploration region for LUKOIL is western Siberia, the company is also involved in exploration and production projects in Central Asia, Africa, the Middle East, and South America. In addition, LUKOIL owns four refineries in Russia, as well as refineries in Ukraine, Bulgaria, and Romania. The company also has an extended retail network in 19 countries. It controls about 200 tank-farm facilities and close to 6,000 gas filling stations in Russia, the Baltic States, eastern Europe, Cyprus, Turkey, and the United States. In 2005 LUKOIL put in operation the Nakhodkinskoye gas field that started its gas program targeting rapid growth of gas production. The key regions for development of LUKOIL gas production are the Bolshekhetskaya Depression, the northern Caspian, and Tsentralno-Astrakhanskoye field in Russia as well as the Kandym-Khauzak-Shady project in Uzbekistan and the Shakh Deniz project in Azerbaijan.

The company was established in 1991 as a state concern named LangepasUraiKogalymneft (hence the current name LUKOIL). At the time of writing, over 50 percent of LUKOIL's stock were free-floated shares both in the Russian stock market and in the London Stock Exchange. LUKOIL proudly declares itself to be the only public Russian oil company whose share capital is dominated by minority stakeholders. LUKOIL's strategic partner is ConocoPhillips, an American oil and gas company that owns 20 percent of LUKOIL's stock. LUKOIL has a number of partnership agreements and joint projects in upstream, gas processing, and downstream projects with Gazprom.

Since 1993, LUKOIL has been headed by its president Vagit Alekperov. In the last years of the Soviet Union's existence, Alekperov held the positions of deputy and first deputy of the Ministry of Oil and Gas. Long-term experience in the oil and gas field as well as a powerful network of relationships in the industry maintained since Soviet times contributed to Alekperov's success in turning LUKOIL into an industry leader in Russia.

In 2008 the company employed about 150,000 people in 60 regions of Russia and 30 countries on four continents. LUKOIL, like most other Russian oil and gas companies, is one of the most attractive employers in the country. However, like many Russian companies in the natural extraction field, LUKOIL has an image as a secretive and tightly controlled organization. Visitors to the impressive LUKOIL headquarters in Moscow meet uniformed bodyguards, and both employees and visitors are subject to security checks and their belongings are x-rayed.

LUKOIL is known as a major sponsor of Russian sports teams, such as Spartak soccer club in Moscow, professional water polo club Spartak, LUKOIL motor-racing team, the national ski-racing team, and others. In 2007 the company provided financial support to the fund "Application Committee Sochi–2014," aimed at nominating Sochi to host the XXII Winter Olympic Games in 2014.

See Also: Company Profiles: Eastern Europe; ConocoPhillips; Gazprom; Russia.

Bibliography. LUKOIL, www.lukoil.ru (cited March 2009).

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Luxembourg

A landlocked country in Western Europe, Luxembourg (998 sq. mi., population 480,222, gross domestic product [GDP] $38 billion in 2007) is a hub of its economic and political activity. Once a part of the Low Countries that produced so much of the fine art and music of the late Middle Ages and Early Modern period, Luxembourg has a history dating back to the construction of Luxembourg Castle in 983, named for the House of Luxembourg whose dynasty presided over the country until 1477, when Luxembourg and the Netherlands became part of the Habsburg Empire. The modern state formally dates from 1867, after France and Prussia nearly engaged in war over control of the small country. Despite its independence, the king of the Netherlands remained the ruler of Luxembourg until 1890, when William III died and passed control of the Netherlands and Luxembourg to separate heirs.

Modern-day Luxembourg is a trilingual country, with German, French, and Luxembourgish as its official languages. Luxembourgish, spoken by some 300,000 people worldwide, is a Moselle Franconian language: a High German dialect developed among the German immigrants in France, Belgium, and Romania during the 12th and 13th centuries.

Luxembourg is a parliamentary democracy with a constitution ratified in 1868, a year after the second Treaty of London. The legislature is unicameral, consisting only of the Chamber of Deputies, the 60 members of which are directly elected from four regions every five years. The Council of State, 21 nonpoliticians appointed by the Grand Duke, advises the Chamber during the drafting of legislation. The Grand Duke, currently Henri I, is the hereditary monarch and head of state, while the prime minister is the head of government and serves on the Council of Government with the other ministers of the executive branch.

Since 1958, Luxembourg was part of the Benelux economic union with Belgium and the Netherlands—its fellow former Low Countries—the name of the union derived from the first letters of each country's name. Most of Benelux's concerns and duties have since been subsumed into the European Union, of which the Benelux countries were founding members.

Luxembourg is one of the wealthiest nations in the world, and the second-largest investment fund center (after the United States). The GDP per capita is the highest in the world—$87,995 in 2006—but in recent years the government has run at a budget deficit for the first time in recent history, a casualty of the 21st century's slowing economic growth. Inflation and unemployment have historically been low, and the GDP high, thanks to a history of industrialization and banking excellence. The industrial sector has included significant export levels of steel, chemicals, and rubber, and as industry declined, the financial sector has soared. The country has actively courted the interest of internet companies, and both Skype and eBay have opened headquarters in Luxembourg as a result.

See Also: Belgium; European Monetary Union; European Union; Netherlands.

Bibliography. Paul Arblaster, *A History of the Low Countries* (Palgrave Macmillan, 2005); J. C. H. Blom, Emiel Lamberts, eds., James C. Kennedy, trans., *History of the Low Countries* (Berghahn Books, 1999); Bernard A. Cook, *Belgium: A History* (Peter Lang, 2005).

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Maastricht Treaty

The Maastricht Treaty is the supranational agreement that created the European Union (EU) and moved member states closer to economic and political unity. Also known as the Treaty on European Union, it derives its name from the Dutch city Maastricht in which it was signed on February 7, 1992, following a prolonged period of often fractious and politically charged negotiations. After eventually being ratified by all members, the Maastricht Treaty took effect on November 1 of the following year, superseding the Treaty of Rome and the European Economic Community (EEC) and marking the greatest degree of multinational cooperation achieved to date among European member states. The treaty can be regarded as the continuation of a decades-long trend wherein many European nations have been progressively moving toward economic and political unity.

At the time the Maastricht Treaty brought the EU into existence, it contained 12 original member countries, with Austria, Finland, and Sweden later joining as additional signatories in 1995. In 2004 and again in 2007, the treaty was amended to permit the inclusion of 12 additional states (10 in 2004, two in 2007) into the EU. Presently three countries are candidates for EU membership, and the treaty is expected to be expanded again with the anticipated accession of Croatia, Macedonia, and Turkey into the EU, although as of 2008 no admission date had been agreed upon. However, in the wake of the rapid expansion of the EU in the first years of the 21st century, many citizens of current member states advocate a slower rate of expansion.

Subsequent external protocols associated with the Maastricht Treaty facilitated the adoption of new policies related to political and economic unity, including the establishment of EU citizenship, giving citizens of states holding full EU membership the right to live and work in any EU state and the right to vote in elections in that state. Many aspects of EU law and the Maastricht Treaty regulate matters unrelated to trade or economic affairs, such as television broadcast standards, exhaust regulations for automobiles, public health guidelines, and the elimination of capital punishment.

While many dimensions of the Maastricht Treaty also address social and political issues, arguably its primary function is to strengthen its members economically. Specifically, cultivation of closer economic linkages between member states improves the ability of the community as a whole to compete in the arena of global trade. By eliminating or reducing tariffs and by simplifying the movement of goods and labor across borders, the community as a whole was foreseen as becoming more economically efficient and competitive. The Maastricht

Treaty delineated policies and distinct phases of Economic and Monetary Union (EMU) that eventually led to the introduction of the euro in 1999 and established it as the common currency of most EU member states. The treaty also established the economic criteria that EU states must fulfill as members.

Additionally, the treaty created a body of institutions that have become collectively known as the "Three Pillars of the EU": the European Communities (EC) pillar that had existed in previous form within the European Community (EC) organization, the Common Foreign and Security Policy (CFSP) pillar, and the Police and Judicial Cooperation in Criminal Matters (PJCC) pillar. The first pillar, or EC Pillar, is concerned principally with economic, environmental, and social policies and addresses matters such as agriculture, customs, economic/monetary union, healthcare, and immigration and citizenship policies. The second, or CFSP Pillar, addresses foreign policy and military matters such as deployment of peacekeepers. The third, or PJCC Pillar, promotes cooperation in combating smuggling, terrorism, and other forms of crime. The pillar structure of organizing laws and regulations is slated to be abolished by merging into a single, consolidated European Union authority in 2009 pending the ratification of the Treaty of Lisbon.

Support for the Maastricht Treaty has not been universal, and its ratification was contested heavily in several nations including Britain, Denmark, and France. Elements within both the British government and the general public were opposed to certain social provisions proposed by Maastricht, and Britain was initially granted exemptions from the social chapter of the treaty such as those regulating workers' pay and benefits. After a change in government, Britain eventually did adopt Maastricht's social protocols, but together with Denmark and Sweden has declined to adopt the euro as its currency. After initially voting against the treaty by a narrow margin, Danish voters later narrowly voted to ratify Maastricht after Denmark was permitted to opt out of certain of the treaty's sociopolitical provisions. Maastricht was only narrowly approved by French voters in a 1993 referendum. More recently, in 2005, Maastricht's constitution was to be ratified, facilitating a greater merging of sovereignty among members, but opposition was voiced in many countries and voters in both France and the Netherlands rejected the EU constitution via referendum.

See Also: Common Market; European Monetary Union; European Union; Free Markets; Regional Integration; Treaty of Rome.

Bibliography. Stefania Baroncelli, Carlo Spagnolo, and Leila Simona Talani, *Back to Maastricht: Obstacles to Constitutional Reform Within the EU Treaty (1991–2007)* (Cambridge Scholars, 2008); Michael J. Baun, *An Imperfect Union: The Maastricht Treaty and the New Politics of European Integration* (Westview Press, 1996); Elizabeth E. Bomberg and Alexander C.-G. Stubb, *The European Union: How Does it Work?* (Oxford University Press, 2003); European Union, *The Treaty of the European Union, Mastricht Treaty*, February 7, 1992, www.eurotreaties.com (cited March 2009); Paul Hoebink, *The Treaty of Maastrict and Europe's Development Co-operation* (Aksant Academic Publishers, 2004); Berthold Rittberger, *Building Europe's Parliament: Democratic Representation Beyond the Nation-State* (Oxford University Press, 2005); James D. Savage, *Making the EMU: The Politics of Budgetary Surveillance and the Enforcement of Maastricht* (Oxford University Press, 2007); Constantin Stefanou, *The Dynamic of the Maastricht Process* (Bruylant, 2007).

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Macroeconomics

Macroeconomics is a part of economic analysis that focuses on the understanding of economic issues at the aggregated level. It is related to microeconomic analysis, which pursues the study of the individual economic behavior of economic agents such as households, firms, and governments and deals with the issue of the functioning of markets with an emphasis on welfare. Macroeconomics in contrast aims at the understanding of the economy as a whole. The study is concerned with the economic aggregates such as total demand for goods and services by households and firms, the total investment in the economy, the value of exports and the spending by the state sector. At the same time it endeavors to understand the relationship between national income and consumption as well as taxation, savings, and imports. The key issues of the analysis are national output and economic growth, unemployment, and the development of the price level in the form of inflation.

Macroeconomic analysis can take the form of a partial analysis in which relevant aspects are identified as the object of analysis within the general economic process. This follows an isolation of particular behavioral cause-effect relationships on the basis of assumptions, which leads to a construction of models. The ceteris paribus analysis examines how a change of a variable affects another dependent variable within the model and assumes that all other variables remain unchanged. This form of partial analysis is applied in the interest rate–investment relationship, for example. Here we assume that all other variables remain constant but that a change in the money supply will have an effect on the interest rate, which in turn will change investment in the economy.

Macroeconomics can also pursue a general analysis that analyzes the interdependence of all economic variables. Here the effect of a change in demand for a particular good X will be analyzed with regard to its effect on all other goods, prices, and production factors as well as on the general goods and factor markets. In particular, does the general analysis focus on the effect of a change of the price level in the goods market on other partial markets such as the money market and the factor market, in particular the labor market. The analysis can be ex-ante or ex-post. The ex-ante analysis incorporates the plans and expectations of economic agents and aggregates (e.g., construction of an equilibrium on the basis of the consumption and investment plans on the goods markets), whereby the ex-post analysis explains economic situations that have already taken place (e.g., national income accounting, circular flow of income, gross domestic product, etc.). Macroeconomics can take a static or a dynamic form, when it is assumed that no economic agent has any need to readjust their economic plans.

The analysis, however, blurs individual results due to the aggregation; this leads to macroeconomic analysis being less definite depending on the size and heterogeneity of the selected groups of aggregates. Keeping this in mind, the value of the macroeconomic insight is necessary for the identification of economic policy options and their respective efficacy. Macroeconomics plays an important role in growth theory, labor market theory, monetary theory, and international and development economics. The input-output analysis aims to disaggregate some of the macroeconomic variables to gain a more detailed insight into economic processes.

Some of the main issues in macroeconomic analysis are inflation, unemployment, and output and growth. The inflation rate is the annual increase in the average price of goods and services. The price index measures the average level of prices; the common price index is the Consumer Price Index (CPI). The CPI measures the cost of purchasing a standard basket of goods at different points in time: the prices are weighted according to the economic importance of each individual good or service included in the basket. The CPI is the most widely used measure of inflation and is also used as the basis for many governmental inflation targets. Other important indices used are the Retail Price Index (RPI), the GDP deflator, and the Producer Price Index (PPI).

Unemployment measures the number of people who are registered as actively looking for work. The unemployment rate is based on the labor force, which accounts for the total number of people in paid employment and those who are registered as looking for work. The unemployment rate is calculated as the number of people who are looking for work as a percentage share of the total labor force. Output and growth are commonly measured on the basis of the gross domestic product (GDP), which measures the total value of goods and services produced within an economy over a particular period of time (data can be quarterly or annual). The gross national income (GNI) measures the total income that is generated within an economy. Economic growth indicates a positive change in those figures. Macroeconomic theory assumes cyclical changes in the form of recessions and booms that have impact on the general price level in the economy (recessionary gap, inflationary gap) as well as the rate of employment.

Macroeconomic Policy

Macroeconomic policy is divided into two main policy options that aim to stabilize the economy and smooth out any cyclical fluctuations. These policies are fiscal policy and monetary policy. Fiscal policy uses a variation of taxation and government expenditure to affect the injections into and the withdrawals from the economy. Monetary policy focuses on a variation of the money supply and the setting of the interest rate as a cost of borrowing from the central bank by commercial banks and thereby affecting the overall lending rate within the economy. The government can also use the exchange rate to influence its trade volume and trade direction with other economies (open economy macroeconomics).

Keynesian Economics

The history of macroeconomic thought is determined by the development from classical economics where a natural adjustment toward full employment is assumed to Keynesian beliefs. John Maynard Keynes revolutionized economics by suggesting in his General Theory of Employment, Interest, and Money that this automatic adjustment does not take place and that supply does not create its own demand. He emphasized a refocus on an adjustment of the demand side within the economy to achieve an equilibrium. The General Theory reiterates many behavioral assumptions of the classical theory, in particular, the objectives of profit and utility maximization, marginal values, perfect competition on goods markets, the static form of analysis that assumes technology as given; furthermore, the analysis ignores the dynamic impact on economic growth of any of such factors as population and production factors. Keynes accepted the capitalist form of the economic structure, which enabled an incorporation of his theory into a neoclassical synthesis.

The Keynesian emphasis lies in the construction of the equilibrium level of national income from a short-term perspective, while allowing the capital stock to remain unchanged. This can result in an equilibrium situation below the level of full employment, which would then necessitate governmental intervention in the form of fiscal or monetary policy. The impact of any changes in consumption demand is highlighted by the multiplicator-accelerator process, which describes the size of the effect that a change in any of the autonomous demand aggregates (i.e., not dependent on national income, here nonconsumption demand) have on national income. This analysis assumes both a constant marginal propensity to consume and a constant marginal propensity to withdraw.

In the case of a national income level below full employment, any change in the autonomous demand aggregates will lead to an increase in national income over a number of periods in the form of the multiplier process, whereas any change in the autonomous demand aggregates (investment, government expenditure, exports) in a situation of full employment will lead to inflationary tendencies as demand will outweigh the potential of supply due to the scarcity of resources. One such autonomous demand aggregate is investment demand, and this aggregate is dependent on the interest rate and the marginal rate of capital productivity. As long as the marginal factor productivity is greater than the market rate of interest, investment will be positive, with the constraint of the constant marginal productivity investment being negatively related to the interest rate.

On the monetary side of the economy, Keynes assumes three motives for holding money, which have macroeconomic implications. These motives are transaction, precaution, and speculation. He derives the liquidity preference curve as the money demand curve, which shows a negative relationship between money demand and the interest rate. In the case of a strong fall of the market rate of interest, the speculation demand of money becomes infinite, which might lead to a liquidity trap. The Keynesian theory had a major influence in the formation of the relationship between inflation and unemployment. The Phillips Curve represents a growing rate of unemployment going alongside a fall in the inflation rate, thus suggesting a trade-off between inflation and unemployment. The trade-off was later refuted by Friedman and Phelps and their suggestion of the nonaccelerating inflation rate of unemployment (NAIRU). This NAIRU is the natural rate of unemployment at which the inflation rate remains constant. Monetarists believe that governmental policies can only achieve a reduction of this rate in the short term, as in the long term any of such policies will be purely inflationary.

A widely used form of analysis is the IS-LM model that describes a simultaneous derivation of an equilibrium on the goods market and the money market. Here the IS curve is derived from the goods market, which represents different equilibrium situations for various combinations of interest rate and national income. Within a closed economy with no state, the goods market is assumed in a state of equilibrium when $Y = C(Y) + I(r)$ or when $Y = C(Y) + S(Y)$, whereby Y denotes national income, $C(Y)$ consumption demand dependent on national income, $I(r)$ investment dependent on the market rate of interest, and $S(Y)$, savings dependent on national income and it holds that $C = Y - S$. The LM curve represents the money market equilibrium, where the demand for money (L) has to equal the exogenously determined (by the central bank) supply of money (M). The demand for money depends on the market rate of interest as well as on the national income level (motives for holding money), for the equilibrium M = L (r,Y) must hold. Within this analysis the variables Y, C, I, S, and L are considered ex-ante variables—they are planned. In the IS-LM diagram we can identify the interest rate–national income combination at which both goods and money market are in equilibrium.

A situation of disequilibrium leads in Keynesian analysis to output adjustments rather than price changes in the short run. This has repercussions on the labor market, hence also affecting national income, which in turn affects the consumption demand and hence impacts back onto the goods market. Such a cumulative effect of contraction of output and reduction in demand can result in a situation of depression with excess supply of products and labor. In this sense macroeconomic outcomes can be led back to microeconomic behavioral forms of economic agents in situations of disequilibrium that are also dependent on their expectations of future economic situations and outcomes. According to Leijonhufvud and Clover, Keynes highlighted the notion that prices do not always effectively signal shortages and excesses and hence do not always act to coordinate the plans of economic agents. Furthermore, it is doubtable whether the market rate of interest responds coherently to disequilibria between savings and investment demand within the economy, in particular when assuming international capital markets and recent developments in financial markets in the form of securitization.

Keynesian economics found its main impact until the 1970s, when a sustained phase of stagnation in many developed nations led to a monetarist counterargument. This movement led to a refocus of governmental policies onto monetary policies rather than fiscal ones. Keynesian theory had a strong impact on functional finance whereby a contractionary economic policy was meant to tackle an inflationary situation whereby the expansionary economic policy aimed at a deflationary gap in the form of economic fine tuning under the belief of cyclical changes. These cyclical fluctuations could vary from Kontradieff-cycles (50–60 years), Juglar-cycles (9.5 years), to Kitchin-cycles (3.5 years).

See Also: Capitalism; Globalization; Open Economy Macroeconomics; United States.

Bibliography. Daron Acemoglu, *Introduction to Modern Economic Growth* (Princeton University Press, 2009); Paul R. Bergin, "How Well Can the New Open Economy Macroeconomics Explain the Exchange Rate and Current Account?" *Journal of International Money and Finance* (v.25/5, 2006); M. Alper Cenesiz and Christian Pierdzioch, "Financial Market Integration, Labor Markets, and Macroeconomic Policies," *International Review of Economics and Finance* (v.17/3, 2008); José María Fanelli, *Macroeconomic Volatility, Institutions and Financial Architectures: The Developing World Experience* (Palgrave Macmillan, 2008); Robert H. Frank, Ben Bernanke, and Louis Johnston, *Principles of Macroeconomics* (McGraw-Hill Irwin, 2009); Milton Friedman, "The Role of Monetary Policy," *American Economic Review* (v.58, 1968); F. H. Hahn and F. P. R. Brechling, eds., *The Theory of Interest Rates* (Macmillan, 1965); John Maynard Keynes, *The General Theory of Employment, Interest and Money* (Macmillan, 1936); A. Leijonhufvud, *On Keynesian Economics and the Economics of Keynes* (Oxford University Press, 1968); E. Phelps, "Money-Wage Dynamics and Labour Market Equilibrium," *Journal of Political Economy* (v.76, 1968); P. A. Samuelson, "Interaction Between the Multiplier Analysis and the Principle of Acceleration," *Review of Economics and Statistics* (v.21, 1939); John N. Smithin, *Money, Enterprise and Income Distribution: Towards a Macroeconomic Theory of Capitalism* (Routledge, 2009).

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Madrid General Index

The Índice General de la Bolsa de Madrid (IGBM), or Madrid General Index, represents the most relevant set of indices in Spain besides the IBEX 35. The Madrid General Index is comprised of a changing number of stocks (currently more than 100) that are traded in the Bolsa de Madrid. The IGBM is made up of two sets of indices: based on price and profitability measures. It has been published since the end of the 1940s. From 1986, the IGBM, both for prices and yields, has not changed its base, and the calculations are linked to the current series with the December 31, 1985, base = 100. The base value of the new sectorial and subsectorial indices has been 1,000 since the closing of the market on December 31, 2004.

The IGBM indices are divided into two series: the first corresponds to all the series of price indices and the second to performance indices. Composition and weightings are the same for both. The unified sectorial and subsectorial classification for Spanish Exchanges (BME) established on January 1, 2005, applies to all IGBM companies. IGBM's sectors are as follows:

1. Oil and energy
2. Basic materials, industry, and construction
3. Consumer goods
4. Consumer services
5. Financial and real estate services
6. Technology and telecommunications

The management of the IGBM is the responsibility of the management committee, which is supervised and appointed by the board of directors of the governing body of the Bolsa de Madrid. The management committee responsible for the IGBM indices is comprised of five members and a general coordinator (responsible for calling ordinary and extraordinary meetings) whose functions are (1) ensuring that the indices are calculated in accordance with prevailing technical rules; (2) holding half-yearly meetings to decide on the composition of the IGBM for the following six months, as well as extraordinary meetings, whenever necessary; and (3) drawing up a report, which must be approved by the board of the governing body if it is necessary to change the technical rules for calculating the IGBM indices.

IGBM is not made up of a fixed number of companies. During each six-monthly meeting, all those companies that fulfill all the requirements are admitted and those that no longer do so are excluded. The criteria to join the IGBM are based on the following liquidity features: (1) trading volume of more than €3 million; (2) turnover velocity of more than 10 percent of capitalization on an annual basis, taking into consideration only the equity capital in free float; and (3) trading frequency of more than 50 percent.

At the extraordinary meetings, those companies who, in the committee's view, are likely to meet the requirements can join the IGBM before the next six-monthly definition. The management committee makes decisions on admission or exclusion of companies when it deems convenient and under special circumstances that are not mentioned in the prior specifications.

The weighting of each company is calculated on the basis of the market capitalization on the last day of the preceding six-month period. The following adjustments are taken into account: capitalization adjustment of Spanish companies in the IGBM, weightings of sectors and subsectors, and adjustments for foreign companies. In order to calculate the IGBM on a daily basis, the daily indices of each IGBM-listed company are used. The Index Value, with 100 as the base, is the quotient between the daily price and the so-called reference price, that is, the price at the close of the day prior to the change in the composition of the IGBM. In relation to daily adjustments for operations that affect IGBM-listed companies, capital increases, or mergers and acquisitions between two IGBM companies belonging to the same subsector, or splits, are taken into account for the daily calculation of the index, although dividends paid by companies are not.

See Also: CAC 40 Index (Paris); DAX Index (Germany); Dow Jones Index; FTSE; S&P 500 Index.

Bibliography. Begoña Moreno Castaño, *La bolsa de Madrid. Historia de un mercado de valores europeo* [Bolsa de Madrid. History of a European Stock Exchange] (Universidad de Cantabria, 2007); IGBM Management Committee, *Technical Rules for the Composition, Classification by Sectors and Calculation of the IGBM Family of Indices*, version 7.0, June 27, 2007, www.bolsamadrid.es (cited March 2009); Javier Ybáñez, "Spain: Domestic Stock Exchanges," in *World Stock Exchanges: A Practical Guide*, Hugh Maule, ed. (Globe Business Publishing, 2007).

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Make-or-Buy Decision

The term *make-or-buy decision* represents the decision of firms to organize their goods and services internally or externally. This decision is so central to the functioning of businesses that it has attracted scholars from multiple disciplines such as supply chains, vertical integration, technology, flexibility, allocation of resources, large versus small organization, and core competencies, among others. Further, factors that have been documented as being central to the make-or-buy decision include total acquisition cost, complexity of the product, technological factors, costs, and skills. Others have discussed factors that include environment characteristics, lifetime costs, and opportunity costs. Although these factors are important, what is missing is the role of market orientation and production costs in the make-or-buy decision-making process.

Given that market orientation leads to superior performance, and that production costs depend on the costs of transportation, which in turn depend on the cost of fuel, it is imperative that managers understand the circumstances under which a making or buying decision is most desirable.

The Make-or-Buy Model

Market orientation refers to the extent to which a firm is able to meet customers' needs. John Narver and Stanley Slater (1990) view market orientation as a combination of three behavioral components—customer orientation, competitor orientation, and interfunctional coordination—whereas Ajay Kohli and Bernard Jaworski's (1990) view of market orientation relates to information generation, dissemination, and responsiveness relating to customers. Clearly, the fundamental benefit of being market oriented is the creation of superior customer value and continuous superior performance for the business. Empirical research supports this assertion. However, market orientation is the function of costs; e.g., if a product is expensive, customers may be unwilling to buy, and thus a lack of market orientation on the part of firms.

Further, the significant increase in the geographical scale of production and distribution has necessitated that firms compare production costs. For the purpose of this study, production costs is defined as the total costs incurred by a firm through the purchase of input goods, its transportation to a plant, and its production. Prior research addresses the elements of time in transportation, such as order time, timing, punctuality, and frequency, and evaluates the differences between adjacent trading partners, nearby trading partners, and distant trading partners. However, there is little reference to the heart of the transportation costs, such as the cost of fuel. Clearly, an alternative to geographical proximity is that suppliers that are located far from plants should coordinate their transportation systems, leading to considerable reduction in transportation time and costs. Or, firms should make the product in-house, leading to savings in transportation time and costs.

Research indicates that a "make" decision is desirable when strong competition exists between firms and their vulnerable core competencies. By contrast, a "buy" decision allows firms to respond flexibly to changes that can occur in technology, demand, and costs, and hence avoid inefficiencies. This makes the argument for the need for inclusion of market orientation and costs in the make-or-buy decision-making model in order to create superior value for customers and superior performance for businesses.

The model suggests that although a firm's decision to make gives rise to market orientation, its initial cost of production increases up to a point, beyond which the production cost decreases, and thus enables a firm to be more cost competitive and market oriented. By contrast, a firm's decision to buy has a constant cost. While one scenario may suggest that the production cost exceeds the benefit being market orientation, another scenario suggests that the benefit of market orientation outweighs the cost of production. A third scenario indicates that buying is more desirable than making because buying is always cheaper than making. Clearly, the first scenario is desirable for managers engaged in service industries, whereas the second scenario is applicable to manufacturing. The third scenario is advisable for managers who need to maintain a stable market orientation and thus keep production cost low; however, firms that are equipped to handle only stable markets will not be effective because real markets are often complex and unpredictable.

Although the model depicts how costs can be minimized, sometimes volatile changes in the price of fuel should be factored into the production costs. Indeed, rising fuel costs have been identified as an emergency that affects all supply managers. In sum, the implication for managers is that they should recognize the need for preserving market orientation by keeping costs low through the make-or-buy decision.

See Also: Manufacturing; Off-Shoring; Operations Management; Outsourcing; Supply Chain Management.

Bibliography. Balram Avittathur and Paul Swamidass, "Matching Plant Flexibility and Supplier Flexibility: Lessons From Small Suppliers of U.S. Manufacturing Plants in India," *Journal of Operations Management* (v.25/3, 2007); Bernard Jaworski and Ajay Kohli, "Market Orientation: Antecedents and Consequences," *Journal of Marketing* (v.57/July, 1993); Ajay Kohli and Bernard Jaworski, "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing* (v.54, 1990); Socrates Moschuris "Triggering Mechanisms in Make-or-Buy Decisions: An Empirical Analysis," *The Journal of Supply Chain Management* (v.43/1, 2007); John Narver and Stanley Slater, "The Effects of a Market Orientation on Business Profitability," *Journal of Marketing* (v.54/4, 1990); Nada Sanders, "Pattern of Information Technology Use: The Impact on Buyer-Supplier Coordination and Performance," *Journal of Operations Management* (v.26/3, 2008); Stanley Slater and John Narver, "Does Competitive Environment Moderate the Market Orientation-Performance Relationship?" *Journal of Marketing* (v.58/1, 1994).

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Malaysia

Malaysia is located in southeastern Asia on a peninsula bordering Thailand to the north, the northern one-third of the island of Borneo bordering Indonesia, Brunei, and the South China Sea, south of Vietnam. The country is slightly larger than New Mexico. The capitol of Malaysia is Kuala Lumpur.

Great Britain established colonies and protectorates in the area of current Malaysia during the late 18th and 19th centuries. During World War II Malaysia was occupied by Japan from 1942 to 1945. In 1948, the Federation of Malaya was formed on the Malay peninsula, which became independent in 1957. Malaysia joined the United Nations on September 17 of that year. The present day Federation of Malaysia was formed with the merger of the former British colonies of the East Malaysian states of Sabah and Sarawak on the northern coast of Borneo; Singapore joined Malaya in 1963. The first years of Malaysia were volatile; there was a communist insurgency, a confrontation from Indonesia, Filipino claims to Sabah, and Singapore's expulsion from the federation in 1965. From 1981 until 2003, under the longest-serving prime minister, Mahathir bin Mohamad, Malaysia successfully diversified its economy by reducing its dependence on exports of raw materials and expanding into manufacturing, services, and tourism.

Some of Malaysia's natural resources include tin, petroleum, timber, copper, iron ore, natural gas, and bauxite. Its estimated population in 2008 was approximately 27 million. The dominant religion is Islam, followed by Buddhism and Hinduism. The country's official language is Bahasa Malaysia.

Government

The government of Malaysia is a constitutional monarchy, and the heads of the states are either hereditary sultans or appointed governors. The constitution was ratified on August 31, 1957, and has been amended many times since. The most recent amendment to the constitution was in 2007. The position of the king is largely ceremonial; the current king is Sultan Mizan Zainal Abidin, who has acted in that capacity since December 13, 2006.

The cabinet is appointed by the prime minister from among the members of Parliament with consent of the king. Kings are elected for five-year terms by and from the hereditary rulers of nine of the states. The last election was held on November, 3 2006 and the next will be held in 2011. The prime minister is selected from the house of representatives. When the legislative elections have concluded, the leader who commands the support of the majority of members in the house becomes prime minister. It has been tradition since independence that the leader of the UMNO party becomes prime minister.

The bicameral Parliament or Parlimen consists of the house of representatives, known as Dewan Rakyat, and the senate, which is known as Dewan Negara. This upper house contains 70 seats, with 44 appointed by the king and 26 elected by 13 state legislatures. These senators serve three-year terms with a limit of two terms. The house of representatives or Dewan Rakyat is made up of 222 seats. The members are elected by popular vote to serve five-year maxi-

Malaysia is rich in natural resources, such as this lumber being prepared for export. The country has thrived through export-oriented industrialization and a series of pragmatic economic policies.

mum terms. Elections for the house of representatives were held on March 8, 2008, and are also scheduled for June 2013. Citizens must be 21 years of age or older in order to vote.

There are a variety of sharia and civil courts in Malaysia. Civil courts include the federal court, court of appeal, high court of Malaya on peninsular Malaysia, and the high court of Sabah and Sarawak in the states of Borneo (judges appointed by the king on the advice of the prime minister). Sharia courts include sharia appeal court, sharia high court, and sharia subordinate courts at the state level, and deal with religious and family matters such as custody, divorce, and inheritance, but only for Muslims. Decisions of sharia courts cannot be appealed to civil courts.

Economy

Malaysia today is an emerging multi-sector economy. However, in the 1970s it was a producer of raw materials. When Prime Minister Abdullah Badawi came into office in 2003, he tried to shift the Malaysian economy farther up the value-added production chain in several ways. Foremost, he attracted investments in high-technology industries, medical technology, and pharmaceuticals, which has largely contributed to the nation's successful diversification strategy. Electronics exports remain a significant driver of the economy, but the government is continuing efforts to boost domestic demand to wean the economy off of its dependence on exports. Malaysia profited from the higher world energy prices of 2008 since it is an oil and gas exporter. However, the rising cost of domestic gasoline and diesel fuel forced Kuala Lumpur to reduce government subsidies.

The country was hit hard by the Asian Currency Crisis in 1996–97 but recovered by 2000. Inflationary pressures began to build in 2007 and in 2008 inflation stood at nearly 6 percent, even though Malaysia "unpegged" the ringgit from the US dollar in 2005 and the currency appreciated 6 percent per year against the dollar 2006–08. This has helped to hold down the price of imports.

The government presented its five-year national development agenda in April 2006 through the Ninth Malaysia Plan, which outlined the national budget for 2006–10. Prime Minister Abdullah unveiled a series of development plans for several regions of Malaysia that have faced the challenge of attracting business investment. Under Prime Minister Abdullah's leadership real gross domestic product (GDP) growth has averaged about 6 percent per year, but regions outside of Kuala Lumpur and the manufacturing hub of Penang have not seen such gains.

The Malaysian central bank has maintained healthy foreign exchange reserves and the regulatory regime has limited Malaysia's exposure to riskier financial instruments and the global financial crises. So while these steps may spare Malaysia some of the brunt of the economic financial crisis that began in 2008, decreasing worldwide demand for consumer goods is expected to hurt economic growth.

Malaysia's estimated Purchasing Power Parity per capita for 2008 was $15,700. Purchasing Power Parity in general for 2008 was $397.5 billion (estimated). The GDP composition by sectors is as follows: agriculture, 9.7 percent; industry, 44.6 percent; services, 45.7 percent. The estimated unemployment rate for 2008 was 3.7 percent, but that rate was expected to rise as demand for consumer goods decreases. Estimated public debt for 2008 was about 43 percent and the federal budget had a deficit of approximately $10 billion.

In terms of agriculture products, peninsular Malaysia primarily produces rubber, palm oil, cocoa, and rice. The Sabah region primarily produces subsistence crops, rubber, timber, coconuts, and rice and the Sarawak area produces rubber, pepper, and timber.

In terms of industries, peninsular Malaysia hosts rubber and palm oil processing and manufacturing, light manufacturing, electronics, tin mining and smelting, logging, and timber processing. Sabah hosts logging and petroleum production and Sarawak hosts agriculture processing, petroleum production, and refining, and logging.

Sabah and Sarawak are located in the Eastern portion of Malaysia. Some major ports and terminals are Bintulu, Johor Bahru, Kuantan, Labuan, George Town (Penang), Port Kelang, Tanjung and Pelepas.

The Strait of Malacca and South China Sea are the principal bodies of water surrounding Malaysia and are high-risk areas for piracy and armed robbery of ships. There have been numerous reports of commercial vessels that have been attacked and hijacked both at anchor and while underway. The vessels that are hijacked are often disguised and their cargo is diverted to ports in east Asia. Their crews are usually murdered or cast adrift.

Regional Issues

Malaysia is one of several nations that have asserted sovereignty over the Spratly Islands. China, the Philippines, Taiwan, and Vietnam have also asserted sovereignty over these islands in question. In 2002 the "Declaration on the Conduct of Parties in the South China Sea" eased tensions between the nations over the Spratly Islands, but it is not legally binding. In March 2005 a joint accord among the national oil companies of China, the Philippines, and Vietnam was established regarding marine seismic activities in the Spratly Islands. However, Malaysia was not a party to the accord.

Other disputes continue over deliveries of fresh water to Singapore and Singapore's land reclamation, bridge construction, and maritime boundaries in the Johor and Singapore Straits. The International Court of Justice has even gotten involved and held public hearings in 2007 in response to the Memorials and Countermemorials filed by the parties in 2003 and 2005 over sovereignty of Pedra Branca Island/Pulau Batu Puteh, Middle Rocks, and South Ledge. The Court awarded Ligitan and Sipadan Islands, also claimed by Indonesia and the Philippines, to Malaysia but left maritime boundary and sovereignty of Unarang rock in the hydrocarbon-rich Celebes Sea in dispute. In September 2008 Brunei and Malaysia agreed to resolve their offshore and deepwater seabed dispute, resume hydrocarbon exploration, and renounce any territorial claims on land.

Malaysia is a major center in human trafficking of women and children for the purpose of commercial sexual exploitation, and men, women, and children for forced labor. Those who migrate willingly from south and southeast Asia to work usually go to Malaysia, and some are essentially involuntary servants of Malaysian employers in the domestic, agricultural, construction, plantation, and industrial sectors. Malaysia enacted antitrafficking legislation to combat this problem in July 2007, but it did not take action against exploitative employers or labor traffickers. Additionally, the government had not ratified the 2000 UN Trafficking in Persons (TIP) Protocol as of 2008.

See Also: Asian Financial Crisis; Association of Southeast Asian Nations; Emerging Markets; Newly Industrialized Countries; Sea Piracy; Singapore; Smuggling.

Bibliography. James S. Ang, *Financial Development and Economic Growth in Malaysia* (Routledge, 2008); CIA, "Malaysia," *World Factbook*, www.cia.gov (cited February 2009); Federation of International Trade Associations, "Malaysia Information," www.fita.org (cited March 2009); Ruzita Jusoh and John A. Parnell, "Competitive Strategy and Competitive Performance Measurement in the Strategy Malaysian Context: An Exploratory Study," *Management Decision* (v.46/1–2, 2008); *Malaysia Ninth Economic Development Plan 2005–2010 Handbook* (International Business Publications USA, 2008); Mohamed Ariff Syed Mohamed, *Capital Markets in Malaysia: Corporate Finance, Investment Management, Banking and Corporate Governance* (McGraw-Hill Malaysia, 2008); Joan M. Nelson, Jacob Meerman, and Abdul Rahman Embong, *Globalization & National Autonomy: The Experience of Malaysia* (Institute of Southeast Asian Studies, 2008); Jeff Tan, *Privatization in Malaysia: Regulation, Rent-Seeking and Policy Failure* (Routledge, 2008); Tuck Cheong Tang and Hock Tsen Wong, *Malaysia's International Trade Issues: An Impressionistic View* (Pelanduk Publications, 2008).

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Managed Float Regime

The current worldwide financial environment is called a managed (or dirty) float regime. With national and regional economies increasingly intertwined, currencies are almost universally managed by central authorities: While exchange rates fluctuate daily, central banks or other institutions buy and sell currencies in order to influence their value. This intervention works, in part, to slow down the damage that can be done by economic crises in the international economy.

The *managed* modifier is used to highlight the difference between this circumstance and a "pure" floating exchange rate, one in which those fluctuations are governed by market forces. The dirty float regime is one in which currencies are allowed to fluctuate—they are not pegged to fixed values as in fixed exchange rate systems—but intervention manipulates those fluctuations, like the paddle in a boat at sea, still bobbing with the waves rather than being affixed to a pylon, but (ideally) never capsizing or pulled too far in one direction or another.

The foreign exchange market, currency speculators, and arbitrageurs all amplify the size and frequency of currency fluctuations, and central bank intervention is meant to counteract that. More than three quarters of the activity on the foreign exchange market is speculative, purchases made with no intention of "spending" that currency. This has been increasingly true since the late 1990s, when currency speculation started to become more and more intense, more and more aggressive. When speculators short huge amounts of a country's currency, the government can buy it back in order to stabilize prices and prevent a plummet—essentially acting as a force to countermand the already artificial nature and very real effects of currency speculation and the treatment of money as a commodity good.

Compared to private entities, central banks have tremendous foreign exchange reserves, and use various strategies to try to stabilize the market, influence inflation or interest rates, and constrict or enlarge the money supply. There is often a target rate for their currency—not as fixed as a pegged rate, but a range to shoot for. Economist Milton Friedman has advocated applying the buy low/sell high strategy to the managed float: Central banks should buy up their currencies when they are exchanging at too low a rate, and sell them when the rate is too high, thus not only stabilizing the currency market but making a profit. To date, central banks' activities have been more reactive than this, and so there is too little real-world data to evaluate the effectiveness of Friedman's strategy.

Typically, intervention occurs not with every jot and jostle of the market, but a few times a year in order to right the course. It is not always enough, but the severity of currency-related crises like the Asian financial crisis of the late 1990s is enough to demonstrate the need for action of some kind.

See Also: Asian Financial Crisis; Central Banks; Currency; Currency Speculators; Currency Zone; Dirty Float; Flexible Exchange Rate Regime; Floating Exchange Rate; Foreign Exchange Market; Foreign Exchange Reserves; Hedging; Market Maker.

Bibliography. Alan Greenspan, "The Roots of the Mortgage Crisis: Bubbles Cannot Be Safely Defused by Monetary Policy Before the Speculative Fever Breaks on its Own," *Wall Street Journal* (December 12, 2007); William Greider, *One World, Ready or Not* (Penguin Press, 1997); Peter A. McKay, "Scammers Operating on Periphery of CFTC's Domain Lure Little Guy With Fantastic Promises of Profits," *Wall Street Journal* (July 26, 2005); Gregory J. Millman, *Around the World on a Trillion Dollars a Day* (Bantam Press, 1995); John J. Murphy, *Technical Analysis of the Financial Markets* (New York Institute of Finance, 1999); Brian J. Stark, *Special Situation Investing: Hedging, Arbitrage, and Liquidation* (Dow-Jones Publishers, 1983).

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Management

Management is the process that organizations use to reach their goals utilizing people and other resources. Organizations and the environments that they are located in are changing quickly and significantly. Traditional hierarchical command and structured organizations are proving too slow and costly for the 21st century. Rather than working with a boss and subordinates, an increasingly typical situation is one driven by teamwork that integrates different types of know-how to foster creative solutions. Information technology is offering new and richer ways for people to collaborate, even when they are located in different parts of the world. Networking is increasingly an important factor. On one level organizations are partnering with other organizations to combine their expertise and strengths to take advantage of opportunities otherwise unavailable to them—for example through joint ventures. On another level individuals are increasingly creating and joining networks in their companies, professions, and very large global ones.

The Evolution of Management Thought

The roots of management are in ancient military organizations. Sun Tzu's *The Art of War* (4th century B.C.E.) is an example that discusses many strategic, structural, and interpersonal management issues. Adam Smith in *The Wealth of Nations* (1776) had the insight that having each person perform a narrow task well might result in greater agility and quality in production. This notion is called job specialization or the division of labor.

In the early 20th century, Frederick W. Taylor put forth an approach called "scientific management." This involved doing time-and-motion studies and otherwise collecting data to try to determine the best ways to do each task and movement that constituted a job. Henri Fayol, a French mining executive, in his book *General and Industrial Management* (1916), developed a functional taxonomy of management comprised of organizing, command, coordination, and control. Max Weber, a German academic, in *The Theory of Social and Economic Organization* (1922), distinguished traditional nepotistic family-run businesses from ones with more fairness and objectivity in hiring, promoting, and decision making. He called such "rational" organizations "bureaucracies," emphasizing that they ran on the basis of set rules and policies rather than the whims and power of individuals. Chester Barnard's *The Functions of the Executive* (1938) viewed organizations as cooperative systems, which need to obtain the voluntary cooperation of their members.

In the mid-20th century, Herbert Simon suggested that managers do not search indefinitely for the best alternative but rather often decide upon a decision choice that will work, although not necessarily optimally. He called this "satisficing." In the 1960s organizations were viewed as systems analogous to biological organisms. Under "systems theory," organizations first took in inputs, such as financial material and human resources, which went through a transformation process, involving technologies and managerial actions, within the organization; next they sent out outputs, including goods and services.

In the 1980s and 1990s, "quality management," sometimes called "Japanese management," became a leading approach. Key features included the continuous improvement of products and services, of the level of customer satisfaction with them, and Just-in-Time (JIT) inventory, where the company purchases of materials would be limited to those needed for the particular day or week. In the 21st century, managing for sustainability, or "green management," is increasing its influence as companies grapple with the ethical and legal need to make their operations and products support, rather than hurt, our natural environment.

Culture, Environments, and Ethics

Just as different nationalities have cultures, so do organizations. The internal environment of an organization includes a corporate culture that is comprised of the key values, beliefs, understandings, and norms generally shared by members of the organization. The fundamental values that characterize an organization's culture are communicated through symbols, stories, slogans, and ceremonies.

Contemporary business is often conducted by multinational companies (MNCs) operating around the world. More and more markets are becoming worldwide ones, and organizations must recruit people who are adept at intercultural relations and communications. One important trend has been outsourcing of jobs from high-wage countries to low-cost ones.

The publicity of a series of large corporate scandals involving Enron, Arthur Andersen, WorldCom, Tyco, poison-painted Chinese toys, and Bernard Madoff provided an impetus for higher expectations of managers. The Sarbanes-Oxley law reflects this trend. A key way companies can be ethical is through devising strategies whereby they help to alleviate poverty, improve health, or introduce environmental sustainability through business activities that are profitable. So rather than rue the need to spend money on the research and development of environmentally helpful and conscientious parts of a product or service, a company might relish the prospect of aligning with the requirements of society before they are legally mandated so that if that does occur, they will be in the best competitive position.

Functions

The management process is comprised of planning, organizing, leading, and controlling activities. Planning involves setting goals and objectives and determining what actions should be taken to move toward accomplishing them. Organizing is the process of assigning tasks, allocating resources, and coordinating the people and groups of the organization in the implementation of plans. Leading is the process of encouraging others to commit themselves to working well and supporting goals. Controlling is the process of evaluating actual work performance against planned results and directing any adjustments that might be needed to improve performance.

One of the important choices in decision making is whether a decision is best made by a manager or a larger group. Group decision making must occur with a sensitivity to avoid the tendency toward groupthink, or premature agreement on a decision. Some companies institute a devil's advocate position to ensure that the potential downsides of proposals are accurately considered. Problem solving can be improved through such creativity-stimulating procedures as brainstorming, where initially all ideas that come to mind are put on the table and then evaluated. Increasingly, teams are highly diverse and global. Also, working over the internet in virtual teams is an important trend.

Beyond tactical or short-term plans, organizations develop long-term strategies. Sometimes these are premised on competitive advantages exceeding those of competitors for providing superior value. Sometimes firms articulate the fundamental purposes of their organization in mission statements. The strategic management process involves environmental analysis of demographic and cultural aspects of societies in which the organizations exist, the technological product and processes available, the force of the economy, and legal and political forces (both local and international). When developing strategy, an organization must also analyze its internal capabilities, including its operations, logistical activities, marketing and sales, service procurement, technology development, human resource management, firm infrastructure, and resource management. Often firms focus on their core competence associated with things they do best. Generic strategies for obtaining competitive advantage include striving to be the lowest-cost producer of a product or provider of a service and making their product or service different in ways valued by customers. Firms must monitor and evaluate how their strategies are implemented and attempt to adjust them in line with the implications of such information.

Organizational Structure

Organizational structure refers to how the people, departments, technologies, and locations of a company are connected. Different ways of structuring an organization are appropriate for different situations. When units or people are interdependent and require each other to complete their work well, an integrated structure that fosters interaction, coordination, and cooperation might be appropriate. Organizations that have a formal structure are often specified by organizational charts showing how people and units are connected with each other as far as who reports to whom and who has authority over whom.

The current tendency is to move away from hierarchical multilevel organizations and rather institute flatter ones where employees are empowered and enabled by technology to make decisions themselves rather than seeking the approval of higher-ups as much. Traditional organizations were centralized, where top management had to approve most things. Contemporary organizations are more typically decentralized. Some organizations are organized around certain products or services; others are organized around categories of customers; and yet others have geographic structures. Organizations in which people have two bosses are called matrix structures. For example, a person might report to a functional department head (e.g., finance) and also to the head of a project they are in, such as the solar energy project.

Managing in a Networked World

Information systems were initially used for data storage. The ability to provide numerical summaries and calculations involving data was called "data processing." As computer technology developed, management information transcending mere data agglomeration was provided by these technologies. Initially a company's information was centralized in one large computer, access to which was through specialized programmers. Then the microcomputer revolution of the 1980s fostered the dispersion of the collection and analysis of information and companies to many small computers in departments, offices, and even on individual desks. This fragmentation was reversed to an amazing extent in the 1990s and early 21st century by the development of organizational networks (or intranets) and the internet and World Wide Web.

At the onset of the second decade of the 21st century, more sophisticated collaborative social and professional networking technologies are changing many managerial functions. For example, LinkedIn.com is a worldwide social and professional network with more than 30 million members. LinkedIn allows a manager in, for example, the pharmaceutical industry in New Jersey to find experts in new media in places such as Finland or India to collaborate on fulfilling needs, perhaps developing Web-based training.

An incipient trend that may develop into an important venue for conducting business is the use of three-dimensional augmented virtual interfaces, such as virtual worlds. For example, the Second Life virtual world provides people in business with a virtual representation of themselves (called an "avatar") that can attend meetings and share and discuss documents and PowerPoint presentations, while making nonverbal gestures and expressions. So a publisher in London might have a meeting in Second Life with production people in Mumbai, editors in San Francisco, and marketing people in Pretoria without the time delay, cost, neglect of their jobs, and exhaustion of contemporary travel. Certainly the benefits for global sustainability of such a structure are stark.

See Also: Corporate Social Responsibility and International Business Ethics; Leadership; Management Development; Management Education; Management Research; Management Science; Operations Management.

Bibliography. Charles Wankel, ed., *Alleviating Poverty Through Business Strategy* (Palgrave Macmillan, 2008); Charles Wankel, ed., *21st Century Management* (Sage, 2008); Charles Wankel and Robert DeFillippi, eds., *Educating Managers Through Real World Projects* (Information Age Publishing, 2005); Charles Wankel and James A. F. Stoner, eds., *Innovative Approaches to Global Sustainability* (Palgrave Macmillan, 2008).

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Management Development

Management development is the organized approach to prepare individuals to better achieve career and collective goals by working with and through human and nonhuman resources in order to continually add value to the world and its stakeholders. Managers who do things fast and rapidly achieve career and organizational goals demonstrate effectiveness; those who achieve their goals by controlling their human and nonhuman resources without exhausting or wasting them demonstrate efficiency. Managers who do things first and continually add value to enterprises demonstrate creativity; those who do things together and collaboratively address the needs of the world and its stakeholders demonstrate responsiveness. Managers who develop the motives and attitudes, capabilities, and behavior patterns to be consistently effective, efficient, creative, and responsive contributors to enterprises enhance individual career and organizational global performance at the supervisory, middle management, and executive levels.

Successful global businesses integrate management development with organization development initiatives to ensure alignment between management development activities and business strategy. Management development teaching techniques that are often used to advance global business are either formal on-the-job or off-the-job approaches. Among the former are the internal coaching or guided experience method; the internal job rotation method; and the internal performance committee method. Among the latter are the accreditation by independent bodies approach; the market-led MBA degree approach; and the national competency approach.

Although domestic star performers have been selected for global business assignments and undergo an informal "sink or swim" international on-the-job test, formal on-the-job approaches are more likely to produce better global business results. The internal coaching method is a form of guided global experience conducted either by an experienced in-house superior or an external consultant providing initial talent diagnoses, assigning meaningful in-house tasks, evaluating performance, and supportively counseling management development candidates about future global business performance improvements. The internal job rotation method moves managers on a regular schedule from job to job in the company to develop an individual with an appreciation of the whole company, broadened contacts, and proven adaptability.

The internal performance committee method is a way for managers to gain exposure to and participate in group decision making in order to develop a sense of collective responsibility for global business policies. The internal on-the-job methods, however, while providing relevant company-specific experience, offer no guarantees that the lessons learned are correct, timely, or desirable for the professional development of individual managers, since companies may perpetuate a tradition of organizationally well-adapted but professionally underdeveloped global business managers. To address that management development risk, organizations supplement their on-the-job approaches with formal off-the-job ones.

The accreditation by independent bodies approach attempts to certify institutions and management development programs that meet an external set of standards for professional management development. For example, the European Foundation for Management Development (EFMD), a global organization devoted to the continuous improvement of management development, launched the European Quality Improvement System (EQUIS), which has become a leading international system of accreditation for higher education institutions in management and business administration. Management graduates from EQUIS-accredited institutions are certified to have met general external standards of management development, not limited to those from any one organization.

The market-led MBA degree approach is primarily an American-British qualification of management development expertise that prescribes a course of instruction lasting one to two years, focused on business management functional skills demanded by domestic and global markets. Some of the market-led MBA degree programs are also accredited by independent nongovernmental bodies, such as the Association to Advance Collegiate Schools of Business (AACSB) International, which ensure that accredited MBA degree programs advance management development knowledge through sustained faculty scholarship, provide high-caliber teaching of quality and current curricula, and produce management development graduates who have achieved specified professional learning goals. In addition, there are market-led nondegree programs that purport to enhance management development but exhibit a wide range of effectiveness.

Finally, the national competency approach toward management development focuses on a government-led identification of needed individual, organizational, and national functional and performance competencies, along with support for institutions and programs that produce those competencies, such as the Management Standards Centre (MSC) in the United Kingdom (UK) responsible for setting National Occupational Standards (NOS) for management development in all domestic sectors to identify and address national managerial skill gaps to improve UK global competitiveness.

Competitive management development for global business requires both formal on-the-job and off-the-job training techniques to sustain individual talent and organizational learning capable of successfully handling international business challenges. Responsible global business leaders need to institutionalize an appropriate blend of both formal approaches, and avoid provincial methods, to develop world-class managers ready, willing, and able to capitalize on current and future global business opportunities.

See Also: Leadership; Management; Management Education; Management Science.

Bibliography. Chris Ernst, "The Global Manager's Work," in *21st Century Management: A Reference Handbook*, Charles Wankel, ed. (Sage, 2008); Cecil D. Robert and William J. Rothwell, *Next Generation Management Development: The Complete Guide and Resource* (Pfeiffer Wiley, 2007); Daniel R. Tobin and Margaret S. Pettingell, *The AMA Guide to Management Development* (AMACOM/American Management Association, 2008); Charles Wankel and Robert DeFillippi, eds., *Educating Managers With Tomorrow's Technologies* (Information Age Publishing, 2003); Charles Wankel and Robert DeFillippi, eds., *University and Corporate Innovations in Lifelong Learning* (Information Age Publishing, 2008).

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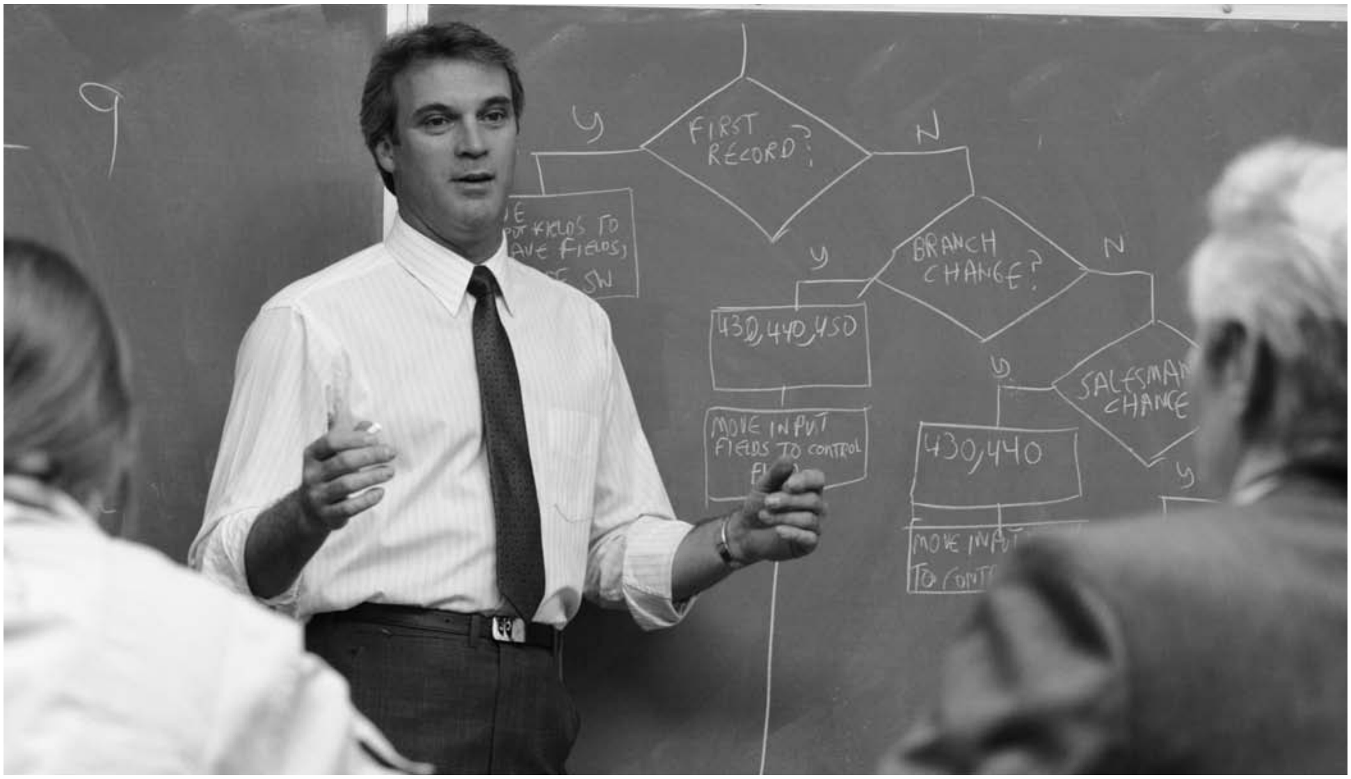
Management Education

As organizations have grown in size and scale over time, so too has the need for the systematic training and development of managers. To fill that void, there has been an increasing creation and utilization of programs in which knowledge about the distinct functions of organizations could be transferred to the people who direct them. Today, all manner of organizations and institutions have begun to teach this class of individuals through numberless learning systems, curricula, and processes generally known as management education.

Although management education has existed in some form since ancient times, the advent of modern management education is a more recent phenomenon. It appeared almost in step with the basic structures of modern management, which is a practice that gained awareness as a distinct discipline in the years around World War II. Prior to then, management had not been commonly perceived as a central factor in any economy.

It was not until the late 18th to mid-19th centuries that a handful of figures across business, government, society, and the academy began to emphasize particular roles of management and structures of modern organization. And only by the outset of the 19th century, in the Scottish mill community at New Lanark, did Robert Owen effectively become the first manager, when he began to concern himself with specific issues related to work and worker. But while Owen espoused education as a necessary factor in forming the complete human, it was not until the late 19th century that the Japanese government-official-turned-businessman, Shibusawa Eiichi, began to strongly encourage higher education opportunities throughout the business community as a way to improve society. His focus on formal business education has been identified as the conception of the first professional manager.

Also by the late 19th century and into the first few decades of the 20th, the emergence of new organizational structures demanded substantive management and formal education for the people performing it. There had in the interim been a proliferation of study and thought on management and organization, especially as "Big Business" took shape in the years around World Wars I and II. By then, academic institutions, mainly in the Western part of the world, had for some



Besides the relatively new management education programs that got their start in the mid-20th century, many managers can benefit from informal continuing education.

time been teaching in disparate areas and classifications of management; for instance, Harvard offered a program of study in business administration and the Massachusetts Institute of Technology offered courses in engineering administration. But in the new order following World War II, and notably with the establishment of the GI Bill in the United States, there came a growing demand for business-related courses. As a result, colleges and universities began to offer more graduate and undergraduate courses in areas such as marketing, finance and accounting, and organizational operation.

But it was not until the 1949–50 academic year, when Peter Drucker joined the faculty of the Graduate Business School at New York University, that the world would be introduced to the first appointment of a professor of management. Through a combination of teaching and consulting work, Drucker observed and formulated the basic principles of modern management. Among his consistent, overarching themes was that it is the responsibility of management to develop people to perform productively and autonomously, and that the highly-skilled worker is the most valuable resource in any organization. These seemingly simple insights had vital implications as Drucker detected a broad social and economic shift from manual work to knowledge work. For it would become increasingly and continuously necessary for managers to learn about, understand, and integrate the principles and practices of good management.

In the coming years, and well before the end of the 20th century, management education programs became a fixture in organizations and institutions across the business, government, and social sectors. Today, a good many managers are likely to have acquired a master of business administration (MBA) or related graduate degree following their undergraduate studies—and may do so even after having obtained an undergraduate degree from one of the burgeoning programs in management, business administration, or specialized areas of both. Yet much as these programs encourage students and businesspeople to communicate with each other on practical problems as a method of learning, there remains a tension within management education as primarily an applied discipline versus an academic pursuit. Among the popular concerns is that the MBA course of study is effectively irrelevant for students who lack adequate managerial experience, and that the concept of management is being distorted by excitement over the perceived glamour of subjects such as leadership and entrepreneurship.

Nevertheless, high executives and upper-level decision makers, middle managers, and other individuals with conceivable potential for management positions have considerable access to a range of continuous learning opportunities. These include numberless combinations of formal or informal instruction delivered by personnel within the organization, external outfits such as management consultants, or specially-designed programs that draw people to faculty on a college or university campus. It also happens that an outgrowth of this focus on education is an enormous industry that produces books and magazines on all areas of management—even those outside business.

In all, the effective education of managers remains a consistent need in developed society and especially in the modern era of globalization.

See Also: Academy of International Business; Management; Management Development; Management Research; Management Science.

Bibliography. Michael Brocklehurst, Andrew Sturdy, Diana Winstanley, and Michaela Driver, "Introduction: Whither the MBA? Factions, Fault Lines and the Future," *Management Learning* (v.38/4, 2007); Richard T. Harrison, Claire M. Leitch, and Robert Chia, "Developing Paradigmatic Awareness in University Business Schools: The Challenge for Executive Education," *Academy of Management Learning & Education* (v.6/3, 2007); Santiago Iñiguez de Onzoño and Salvador Carmona, "The Changing Business Model of B-schools," *The Journal of Management Development* (v.26/1, 2007); Henry Mintzberg, *Managers, Not MBA's: A Hard Look at the Soft Practice of Managing and Management Development* (Berrett-Koehler, 2004); Jeffrey Pfeffer and Christina T. Fong, "The Business School 'Business': Some Lessons From the U.S. Experience," *The Journal of Management Studies* (v.41/8, 2004); Charles Wankel and Robert DeFillippi, eds., *Educating Managers Through Real World Projects* (Information Age Publishing, 2005); Charles Wankel and Robert DeFillippi, eds., *New Visions of Graduate Management Education* (Information Age Publishing, 2006); Charles Wankel and Robert DeFillippi, eds., *Rethinking Management Education for the 21st Century* (Information Age Publishing, 2002); Charles Wankel and Robert DeFillippi, eds., *University and Corporate Innovations in Lifelong Learning* (Information Age Publishing, 2008).

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Management Information Systems

The field of management information systems (MIS) is concerned with a special class of information systems, used to evaluate other information systems in use in the operations of an organization, and to automate, support, and supplement human decision making processes involved in those operations. Like other information systems, the 21st century's management information systems are dependent on and an outgrowth of the rapid sophistication of computer technology at the end of the 20th century and the availability of cheap computing power and an enormous software industry prepared to produce specialized software for business operations.

Management information systems is not simply the study and implementation of the software and other information technology that can be used in the workplace, or of management techniques in operating a business. It is not even the combination or intersection of the two. MIS examines the relationship between the two, and the emergent phenomena associated with that relationship. While accounting information systems, essentially a subset of MIS, focuses on the financial and record-keeping aspects of the business's operations, MIS looks largely at what organizational theory calls "internal control."

Internal control is the way in which a business's resources are allocated and recorded, and is thus implicated in the business's security—its protection from fraud, infringement, negligence, theft, and mismanagement. The concerns of internal control are efficiency, reliability, clarity of reports and records, and compliance with standards and objectives. It prizes consistency, deriving both fairness and efficiency from the practice of handling any given situation in the same way every time, whether it is a crisis or an everyday business transaction.

In the interest of preventing fraudulent financial reporting, the Committee of Sponsoring Organizations of the Treadway Commission (COSO), founded by the United States's major accounting associations, encourages the use of its Internal Control–Integrated Framework. Under this framework, internal control is discussed in terms of five components: the control environment, the foundation for internal control; risk assessment, the discovery and analysis of the risks involved in the attempt to achieve the organization's objectives; information and communication, the systems involved in information processing; control activities, the processes designed to carry out management's directives; and monitoring, the self-evaluation of the system. Clear objectives and budgets must be set before any of this framework can be in place; a surprising amount of poor management comes simply from the lack of explicit objectives, without which neither success nor progress toward it can be recognized.

MIS often involves decision support systems (DSS), a class of information systems that augment decision-making processes with software by making the relevant data easy to access both in raw form and organized in various categories and databases. Purchasing decisions are informed by inventory and sales data, for instance, while decisions about an employee's contract are easier to make when his contributions are easy to identify and collate, instead of relying on general impressions that can be affected more by personal relationships and chemistry than objective business sense. Decision support systems can be communication-driven, facilitating the decision-making processes involving multiple people; data-driven, as in the purchasing example; document-driven, when the relevant data is "unstructured" (in the form of customer letters, for instance, as opposed to manipulable numbers in a spreadsheet); knowledge-driven, when procedures or problem solving are involved; or model-driven, when the current situation can be compared to others.

Executive information systems are a subtype of decision support systems and are specifically designed for executive-level decision making affecting the whole of the company, and focused on the overall goals of the company more than the day-to-day transactional operations. The needs of these systems vary by the company's industry, but will include significant data about and evaluations of the other parties the company works with—buyers, vendors, contractors, regulatory agencies, and so on—and relevant industry-wide information.

Expert systems, instead of supplementing the human decision process, attempt to reproduce human expertise in a specific domain. Far more than simple databases of facts, these systems are based on the discipline of knowledge engineering, which integrates and formalizes knowledge into computer systems using sophisticated mathematical knowledge and a thorough understanding of cognitive science.

See Also: Accounting Information Systems; Information Systems; Information Technology Auditing; Management; Management Development; Management Education; Management Science; Operations Management.

Bibliography. Marion Ball, Charlotte A. Weaver, and Joan M. Kiel, *Healthcare Information Management Systems: Cases, Strategies, and Solutions* (Springer, 1990); Jane P. Laudon and Kenneth C. Laudon, *Management Information Systems: Managing the Digital Firm* (Prentice Hall, 2007); George Marakas, *Decision Support Systems in the 21st Century* (Prentice Hall, 1999); James O'Brien and George Marakas, *Management Information Systems* (McGraw-Hill, 2008); Effy Oz, *Management Information Systems* (Course Technology, 2008); D. J. Power, *Decision Support Systems: Concepts and Resources for Managers* (Quorum Books, 2002).

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Management Research

Management research reflects the broad, eclectic, interdisciplinary character of both the academic field of management and management practice. Research within management can range widely from highly quantitative, positivist, and functionalist studies to qualitative, postmodernist, and critical approaches, and to transdisciplinary work that transcends traditional boundaries between different philosophies and methodologies.

Frederick W. Taylor (1856–1915) is generally seen as the founding father of the "scientific" strand of management research, epitomizing the classical, functionalist (i.e., where the aim is to improve the effectiveness of the functions of management) approach. Taylor used detailed time studies (in which he would break a particular job into individual components and measure each to the hundredth of a minute) in a bid to optimize shop floor work and improve efficiency and worker productivity at his employer Bethlehem Steel. His "scientific management" became highly popular in the first two decades of the 20th century, spearheading the efficiency movement in America.

The Taylorist belief that all people are primarily rational economic agents and that quantitative scientific methods offer the best way to address management problems continued to underpin the subsequently developed quantitative or "rational" management research philosophies and methodologies. For example, statistical methods of analysis, network analysis, simulation techniques, and theories of linear and dynamic programming associated in particular with operations research, management science, accounting, and finance began to gain prominence in the 1960s as part of the rise of Systems Rationalism, which drew heavily on Taylorist principles. Like Taylorites, systems rationalists relied on science in search for universal tenets that managers could use to plan, forecast, and boost effectiveness in their work. Quantitative management research methods (including those left behind by Systems Rationalism) are still informed by similar goals.

In contrast to scientific management and Systems Rationalism, the Human Relations movement (1925–55) gave rise to the management research focus on social or "normative" issues in employee behavior and management. Elton Mayo (1880–1949) is normally heralded as the founder of the Human Relations approach. Mayo was involved in the observational and experimental studies of worker productivity at Western Electric's Hawthorne plant and drew on clinical psychology, sociology, and anthropology to make sense of the shop floor dynamics. He emphasised the need to research employees' needs for social belonging (which he saw as more important than monetary incentives or physical working conditions), so that managers could provide appropriate leadership and generate commitment as a means of improving productivity.

Similarly to the principles of Taylorism in relation to the subsequent "scientific'" approaches to management, these research goals of the Human Relations school continued to inform many of the later qualitative, social sciences–oriented research philosophies and methodologies. For instance, the growing concern in practitioner and consultant literature with organizational culture and quality (from 1980s onward) has drawn inspiration from Japanese corporations, the specific "culture" of which became seen as the key to instilling employee commitment and loyalty and thus improving business performance and quality.

This concern became translated into attempts to analyze corporate cultures in order to enable managers to shape them by creating and instilling particular value systems in their organizations. This research agenda has produced and still underpins today a diverse range of organizational culture-related research objects and management tools—from teamwork, Total Quality Management, empowerment, and self-actualization to emotional intelligence, organizational storytelling, and organizational spirituality. It typically relies on qualitative or mixed methods of analysis.

One approach to management research voguish particularly in Europe is that called Critical Management Studies. This Marxist-inspired perspective views management suspiciously as devising dehumanizing methods for controlling workers. Another recent development in management research is the growing interest in transdisciplinary work, whereby ideas and methods traditionally associated with one research area are adopted by researchers in other areas. As a result, management research can now transcend the boundaries between different philosophies, specialisms, and methodologies as well as be located within them.

See Also: Management; Research Methods: Mixed Methods; Research Methods: Qualitative; Research Methods: Quantitative.

Bibliography. Mark Easterby-Smith, Richard Thorpe, and Paul Jackson, *Management Research* (Sage, 2008); Michael M. Harris, *Handbook of Research in International Human Resource Management* (Lawrence Erlbaum Associates, 2008); Peter Bevington Smith, Mark F. Peterson, and David C. Thomas, *The Handbook of Cross-Cultural Management*

Research (Sage, 2008); Milé Terziovski, *Energizing Management Through Innovation and Entrepreneurship: European Research and Practice* (Routledge, 2009).

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Management Science

Management science (also known as operational, or operations, research) is an interdisciplinary field that assists decision making through the design and provision of quantitative and qualitative models of problematic situations.

More than any other war before it, World War II challenged the opposing armies with problems concerning logistics, equipment evaluation, and search tactics. Interdisciplinary teams of scientists tackled such problems, resulting in a set of applied mathematical methods that were used successfully to support decision making. Following the war, these methods were quickly appreciated as applicable to the challenges facing management and industry. The crowning achievement was the generic applicability of one particular mathematical algorithm known as the simplex method. This algorithm could find an optimum solution for the attainment of an objective based upon a set of mathematically structured constraints. Its relevance to problems concerning distribution, transportation, location, inventory, and scheduling provided management with a powerful method for controlling costs and maximizing revenues. The 1950s saw a host of new applied mathematical developments (such as the modeling of queues, multistage planning, and feedback modeling), serving to consolidate management science as the field that could provide much-needed support for making decisions in an increasingly competitive world.

The basic approach of management science begins by defining the problem of interest. Data is collected and fed into the structured mathematical model relevant to the particular situation. The model is developed, verified, and validated, and an optimum solution is generated. Since a problematic situation is liable to the perturbations of its contextual environment, an optimum solution is usually accompanied by a set of results that show how it changes with external circumstances—what is known as sensitivity analysis. The model, its results, and recommendations are then communicated to management in order to assist decision making.

Aside from the utility of finding optimum solutions, the logical thinking demanded by mathematical modeling facilitates learning about the situation of interest. Indeed, for many management scientists, finding an optimum solution is secondary to the knowledge gained through the process of modeling a problem. The reason is that although the model might find an optimum result, this result is based only upon what was inputted in the model. A wide array of extraneous variables, not easily amenable to mathematical modeling, will ultimately affect the implementation of the model's recommendations in ways that the model cannot show. As such, what is optimum in a model should actually be interpreted as a good approximation of what will happen in a real-world implementation.

The challenge of accounting for extraneous variables, and the perceived value of learning about situations, has led management science to develop approaches for dealing with unquantifiable uncertainty, intimidating complexity, and requisite negotiation. Known as Problem Structuring Methods, their roots lie in psychology, choice theory, game theory, and systems thinking. They rely less on applied mathematics and more on an effective integration of qualitative and quantitative analyses. A good example of this integration can be found in Strategic Options Development and Analysis (SODA). This is a particular cognitive mapping approach, inspired by the psychological theory of personal constructs, whereby the model design renders the qualitative input amenable to the analytical tools of graph theory. Another leading method is Soft Systems Methodology (SSM). This promotes a particularly rigorous learning process that helps decision makers plan for the future systemically, that is to say, in a holistic manner. An effective qualitative substitute for probabilistic decision theory can be found in a method known as the Strategic Choice Approach (SCA).

Contrary to the purely quantitative models for which management science is famous, problem structuring methods have developed especially for dealing with situations whose structure is not readily manipulated within the bounds of mathematics. Problems and opportunities in such situations are more the product of human perception than of hard data. For this reason, the methods rely less on algebra, probabilities, and data collection, and more on diagrammatic representation, scenario development, and the clarification of managerial perceptions. Not unlike the challenges of strategic planning—as opposed to the resolution of operational problems—the methods require the active involvement of decision makers in a joint modeling effort with the structuring expert(s) or facilitator(s). For this reason, the process and content of the methods are more readily transparent than the abstract symbolism of mathematical models.

See Also: Decision Making; Management; Optimization; Scenario Analysis; Simulation Modeling.

Bibliography. Hans G. Daellenbach and Robert L. Flood, *The Informed Student Guide to Management Science* (Thomson, 2002); Raj Nigam, "Structuring and Sustaining Excellence in Management Science at Merrill Lynch," *Interfaces* (v.38/3, 2008); Jonathan Rosenhead and John Mingers, eds., *Rational Analysis for a Problematic World Revisited: Problem Structuring Methods for Complexity, Uncertainty and Conflict* (Wiley, 2001); Terry Williams, *Management Science in Practice* (Wiley, 2008); Wayne L. Winston et al., *Practical Management Science* (South-Western Cengage, 2009).

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Managerial Accounting

Many definitions of accounting exist, although a popular one is that formulated by the American Accounting Association: "the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information."

It is important to note, however, that all the information so provided does not have to be financial in nature, and qualitative as well as quantitative data might well help in the process of assisting management to make more informed decisions.

Managerial (the more normal United Kingdom expression is *management*) accounting is one of only several different facets of the accounting discipline. The normal distinction made is between financial accounting on the one hand and managerial accounting on the other. In this strict dichotomy, financial accounting is concerned with the preparation largely of documents that relate to past performance (hence the income statement ["profit and loss account"], statement of financial position ["balance sheet"], and cash or funds flow statement). Clearly, however, the projection of such documents to a future time period/date is also possible. In all developed nations it is mandatory to produce the specified documents on a regular basis (annually would be the norm), although for internal control purposes it is likely that any organization of a reasonable size would generate them far more frequently than this. But one of the most interesting aspects of the financial accounts is that the annual documents, at least in summary form, invariably must by law be made available to external constituencies ("external" meaning other than the incumbent management). Thus owners and government (because of the corporate tax implications) have an inalienable right in this regard; and employees and their representatives, investment analysts, the local community, etc., all might well be perceived also to have a vested interest in corporate performance as evidenced by the statements produced.

The structure and composition of the organization's financial accounts is constrained by legislation, the requirements of both the object country's accounting profession (perhaps collectively representing several bodies) and its stock exchange. In the United States, the Financial Accounting Standards Board has established Generally Accepted Accounting Principles (GAAPs) that are deemed to underpin the preparation of a business's financial statements. The world is increasingly moving toward the adoption of International Financial Reporting Standards because of the need to compare the performance of businesses on a global scale, particularly given the move toward multiple stock exchange quotations for multinational corporations (MNCs).

The situation described above should be compared with that of managerial accounting, which is largely concerned with the provision of information to people solely within the organization in order to assist their better decision making. Such information is not intended to be released to external constituencies—indeed, much of it is highly sensitive and the very last sort of thing one would want one's competitors to get hold of. Such information relates to the costs and relative profitability of different products or product lines; the basis on which capital expenditure decisions are made; budgets for both the impending (in detail) and subsequent (in rather less detail) financial periods; and the identification of alternative uses for the company's resources, including such things as whether a product or service should be produced internally or "bought in" from outside (when the economist's concept of "opportunity cost" becomes an important consideration). Unlike the organization's financial accounting reports, its managerial accounting activities are unrestrained by GAAPs (since policing and enforcing them would be impossible), although one would nevertheless hope for some level of internal consistency in the provision of managerial accounting information.

However, it is important to recognize that the accounting function is not restricted merely to the two subdisciplines identified. Thus a further "arm" that can easily be identified is that of financial management, concerned with the management of all the cash resources available to the business. It therefore incorporates the aspects of working capital management (i.e., the management of accounts payable [creditors] and accounts receivable [debtors]); what should be done to take maximum benefit from surplus cash resources; and, should it be necessary to arrange additional financing, what form should this take (debt versus equity, for example), and if debt is to be raised, should this be domestically or internationally (when a lower annual interest cost might well eventually be outweighed by an adverse exchange rate movement in the interim).

Treasury accounting, internal auditing, the post-completion auditing of capital projects, and financial services accounting are all additional examples of the variety of the accounting function in the typical organization.

Origins and Development

It is generally accepted that the origins of today's managerial accounting (even if then termed cost accounting) can be traced back to the Industrial Revolution, having its genesis in the United Kingdom in the 18th century, and with substantial progress in cost accounting procedures having accelerated during World War I. However, as H. Thomas Johnson and Robert S. Kaplan argue, thereafter progress ossified, such that over the 60-year period post 1925, there was little progress recorded in the managerial accounting domain. This they attribute to the requirement that information relating to product costs was more in order to feed the organization's (external) financial accounting reports, with the separation of the ownership and management of organizations (in the United Kingdom this followed immediately upon the Joint Stock Act of 1844), than it had any regard to management's desire for information that would assist in its decision-making processes.

Thus, in order to assist in the generation of financial statements that would summarize the financial position of the company (principally for the benefit of its owners and creditors), cost accounting emerged to meet the requirement to allocate costs between the cost of creating the goods that had been sold, on the one hand, and those costs that remained embedded in unsold inventories, on the other. So while simple procedures developed to enable this apportionment to occur (i.e., an allocation of cost between the two competing objectives that was both simple and verifiable), the result was that the generation of sufficiently accurate information such as to enable the distinction to be made between profitable and unprofitable products and/or services simply did not occur.

Thankfully, since the work of Johnson and Kaplan (and probably largely because of it), the managerial accounting "discipline" has moved on apace. Thus the informational deficiencies that had erstwhile been in evidence have been largely addressed via an increasing number of initiatives (of which activity-based costing is but one of many), and while overriding standards might still remain to be applied (and it is probably beneficial that they should be held in abeyance at least in the short term), the movement for revamping the subdiscipline to increase its credibility in the global environment of the 21st century gathers momentum.

See Also: Capital Budgeting; Cost Accounting; Disclosure Requirements; Fixed Costs; International Accounting Standards Board; Variable Costs.

Bibliography. Ramji Balakrishnan, Konduru Sivaramakrishnan, and Geoffrey B. Sprinkle, *Managerial Accounting* (John Wiley & Sons, 2009); Colin Drury, *Management and Cost Accounting* (Thomson South-Western, 2008); Ray H. Garrison, Eric W. Noreen, and Peter C. Brewer, *Managerial Accounting* (McGraw-Hill Irwin, 2009); Ronald W. Hilton, Michael W. Maher, and Frank H. Selto, *Cost Management: Strategies for Business Decisions* (McGraw-Hill Irwin, 2008); Charles T. Horngren, Srikant M. Datar, and George Foster, *Cost Accounting* (Pearson Prentice Hall, 2006); H. Thomas Johnson and Robert S. Kaplan, *Relevance Lost: The Rise and Fall of Management Accounting* (Harvard Business School Press, 2007); Jay Rich et al., *Cornerstones of Financial and Managerial Accounting* (South-Western, 2009); Emilia Shorecova and Maria Farkasova, "Social Information in Managerial Accounting and Managerial Information System," *Agricultural Economics-Zemedelska Ekonomika* (v.53/8, 2007).

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Manufacturing

The word *manufacturing* has its roots in three ancient Latin words: *manu,* meaning by hand; *facere,* meaning to make; and *faber,* or maker. Recent definitions have expanded this definition into "to make from raw materials by hand or machinery." The Department of Trade and Industry of the British government has defined manufacturing more broadly as "manufacturing firms transform ideas into products and services," incorporating a range of activities from research to recycling of products. Over the past thousands of years, manufacturing has evolved from a craft practiced by individuals to an organizational activity performed by firms to an intraorganizational activity coordinated and controlled by sophisticated networks of firms transforming raw material into finished products. The equipment used to support manufacturing has undergone a similar evolution from simple tools to systems employing complex technology combinations.

In the years before the Industrial Revolution, manufacturing was an artisan activity. Craftsmen produced customized items and services for clients using hand tools. Production was heavily reliant on the judgment of the craftsman who implemented his own idea of standards and quality. Components could not be substituted from one producer to another and replacement parts had to be made by the original craftsman. To identify their work, some craftsmen would place a distinctive sign or "brand" on items.

The Industrial Revolution

All of this changed in the Industrial Revolution that occurred between 1770 to 1820 in England. Several factors combined to create the Industrial Revolution: a critical mass of people, improved market access, political stability, technology, and financial innovation. The critical mass of people was as a result of improvements in living conditions, increasing the local population. This created a market for manufactured products as well as labor for factories. Expansion of European powers in the previous 200 years provided large global markets for manufactured products. Political stability in England provided a low-risk environment for investments in large-scale production and distribution. Mass production required improved equipment, and the invention of the steam engine provided motive power for these new tools to produce items on a large scale. To support these production innovations required large amounts of financial capital that was available at the time from local banks.

Manufacturing in England and in the United States developed along different paths. English manufacturers focused on integrating skilled labor with machinery while the United States incorporated the use of unskilled labor. The machine tool industry began with Henry Maudsley, who created the first powered lathe, a machine to turn and cut metal. In the hands of skilled craftsmen, the ability to accurately produce metal components with a round profile such as screws accelerated the development of other machines supporting innovations in iron and textile production. The colonies in America initially imported all of their requirements for manufactured products. However, the conflict for independence encouraged Americans to develop their own sources of manufactured products. Development was initially slow because England prohibited the export of production tools or emigration of skilled labor. This changed when an English immigrant, Samuel Slater, brought British textile technology to America.

Technological improvements developed machine tools further, improving their accuracy and providing a basis for an increased range of metal processing industries. During this period, the manufacturing techniques of standardization and interchangeability began to be adopted into industry, beginning with the production of weapons in the United States. Simeon North, who developed a milling machine, and Eli Whitney applied these ideas in the manufacture of guns for the U.S. Army. Unlike the previously handcrafted items, these muskets were composed of standardized, uniform subcomponents, enabling any combination of them to be assembled into finished items. Another advantage of standard components was that relatively unskilled labor could be involved in manufacturing, enabling rapid expansion of production.

Scientific Management

Parallel developments in machinery and production techniques continuously improved manufacturing. A key advance in production technique was the Scientific Management paradigm created by Frederick Taylor that had the following principles: (1) the optimal methods of working should be identified and implemented across the organization; (2) workers should be selected and trained to perform the tasks of the organization; and (3) management of the organization should focus on planning and analysis while workers executed manual tasks.

In practice, manual tasks were analyzed and decomposed into subtasks, which were then optimized to improve efficiency. Mass production, which was implemented by Henry Ford in the manufacture of automobiles, was the combination of standardized, interchangeable component production with the management techniques of Taylor.

Postwar Developments

U.S. manufacturing firms began growing rapidly, with further gains in efficiency occurring during the two world wars. The years after World War II saw the dominance of U.S. firms as they improved their processing and organizational abilities using techniques learned from weapons production. Wartime improvements in electronics enabled better control of machine tools resulting in Numerical Control systems, developed by MIT for the U.S. military. Rising incomes also meant that there were ready markets for finished products.

Even though U.S. manufacturers dominated world markets in 1970 and were refining their advantage with the development of computer-controlled tools, new techniques were being refined in Japan that would result in major changes by 1980. By focusing on efficiency and quality, Japanese manufacturers lowered production costs dramatically. Toyota, for example, achieved production efficiencies and quality levels that were several times better than its U.S. competitors' using a system called Just-in-Time manufacturing or JIT. These production techniques were a logical extension of the mass production approach and followed these principles: (1) elimination of waste by elimination of inventory and by improved quality; (2) shifting workers from individual, low-skill tasks to high-skill, shared tasks; and (3) continuous refining and improvement.

Additional techniques employed by these firms included Concurrent Engineering, in which design and development was done simultaneously, and Total Quality Management, where quality was viewed as an organizational rather than a departmental function. By the end of the 1980s, Japanese firms dominated the manufacture of consumer items and occupied a sizable share of automobile manufacturing. Global financial liberalization and opening of world markets enabled manufacturers to invest in markets that were previously unavailable. Simultaneous improvements in information and communication technology enabled control of these organizations, linking them into production networks. The 1990s saw movement of manufacturing capacity from developed to developing countries with Mexico, then China benefiting from investments by U.S. manufacturers.

Current Methods

Present-day manufacturing is driven by the changes in production created by new technology, work methods, and the economic environment and changes in demand caused by new market requirements. Unlike the environment faced by firms 50 years ago, customers demand higher levels of customization, resulting in fragmented markets. In response, organizations are increasing their pursuit of a cross-functional approach to coordinate complex flows of materials and information in manufacturing networks. Instead of breaking tasks into subunits to be optimized, firms are developing integrated approaches to all manufacturing activities.

In the 1990s manufacturing capacity increasingly moved from developed to developing countries such as Mexico and China, with other countries with low labor costs not far behind. Above, a television factory in Tajikistan in central Asia.

One approach to serving the new, fragmented market is Mass Customization, the ability to provide customized products or services using flexible process at an acceptable cost. Under the mass production paradigm, individual customization would be prohibitively expensive, out of the reach of all but a few consumers. However, improvements in manufacturing technology and supporting services have made the concept of Mass Customization increasingly feasible. Dell Computers has leveraged standardized computer components and its supply chain to provide millions of computer configurations to customers. Smaller manufacturers have used advanced technologies to provide a range of customized items from clothing to toys.

Manufacturing currently revolves around six major activities: research, design and development, production, logistics and distribution, sales and marketing, and services. Research is conducted into new technologies and techniques for manufacturing. Many established aspects of present-day manufacturing technology began as research ideas at universities. Computer-Aided Manufacturing, for example, had its roots in research conducted at MIT, and manufacturing techniques have been refined using industry and university research. Design activities translate ideas into detailed specifications for production. Products, services as well as the processes that create them, can be designed, and design is seen as a way of differentiating products in the marketplace. Customers have been found to pay a premium for products with superior aesthetics, such as those produced by Apple.

Production activities convert inputs into outputs according to the design specifications provided. Material processing activities, for example, convert metals, plastics, and ceramics into finished items using techniques ranging from cutting, joining, deformation, and melting. Traditionally, manufacturing processes have been subtractive or formative. In subtractive processes, material is removed from a block larger than the size of the finished product. Examples include machine tools such as lathes, drills, and milling machines. Formative processes apply transforming forces, heat or force, to material, creating a final shape. Examples of formative processes include forging, casting, or bending equipment.

Advances in materials science and process control have created a new class of processing technologies known as additive processes. In additive processes, material is manipulated to form a finished product in successive layers. Examples of additive processes, sometimes called rapid prototyping or rapid manufacturing processes, include stereolithography, selective laser sintering, 3D printing, and laminated object manufacturing. Initially, these technologies only formed specialized plastics into prototypes, but recent refinements have enabled them to process metal components. These technologies enable organizations to engage in mass customization strategies, providing individualized products to customers.

Logistics can be defined as the management of material flow and information both within and across facilities. Within facilities, logistics is required to ensure that material is available where and when it is needed. Across facilities, logistics coordinates the movement of components and finished products for further processing or final sale. Sales and marketing activities interface with the final customer, earning revenue and providing valuable information on market developments. Coordination of marketing and production activities is important to manufacturers because improperly managed customer demand can lead to additional cost or lost revenue.

Finally, services have increased in importance from support functions such as advice and repair to business drivers in their own right. Manufacturers have pursued "servitization" strategies, in which the sale of industrial products is replaced by the provision of industrial services. The engineering firm Rolls-Royce offers a program for integrated provision of equipment and support on a lease basis, enabling customers to reduce up-front capital costs. Global concerns about the environment have placed increasing pressures on manufacturers from a range of public and private stakeholders. Manufacturers are being called to account for the impact of their products across the entire life cycle from raw material to disposal. Some organizations have taken a proactive approach, launching initiatives to reduce material and energy usage by changes in design and production.

The future of manufacturing is likely to see an increasing range of technology and techniques to convert concepts into finished products and services. In this context, firms may exhibit a range of models to serve customers, from the traditional sale of products to service-led models. Manufacturing has come full circle, from individual artisans creating customized products to mass manufacturers and now to small and large organizations providing customized products to individuals.

See Also: Globalization; Industrialized Countries; Manufacturing Strategy; Operations Management; Supply Chain Management.

Bibliography. C. K. Chua, F. K. Leong, and C. S. Lim, eds., *Rapid Prototyping, Principles and Applications in Manufacturing* (World Scientific, 2003); D. Hounshell, *From the American System to Mass Production, 1800–1932* (Johns Hopkins University Press, 1985); David E. Mulcahy and Joachim Sydow, *A Supply Chain Logistics Program for Warehouse Management* (CRC Press, 2008); Steve J. New, *Supply Chain Management* (Routledge, 2008); N. Rosenberg, *Perspectives on Technology* (Cambridge University Press, 1976); Nigel Slack, *Operations and Process Management: Principles and Practice for Strategic Impact* (Prentice Hall Financial Times, 2009); *The Supply Chain in Manufacturing, Distribution, and Transportation Modeling, Optimization, and Applications* (Auerbach, 2009); Charles Wankel, ed., *21st Century Management: A Reference Handbook* (Sage, 2008); P. Wright, *21st Century Manufacturing* (Prentice Hall, 2002).

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Manufacturing Strategy

A manufacturing strategy can be defined as the pattern of organizational decisions that determine the ability of a manufacturing firm to deliver its product and service requirements to customers. Successful implementation of manufacturing strategies requires the coordination of physical assets, production capabilities, and relationships as manufacturing firms move from individual facilities to business networks. The importance of manufacturing strategy has increased in the last 30 years due to increasing global competition, and a firm's manufacturing ability is now seen as key to competitive advantage.

While the field of manufacturing has had a long history, strategies specific to manufacturing firms have emerged fairly recently. From the mass production era in the 1900s until the 1960s, organizations viewed manufacturing solely in terms of equipment to convert raw materials into finished products and production arrangements such as plant layouts. Long-term organizational strategy was formulated by finance and marketing departments with manufacturing's role limited to the production of the varieties, quantities, and quality specified by these functions. Decisions were primarily about plant, equipment, and personnel with little effort allocated to examining the potential of manufacturing beyond that of a support function.

Initial ideas regarding manufacturing strategy emerged in the late 1960s, as researchers and organizations realized that manufacturing firms were responsible for a large proportion of a firm's physical and human assets. Arguments were made for manufacturing to become more central in formulating strategy, rather than the tactical position it occupied at the time. Few organizations paid attention to the arguments, and the 1980s brought increasing competition from Japanese firms, particularly in automobiles and consumer products. These relative newcomers provided a combination of lower prices and higher quality, something that was not thought possible at the time. Incumbent organizations at the time viewed cost and quality as linked, with higher quality only being achieved at a higher cost. As a result, Japanese firms began taking market share from U.S. and European manufacturers, with many organizations forced to close or sell their businesses.

Since these organizations viewed manufacturing as plant and equipment, the first response was to invest heavily in new production facilities with automated machinery. However, while some organizations experienced success, the costs of these investments took a heavy toll on others, most notably General Motors, whose $60-billion investment in automation generated little return. Organizations realized that there was a need for better management of manufacturing and a greater understanding of how manufacturing could contribute to organizational competitiveness.

Significant research effort was allocated to manufacturing strategy and researchers have created a range of frameworks of increasing sophistication to aid organizations. Initially, frameworks examined equipment, personnel, and management systems required for manufacturing at a single facility. More recent research has expanded the decision areas to include the coordination of manufacturing networks. Increasingly, firms shift the production of items that they cannot produce competitively to other locations, and manufacturing organizations can be viewed as a network of coordinated business relationships. As such, manufacturing strategy decision areas now incorporate decisions on whether an organization will make an item in-house or buy it from another firm. While they examine a range of organizational characteristics, these frameworks can be divided into five perspectives: top-down, bottom-up, market requirements, internal capabilities, and best practice.

Top-Down, Bottom-Up

The top-down perspective positions manufacturing as part of corporate strategy. Senior management examine the requirements of the marketplace and the capabilities of the organization and choose a path of action best suited to the firm. Each functional division such as marketing, finance, and manufacturing creates individual strategies that are designed to support the organization's achievement of its overall objectives. In this perspective, manufacturing adopts a supportive role within overall organizational strategy. A bottom-up or emergent perspective takes the opposite view of manufacturing strategy. In this view, knowledge is created as part of ongoing manufacturing operations. Strategic ideas may emerge from the experience of lower-level staff that may alter the direction or competitive positioning of the firm. These ideas can be adopted at the lower level, with senior management's role changing from originator of strategy to provision of resources to support these emergent ideas.

Market Requirements

The market requirements perspective attempts to explicitly link manufacturing with the demands of customers. Organizations assess the market to determine the areas of manufacturing performance desired by customers. This information is then used to improve the organization's performance in these areas. There is a general agreement among researchers on these performance areas as detailed below.

1. Flexibility: Flexibility is defined as the ability to change manufacturing operations to provide new products, and to incorporate new processes or new delivery options. Improved flexibility can aid organizations in recovering quickly from disruptions and increase sales by providing new options to customers.
2. Dependability: Dependability is defined as the ability to provide required items in the time they were expected. Dependability ensures that manufacturing operations are stable and provides assurance to customers.
3. Delivery Lead Time: Delivery lead time is defined as the time customers are required to wait in order to receive their products or services. Improved speed of delivery can reduce costs to an organization by reducing internal inventory and provide items more quickly to customers.
4. Quality: Quality is defined as the ability to produce items that conform to specifications and meet customer requirements. Within the organization, a high quality level reduces costs and improves dependability of the organization. Outside the organization, a high quality level improves customer satisfaction and can help differentiate the firm's products from those of competitors.
5. Cost: Manufacturing organizations also attempt to minimize the cost of producing products and services. Within the organization, costs are linked to the other abilities as higher quality and dependability can minimize waste, reducing costs. Outside the organization, lower costs can be used to win market share from competitors by providing lower prices to customers or to increase profitability by maintaining the same prices as competitors.

A commonly used framework to determine the relative importance of performance areas is the order winning and order qualifications framework. Order winning factors are the performance areas that contribute to winning business or customer orders and are determinants of market success. Order qualifiers are the areas that the organization needs to provide a minimum level of performance in order to maintain its market presence. If the organization does not provide that level of performance, it will not be considered by customers, but improvement beyond a minimum level will not win additional business.

Internal Capabilities

The internal capabilities perspective takes the opposite view to the market approach as it focuses on an organization's manufacturing resources as critical to its success. This perspective is built on the resource-based view of organizations in which firms are seen as a collection of resources coordinated to provide organizational capabilities. Resources can be tangible (for example, equipment) or intangible (for example, employee skills). The focus is therefore on identifying and understanding which resources are valuable in order to build strategies that maximize their potential.

Best Practice

Best practice approaches focus on the adoption of operational practices that enable superior performance. This paradigm has its root in the benchmarking approach, which is a method of improving organizational performance by comparing company practices with those of other organizations. Best practice approaches to manufacturing strategy were initially stimulated by a need to understand the superior performance of Japanese firms but have been extended to incorporate practices from manufacturers worldwide. Researchers identified the practices that support these performance levels, adapting them for adoption by other firms. The assumption was that in adopting these practices, other firms can achieve a similar level of performance. As manufacturing practices are continually evolving as technologies and customer requirements change, this identification-adaptation-adoption process is continuous or a firm may risk losing its competitive edge. The highest level of best practice is known as world-class manufacturing, defined as the practices required delivering the highest level of performance in quality, design, efficiency, and delivery when compared to other firms internationally.

Individually, none of these paradigms will be sufficient for formulating and implementing a manufacturing strategy. In practice, these paradigms are linked by organizations when formulating and implementing a manufacturing strategy. Generally, a company will formulate a strategic vision, incorporating the views of top management and ideas from manufacturing practice. The internal resources and capabilities of the organization are then assessed against the needs of the marketplace. Based on this assessment, the organization will make choices about which areas it will develop in order to build or maintain its competitive advantage. The organization will then seek to identify or develop best practices to achieve superior manufacturing performance.

See Also: Manufacturing; Manufacturing Yield; Operations Management; Product Development.

Bibliography. Robert H. Hayes and Steven C. Wheelwright, *Restoring our Competitive Edge* (Wiley, 1984); Terry Hill, *Manufacturing Strategy* (Palgrave Macmillan, 2000); Richard Metters, Kathryn King-Metters, and Madeleine Pullman, *Successful Service Operations Management* (South-Western, 2006); K. W. Platts and M. J. Gregory, "Manufacturing Audit in the Process of Strategy Formulation," *International Journal of Operations and Production Management* (1990); Nigel Slack, Stuart Chambers, and Robert Johnston, *Operations Management* (Prentice Hall/Financial Times, 2007); W. Skinner, "Manufacturing—The Missing Link in Corporate Strategy," *Harvard Business Review* (May–June 1969); C. A. Voss, "Alternative Paradigms for Manufacturing Strategy," *International Journal of Operations & Production Management* (v.15/4, 1995).

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Manufacturing Yield

The yield of a manufacturing process or of any production line is of paramount importance to manufacturers as it is directly related to corporate profitability. For many manufacturing companies, the only alternative to remain competitive is to improve yield. Manufacturing yield is generally considered to be a measure of manufacturing success, and it is defined as the ratio of the number of usable devices after the completion of a production process to the number of devices at the beginning of the process. Yield also refers to how much salable product can be produced. So, a higher yield means that more items can be produced for the same overhead cost, which permits unit cost and unit sale price to decrease. This may contribute toward making the company competitive and profitable.

Manufacturers are generally preoccupied with eradicating the factors or failure mechanisms, which affect the yield of a product. However, before doing so, the manufacturer must understand how each stage of the manufacturing process affects yield. Since the definition of yield indicates that it is a statistical parameter, the various stages of product manufacture can be represented as probability functions, which are multiplied in order to attain the overall yield. These probability functions include failure probabilities for various defect types. Yield can be effectively controlled if these failure probabilities can be reasonably determined. This further indicates that there is some relationship between yield and reliability as reliability is simply the failure probability subtracted from one. Reliability is also defined as the probability that a device will perform its intended function for a specified time under the stated environmental condition.

There are two types of reliability problems: intrinsic failures, which are inherent to the manufactured device; and extrinsic failures, which are due to manufacturing defects. Extrinsic factors include poor design, improper manufacturing operations, contaminated environments, defective raw materials, poor incoming inspection, or inadequate shipping and handling.

An example of how yield can be affected by reliability problems can be understood by looking at the manufacture of integrated circuits (IC). There is a trend in the microelectronics industry to produce smaller integrated circuit chips that are capable of more sophisticated functions. Fabrication of advanced integrated circuits usually involves 300 to 400 process steps. However, the fabrication of ICs can be simplified into two major stages known as the front-end and the back-end. In the front-end, the components of the integrated circuits are manufactured, whereas in the back-end, metal is added to connect the components of the chip. Each stage consists of several hundred steps, and it is easy to envisage defects being introduced during any step. For instance, the first step in the front-end stage involves the construction plan and circuit diagrams of the chip. Poor plan design may lead to chips that do not function as intended, thereby diminishing yield. Another instance in which defects can be introduced is in the back-end stage where layers of wires are added to connect the various components. Improper connection sequence or poor connections can also lead to defective chips, thereby leading to poor yield.

Improving Yield

Using proven technology makes it easier to keep yields higher, but old technology soon becomes expensive to maintain, which ultimately leads to increased overhead and reduced profit margins. At first, it may be difficult to achieve high yields with new technology because large amounts of items may be discarded during the learning phase. Nevertheless, overhead cost should eventually become lower and the benefits of the new technology will be realized as the new technology is grasped. However, there is a great snare that many companies fall into. Particularly, small companies with smaller budgets tend to learn as they go along, which can lead to poor revenues and terrible backlogs that eventually cripple production schedules. It may be worth the cost to hire engineers to optimize the new technology as early as possible.

Manufacturing yield can also be improved by implementing simple corrective actions, which include correcting process defects before they occur. This can be done by thoroughly characterizing all machinery whereby the parameters that affect the performance of the machine are clearly understood and documented. Other corrective measures involve real-time control and monitoring of process variation; alert systems to indicate when a process is moving out of control; sufficient training to enable operators to take immediate corrective action; and advanced statistical analysis to identify the root causes of defects.

Another technique that can be applied to improve manufacturing yield is known as design for manufacturability or design for manufacture (DFM). The essence of this technique is to encourage manufacturers to use simplified designs for their products. Simplified designs through a process of standardization result in fewer parts, which minimizes the opportunity for a defective part or an assembly error. This reduces production cost, improves quality, and contributes to increased yield. Design for manufacturability is built on several product design guidelines, which are summarized in its definition.

In the article by David Anderson on "Design for Manufacturability and Concurrent Engineering," DFM is defined as the process of proactively designing products to (1) optimize all the manufacturing functions: fabrication, assembly, test, procurement, shipping, delivery, service, and repair, and (2) assure the best cost, quality, reliability, regulatory compliance, safety, time-to-market, and customer satisfaction. An article on design for manufacturability by Kenneth Crow states that research has indicated that decisions made through the design period account for approximately 70 percent of product cost. If this is accurate, it is easy to visualize how poor product design can adversely affect manufacturing yield.

It is therefore imperative that manufacturers strive to attain better and better yield levels for their products. In order to achieve this objective, manufacturers must implement the necessary measures to mitigate or even eliminate the introduction of defects into their products. Failure to do so will lead to poor yields, ultimate loss of competitiveness, and possible extinction of the business.

See Also: Manufacturing; Manufacturing Strategy; Product Development; Productivity; Quality; Quality Control; Standardization; Supply Chain Management; Technology.

Bibliography. D. M. Anderson, "Design for Manufacturability," www.design4manufacturability.com (cited March 2009); K. Crow, "Design for Manufacturability," www.npd-solutions.com (cited March 2009); K. O. Kim and H.-S. Oh, "Reliability Functions Estimated From Commonly Used Yield Models," *Microelectronics Reliability* (v.48, 2008); T. Kim and W. Kuo, "Modeling Manufacturing Yield and Reliability," *IEEE Transactions on Semiconductor Manufacturing* (v.12/4, 1999); T. Kim and W. Kuo, "Prolog to an Overview of Manufacturing Yield and Reliability Modeling for Semiconductor Products," *Proceedings of the IEEE* (v.87/8, 1999).

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Maquiladora

Maquiladoras are plants devoted to producing or assembling intermediate goods required by other companies in their productive processes, so they are part of productive chains for activities of international subcontracting. They operate under a special tax system that allows them to import inputs and components free of tariffs for assembling products destined for the international market.

Maquiladoras rose in the 1960s. They expanded as part of the processes of internationalization of production, the establishment of free trade agreements, and economic globalization. They are considered an alternative to increasing international competitiveness by taking advantage of the conditions offered by the host countries: abundant and cheap labor, flexibility in the use of the workforce, a corporative system that favors trade unionism control and discipline in the factory, and loose regulations in protecting the environment. To encourage their establishment, governments offer tax benefits and other economic incentives, creation of infrastructure, labor deregulation, and containment of wages.

Maquiladoras initially developed in border areas and were considered a proper means to solving problems of unemployment and migration. They reached significant development during the 1980s and 1990s along the border of Mexico and the United States and in countries of southeast Asia such as Korea, Taiwan, Hong Kong, and Singapore. However, the internationalization of production through maquiladoras should be regarded as a phenomenon of global industrial redesign. They have constituted export-processing zones involving an asymmetrical industrial articulation between developed and peripheral countries based on a new regime of international division of labor, which benefits contracting corporations without encouraging industrial development in the host country.

Initially, maquiladoras emerged as small plants of low investment, characterized by intensive use of unqualified workforce under a very fragmented and routine assembly work process. They have been called "sweatshops" owing to low wages, piecework payment, extended hours of work, poor working conditions that damage the health of workers, abuse and gender inequity, unjustified dismissal, and illegal employment of child labor. They operate traditionally with female labor, especially with single mothers and teenagers who accept the conditions of work and compensation because they need the employment to survive. These precarious job conditions explain their high levels of turnover.

In addition to this traditional model of maquiladoras, a segment of them has evolved toward manufacture under forms of lean production and flexible specialization. They are factories with sophisticated technology that enables increased automation of the work process that requires higher levels of skills in the workforce; there was an increasing incorporation of specialized technicians and engineers. In these plants, the traditional advantage of cheaper labor lost its importance. In its place, competitiveness rested on greater flexibility based on polyvalent work and the use of Japanese manufacturing techniques such as Just-in-Time production and Total Quality Control.

Also, a smaller segment of maquiladoras corresponds to highly capital-intensive companies based on research and development processes. They require increased investment and advanced technology to facilitate innovation and design. They increasingly participate in integrated international business networks operating under diverse collaborative and exchange frameworks.

Trade liberalization trends and economic regionalization and globalization have pushed many countries to accept the establishment of maquiladoras as part of their strategies to boost economic development and facilitate their incorporation into the international economy. However, primarily large transnational corporations control this process. They impel off-shoring production to increase their competitive capabilities in the global markets, which rarely attend the development requirements of the host country. One of the great problems is related to the so-called runaway shops, the footloose industry and the fly-by-night enterprises: The maquiladoras simply move to distinct geographic zones when they find greater competitive advantages. This process creates what it wanted to avoid, i.e., unemployment, migration, and the emergence of ghost towns that have no alternative economic activities for the people. Therefore, governments are increasingly forced to establish better regulations to guarantee more equitable treatment and a different incorporation of the maquiladoras considering the economic and social needs of the country. The design of national development strategies tends to encourage a better integration of national manufacturing, a greater economic development, and an advantageous incorporation to the flow of international trade and production.

See Also: Child Labor; Cross-Border Migrations; Economic Development; Export; Flexibility; Near-Shoring; North American Free Trade Agreement; Off-Shoring; Outsourcing; Periphery.

Bibliography. Shad Dowlatshahi and Cristina Urias, "An Empirical Study of ISO Certification in the Maquiladora Industry," *International Journal of Production Economics* (v.88/3, 2004); Rachel Kamel and Anya Hoffman, *The Maquiladora Reader: Cross-Border Organizing Since NAFTA* (American Friends Service Committee, 1999); Alejandro Lugo, *Fragmented Lives, Assembled Parts: Culture, Capitalism, and Conquest at the U.S.-Mexico Border* (University of Texas Press, 2008); *NAFTA and the Maquiladora Program: Rules, Routines, and Institutional Legitimacy* (Texas Western Press, 2008); Devon G. Peña, *The Terror of the Machine: Technology, Work, Gender & Ecology on the U.S.-Mexico Border* (CMAS Books, 1997); Fernando Romero, *Hyperborder: The Contemporary U.S.-Mexico Border and Its Future* (Princeton Architectural Press, 2008); James G. Samstad and Seth Pipkin, "Bringing the Firm Back In: Local Decision Making and Human Capitol Development in Mexico's Maquiladora Sector," *World Development* (v.33/5, 2005); Enrique De La Garza Toledo, "The Crisis of the Maquiladora Model in Mexico," *Work and Occupations* (v.34/4, 2007).

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Marathon Oil

Marathon Oil (Marathon Oil Corp.) is one of the largest integrated oil companies in the United States. It is engaged in exploration and production of crude oil and natural gas. It was incorporated in 1965, and now employs about 30,000 people (as of January 1, 2008). The company is headquartered in Houston, Texas, and it has exploration and production activities in the United States, Angola, Equatorial Guinea, Gabon, Indonesia, Ireland, Libya, Norway, Ukraine, and the United Kingdom (UK). Marathon Oil is quoted in the New York Stock Exchange with the ticker symbol MRO. Marathon Oil has approximately 60,000 shareholders (as of January 1, 2008).

The United States is the company's largest geographic market (92 percent of the revenues in 2006). Marathon Oil generates revenues through three major business divisions: refining, marketing, and transportation division (86 percent of the revenues in 2006); exploration and production division (14 percent of the revenues in 2006); and integrated gas division (less than 1 percent of the revenues in 2006).

Specifically, Marathon Oil is engaged in worldwide exploration and production of crude oil and natural gas and domestic refining, marketing, and transportation of crude oil and petroleum products. The company's principal operating subsidiaries are Marathon Oil Company and Marathon Ashland Petroleum, LLC. The company has exploration and development activities in the following countries: United States, Norway, Equatorial Guinea, Angola, and Canada (principal exploration activities); United States, UK, Ireland, Norway, Equatorial Guinea, Gabon, and Russia (principal development activities).

Marathon Oil also operates other businesses that market and transport its own and third-party natural gas, crude oil, and other products manufactured from natural gas primarily in the United States, Europe, and west Africa. Marathon Oil's key products include crude oil, natural gas, condensed and natural gas liquids, propane, heavy fuel oil, asphalt, sulfur gasoline, graphite electrodes, aromatics, aliphatic hydrocarbons, liquid hydrocarbons, cumene, base lube oil, polymer-grade propylene, slack wax, refined products, merchandise, and transportation. The company also offers service stations.

The company was formed in 1887 under the name Ohio Oil Company in northwestern Ohio, which was the leading center for crude oil production at that time. Then it was known as USX Corporation. In 1962 the company changed its name to Marathon Oil Company. In 1998 Marathon Oil and Ashland, Inc., formed Marathon Ashland Petroleum, LLC to refine, market, and transport crude oil and petroleum products. Marathon Oil now owns 100 percent of Ashland's shares. The company changed its name to Marathon

Oil Corporation in 2001. The company formed a joint venture with Pilot Corporation in 2001—Pilot Travel Centers LLC, which operates travel centers that offer diesel fuel and gasoline as well as various services, including on-premises brand-name restaurants. Marathon Oil grows with various acquisitions. In 2002 the company acquired GlobexEnergy, Inc., and acquired Western Oil Sands, Inc., in 2007.

In 2008 the executive team of Marathon Oil included Thomas J. Usher (chairman), Clarence P. Cazalot, Jr. (president, chief executive officer), Gary R. Heminger (executive vice president), Janet Clark (chief financial officer), William F. Schwind, Jr. (secretary, general counsel), Michael K. Stewart (controller), Paul C. Reinbolt (treasurer), and Jerry Howard, Philip G. Behrman, Steven B. Hinchman, David E. Roberts, Jr., and Janet Clark (senior vice presidents). The company's board of directors included Charles F. Bolden, Jr.; Clarence P. Cazalot, Jr.; David A. Daberko; William L. Davis; Shirley Ann Jackson; Philip Lader; Charles R. Lee; Dennis H. Reilley; Seth E. Schofield; John W. Snow; Thomas J. Usher; and Douglas C. Yearley.

There are many reasons why Marathon Oil is successful. First, it is a giant that holds onto the entire oil and gas value chain. It is among the world's leading integrated companies in the energy industry that operates in different countries. Marathon Oil's presence in exploration and production, storage and pipeline, refining, marketing, and retail distribution boosts its competitive advantage over rivals. The second reason is the geographical locations of its facilities in terms of refining, marketing, and transportation—Marathon Oil has extensive operations in various regions. The company strategically located its business to serve major markets by establishing a comprehensive terminal and transportation system, along with extensive marketing operations. Third, the company has had an impressive financial performance in previous years and a continuous trend of strong profitability.

See Also: ExxonMobil; United States.

Bibliography. Marathon Oil, www.marathon.com (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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Market Audit

A market audit examines a company from a marketing perspective, just as a financial audit, tax audit, or IT audit examines a company from each of their own perspectives. However, while those audits focus principally on internal data, a market audit gathers a great deal of information from outside the company, in order to compare the company's performance and character to those of its competitors. In this respect it has much in common with the Competitive Market Analysis. While other audits may be performed by accountants, a market audit is the work of a marketer.

The questions asked in a market audit begin very simply, by identifying the type of organization, the products or services it sells, and the customers to whom it sells them. These questions can be broken down very specifically, though, and as more and more specific answers are yielded, a clearer picture of the market is created. Two television networks may seem essentially similar—they both broadcast in the same regions, their programming includes comedies, dramas, news, and sports, and their flagship programming airs in the same hours. But a closer look reveals that one network appeals largely to families and older couples, while the other targets a college-age demographic; this information affects advertisers' decisions about which network to favor their advertising dollars with, and the networks' own decisions about how to maintain or change their appeal to their demographic.

As much data as possible and relevant is collected, in order to provide points of contrast between the company and its competitors. How much does the company charge for its product, and what is the comparative value of its competitors product? Pepsi-Cola made its mark in a crowded field of Coca-Cola competitors by charging the same price for its cola but selling it in bottles that were twice the size. When comparing prices, coupons, discounts, and other incentives are taken into account, as are factors that affect ease of purchase—such as availability, associated costs (a market audit of a resort or tourist attraction would take into account the cost of travel, and perhaps the "cost" of using up vacation days). Much of the data will bear on factors that are outside the company's control, or at least not the result of its choices: both Pepsi and Coca-Cola, for instance, likely sell better in stores that also sell salty snacks, which affects the market data even though it is not the result of a marketing decision. That they likely sell best in hot weather is another marketing point; consider Coca-Cola's long-lived advertising campaign associating the product with Christmas, Santa Claus, and polar bears, integrating its image with that of winter festivity and positioning the product with respect to the colder months.

A market audit will seek to identify key information to inform the company's marketing strategy. Is the company an industry leader? Is the general perception of its importance and leadership proportionate to its market share? How does the public think of the company, and to what demographics does it appeal? (In the case of the two television networks, does the audience perceive that it outgrows one and grows into the other, and if so, does the younger-skewing network want to retain that audience as it matures, or simply guarantee that there is a constant flow of new viewers?) The specifics, of course, will always depend on the industry. Market audits may depend to some extent on classic market research tools like customer satisfaction surveys, mystery shopping, and price elasticity testing, and may employ more recent devices such as commercial eye tracking or so-called "coolhunting," a marketing practice that developed in the 1990s to seek out and lay claim to the cutting edge of youth culture.

See Also: Competitive Market Analysis; Information Technology Auditing; International Marketing Research; Market Development; Marketing; Market Research; Market Share.

Bibliography. Bernard Cova, Robert Kozinets, and Avi Shankar, *Consumer Tribes* (Butterworth-Heinemann, 2007); Peter A. Gloor and Scott M. Cooper, *Coolhunting: Chasing Down the Next Big Thing* (AMACOM, 2007); Nick Southgate, "Coolhunting With Aristotle," *International Journal of Market Research Society* (v.45, 2003).

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Market-Basket Currency

A market-basket currency is a form of money (medium of exchange) whose value is determined as a weighted average of the value of other currencies. The term is often confused with the term *currency basket*, which is actually the group of selected currencies. Typically, the currency basket is composed of a diverse set of four to eight currencies from around the world with no one currency holding a majority. As a composite, market-basket currencies are often used to reduce the risk associated with currency exchange rate fluctuations, especially compared to currencies pegged (or fixed) to one other currency. Governments have created market-basket currencies in response to local currency fluctuations that threaten their economy.

Market-basket currencies have been used since the 1970s after the collapse of the Bretton Woods Accord. For example, the European currency unit (or ECU) was created in 1979. The ECU was composed of a currency basket of all European Community currencies, mainly the British pound sterling, the German mark, the French franc, and the Italian lira. Although it was initially planned as the common currency of the European Community, it was replaced by the euro in 1999.

Israel has used a market-basket currency, the shekel, since 1986 (and from 1976–77). Originally, the shekel was based on the U.S. dollar, German mark, pound sterling, French franc, and Japanese yen until 1999, at which point the mark and franc were exchanged with the euro. In 2005 China changed the peg of their currency, the renminbi, to the U.S. dollar and converted to a floating exchange rate based on a market basket of foreign currencies including the U.S. dollar, euro, Japanese yen, South Korean won, British pound, and others. From 1975 to 2003, Kuwait's dinar was a market-basket currency, but was pegged to the U.S. dollar on January 5, 2003. Kuwait repegged the dinar to a currency basket in May 2007. The Cooperation Council for the Arab States of the Gulf (GCC) plans to create a market-basket currency, the khaleeji, by the year 2010. The GCC is composed of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

In response to the Asian currency crisis of 1997, the Association of Southeast Asian Nations, or ASEAN, has proposed the creation of the Asian currency unit (ACU) as a market-basket currency for member countries China, Japan, and Korea to stabilize financial markets in the region. Although the project has endured several obstacles, discussions continue.

Special Drawing Rights (SDR) are considered a market-basket asset such that it is determined from the market exchange rates of the U.S. dollar, euro, Japanese yen, and British pound sterling. It is revalued once every five years.

See Also: Asian Financial Crisis; Bretton Woods Accord; Currency; Currency Exposure; Euro; Exchange Rate; Exchange Rate Risk (or Currency Exposure); Exchange Rate Volatility; Fixed Exchange Rate; Floating Exchange Rate; Special Drawing Rights.

Bibliography. Campbell R. McConnell and Stanley L Brue, *Microeconomics: Principles, Problems, and Policies* (McGraw-Hill Professional, 2004); Eiji Ogawa and Takatoshi Ito, "On the Desirability of a Regional Basket Currency Arrangement," *Journal of the Japanese and International Economies* (v.16/3, 2002).

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Market Development

Market development implies seeking out new buyer groups as potential customers for a firm's existing products and services. These customers may be currently served by competitors or may not currently consume such offerings. For example, a firm that successfully makes and sells coffee to the retail market in Italy may try to reach into demographic segments (e.g., young or old people) that they currently do not reach; or they may market a similar product to Italian commercial coffee channels (like restaurants, hotel chains, or vending machines); or they may enter the Swiss market. This term excludes significant changes to the product—generally called *product development*—or efforts aimed at increasing market share among current customer groups—generally called *market penetration*. Also, strategies to make significant changes to market as well as product are called *diversification*.

Developing new market segments is a strategy close to the market penetration concept—both aim to increase sales close to the core product-market focus. Developing new market segments (or niches) involves conducting a segmentation analysis, defining those market segments in which the firm currently is not strong, and conducting evaluations of the attractiveness of these unserved markets. The firm may consider demographic, lifestyle, or psychographic variables to define segments. Russell Winer uses the examples of Kodak and Fuji aiming to attract children to the photography market by developing products to help with school projects, and the National Football League trying to attract more women to its TV broadcasts.

Developing new geographic markets is a key option for firms wanting to grow from their traditional markets, whether to new regions of the home country or perhaps to new international markets. The simplest form would be to move into markets that are close geographically and culturally—like a firm moving from one midwestern state of the United States to another, and then to Ontario, Canada; or an Austrian firm expanding to Germany. Entering geographic markets that entail complex supply chains and cultural adaptation is far more complicated—and several issues involved in entering foreign markets will be discussed below; for example, as Henry Mintzberg, Richard Pascale, and colleagues describe Honda's entrance into the United States, completely misjudging their products' suitability for local tastes.

A firm with a promising product, service, and/or brand can try to market a similar offering via different channels of distribution. For example, Starbucks, having done well selling coffee in its chain of coffee shops, began to market packaged coffee through retail outlets. Often new channels go along with new segments and/or geographic markets. For example, diapers for babies are generally sold retail, while diapers for adults can be sold via wholesale (or industrial) channels to hospitals and facilities for the aged; similarly, The Home Depot, Inc., uses alternate channels—like internet and specialty outlets—when developing commercial and governmental markets.

International Market Development

The internationalizing firm has several added strategic dimensions to consider when developing foreign markets, such as entry mode, national culture, international legal issues, organizational structural adaptation, and opportunities provided by regional integration. A significant body of research has considered the options and behavior of firms as they commit to foreign markets. Authors like Harry Barkema and

Rian Drogendijk, Tamer Cavusgil, and Jan Johanson and Jan-Erik Vahlne have emphasized the gradual and sequential nature of the decision-making process whereby the firm is assumed to build a stable domestic position before starting international activities—beginning with sporadic exports and then building overseas operations incrementally. Over time the exports generally lead to the creation of an export department. The next stage in this evolutionary process is the transfer of certain value-adding activities abroad. These firms then also increase the number of subsidiaries abroad, starting with countries close geographically and culturally to the home country, moving to more distant locations and countries less similar to the home country. The reason for this behavior is postulated to be a result of risk aversion. As explained by Yair Aharoni, risk declines as international experience accumulates. A different and more rationalistic explanation was proposed by John Dunning by which internationalization will occur only if firms with sufficient ownership advantages to compensate for the liability of foreignness in one country can transfer these advantages to exploit location advantage in another country.

More recently, the deterministic nature of these evolutionary processes has been challenged. In a study tracing 100 years of Alfa Laval, Ivo Zander and Udo Zander point out that Alfa Laval's growth shows an oscillating rather than a linear pattern of development. Another strategic option is championed by firms that do not develop their international activities in incremental stages, but rather start overseas activities right from their birth. Such firms have been labeled international new ventures, high-technology start-ups, and born global. While these are also, technically, forms of market development, these strategies are more suited to highly entrepreneurial firms willing to take the substantial risks associated with making substantial investments in foreign markets before attaining a strong domestic position. For example, the above-mentioned study by Barkema and Drogendijk of Dutch companies entering into eastern and central Europe demonstrated that, in many cases, expansion steps may be too great; and they thus argue that firms have to balance exploitation and exploration in their internationalization decisions.

An allied set of crucial decisions facing internationalizing firms concerns selecting partners—be they for international joint ventures, strategic alliances, or mergers. Some countries have restrictive foreign ownership laws that obligate international firms to enter with a local partner. However, even absent these legal issues, it is often wise to use local partners to help achieve access to distribution channels, local customers, and to supply knowledge of local laws and customs.

Mergers and acquisitions may be used to achieve rapid entry into high-growth markets, acquire expertise, technology, products, brands, market presence, experienced management, reduce exposure to risk, and complement ongoing internal product development. They minimize the costly time lag associated with the internal development of products, markets, and their required supporting structures; and are particularly useful where product life cycles are short or there are other indications of a profitable market window closing.

David Tse, Yigang Pan, and Kevin Au studied two dimensions of firms' foreign-market entry strategy, namely mode of entry and formation of alliances. They build a model that describes how host country–, home country–, and industry-specific factors affect foreign firms' decisions on how they enter the market and whether they will enter with a partner firm or not. The model also shows how operation-related factors, such as the location and the level of local government, affect these decisions. In all cases the firm faces a complex set of decisions when embarking on a market development strategy. Apart from choice of market (for example, considering the options given above), issues of timing and mode of business operation need to be considered. The latter issue is especially complex in foreign markets.

See Also: Entry Mode; Home Country; Home Depot, The; International Division Structure; Internationalization; International Marketing Research; Marketing; Market Research; Market Share; Subsidiary.

Bibliography. Y. Aharoni, *The Foreign Investment Decision Process* (Harvard Business School Press, 1966); H. G. Barkema and R. Drogendijk, "Internationalising in Small, Incremental or Larger Steps?" *Journal of International Business Studies* (v.38/7, 2007); Christopher A. Bartlett and Sumantra Ghoshal, *Transnational Management: Text, Cases and Readings in Cross-Border Management* (McGraw

Hill, 2000); Julian Birkinshaw, *Entrepreneurship in the Global Firm* (Sage, 2000); Dev Kumar Boojihawon, Pavlos Dimitratos, and Stephen Young, "Characteristics and Influences of Multinational Subsidiary Entrepreneurial Culture: The Case of the Advertising Sector," *International Business Review* (v.16/5, 2007); S. T. Cavusgil, "On the Internationalization Process of Firms," *European Research* (v.8/6, 1980); Michael R. Czinkota et al., *Global Marketing: Foreign Entry, Market Development and Strategy Implementation* (Nelson Education, 2008); H. Mintzberg, R. Pascale, T. Goold, and R. Rumelt, "The 'Honda Effect' Revisited," *California Management Review* (v.38/4, 1996); Michael Porter, *Competition in Global Industries* (Harvard Business School Press, 1986); David K. Tse, Yigang Pan, and Kevin Y. Au, "How MNCs Choose Entry Modes and Form Alliances: The China Experience," *Journal of International Business Studies* (v.28/4, 1997); Russell S. Winer, *Marketing Management,* 2nd ed. (Pearson Prentice Hall, 2004); George Yip, *Total Global Strategy II* (Prentice Hall, 2003); I. Zander and U. B. Zander, "The Oscillating Multinational Firm—Alfa-Laval in the Period 1890–1990," in *The Nature of the International Firm*, I. Björkman and M. Forsgren (Copenhagen Business School Press, 1997).

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Market Imperfections Theory

Market imperfections arise from violating the assumptions of perfect competition as described in neoclassical economics. The neoclassical market model ensures an efficient allocation of all goods and incomes. Moreover, competing vendors can build their business strategy on the equilibrium price because nobody will be motivated to offer or buy products at a different price. However, vendors in real markets have to cope with departures from these assumptions. Four types of market imperfections can be identified:

1. Frequently, only a few suppliers compete in a market or the number of customers is fewer than many. In the first case, the models of oligopolistic or monopolistic competition become effective (e.g., Stackelberg pricing or Bertrand pricing); in the latter case, vendors face an oligopsony or a monopsony.
2. Other violations arise from the heterogeneity of products. The explicit goal of all branding strategies—but also all references to the country of origin and offering superior services—aims to create market imperfections. Consequently, if the measures are successful, marketing strategies introduce market imperfections.
3. A third source of market imperfections arises from entry barriers, which frequently become a relevant condition in the internationalization or even globalization of business activities. Already in the 18th century, Adam Smith and David Ricardo proved that international trade is useful, increases welfare, and extends production possibilities. Ignoring these basic insights, national governments do their utmost to protect their national vendors from international competitors by various means such as customs, or enforcing national engineering standards. However, vendors can create entry barriers themselves by, for instance, building product facilities with the capacity to meet, or even exceed, all the local demand. An incumbent would fear a price war if the already established vendors needed to operate with full capacity load to cope with fixed costs or benefit from economies of scale.
4. The fourth type of imperfections relates to information availability in real markets. Under perfect competition, the equilibrium price, margin profits, and margin cost are known to both sellers and buyers. In reality, the prices differ in terms of time and location, as well as with the heterogeneity of products. It is mainly the consumers who lack precise price knowledge as well as the ability (or the willingness) to take on the mental burden of acquiring and processing complete price information. The emergence of specialized price comparisons for technical durables on the World Wide Web (e.g., priceline.com) reduces, but by no means solves, the problem generally.

These imperfections are utilized for building management theories on two aggregation levels: (1) explaining strategic actions of competing organizations (e.g., "cross and counter" or "follow the leader"), and (2) explaining the existence of the multinational enterprise itself and the internationalization of business activities.

A basic element for the explanation of multinational enterprises is foreign direct investment: investment in building physical manufacturing, distribution, or service-providing facilities in a country different from the firm's home country. These differ from usual portfolio investments with respect to the aims of the investment. Portfolio investments target arbitrage between different markets, for instance, different rates of interests or the reduction of risks by diversification to markets that are not perfectly positive correlated.

In his seminal work, Steven H. Hymer emphasized the importance of direct control, which enables the creation of market imperfections, particularly the elimination of competitive attacks or responses. Hymer argues that a total fusion of two competing firms might maximize profits if (1) the firms are actual or potential competitors and (2) the entry barriers for the markets under consideration are high and the number of competing vendors is small. Otherwise, a monopolistic advantage of the cooperating incumbents would be threatened by the entry of new vendors. In this theoretical development, foreign firms are assumed to be at a disadvantage when entering foreign markets because domestic competitors might have more detailed knowledge of national laws, a better understanding of consumer preferences, and so on. Thus, foreign competitors always have to incur higher information costs. In addition, they have to cope with currency fluctuations and are always in danger of incurring superfluous costs due to cultural misunderstandings. Multinational enterprises emerge if the monopolistic advantages derived by direct control over foreign investments at least compensates for disadvantages.

Charles P. Kindleberger extended this theory of market imperfections by rigidities in the factors markets. If factors are not accessible to competitors or transferable to foreign markets, the multinational firms benefit from these rigidities. Technologies or product designs might be protected by patents, workers' wages may show substantial differences, and even the interest to be paid for credits may vary across national markets. These factor rigidities provide multinational firms with potential advantages if they locate the production facilities in different nations. This perspective enables the explanation of cross-border vertical integration in addition to horizontal integration already considered by Hymer. Moreover, the Kindleberger extension also allows the consideration of governmental restrictions of market entries and governmental trade barriers.

Criticism of this theoretical development has resulted in several innovative management theories. For instance, the market imperfection arguments are static in time. Knowledge-based monopolistic advantages are usually dynamic advantages by nature, because innovative technologies emerge and create markets or replace older technologies in the course of time. This critique resulted in the concept of the international product life cycle.

See Also: Barriers to Entry; Foreign Direct Investment, Horizontal and Vertical; Marketing; Multinational Corporation; Product Life Cycle Hypothesis.

Bibliography. Peter J. Buckley and Mark Casson, eds., *The Economic Theory of the Multinational Enterprise: Selected Papers* (MacMillan, 1985); Stephen Herbert Hymer, *The International Operations of National Firms: A Study of Direct Foreign Investment* (MIT Press, 1976); Charles P. Kindleberger, *American Business Abroad: Six Lectures on Direct Investment* (Yale University Press, 1969); David Ricardo, *The Principles of Political Economy and Taxation* (Murray, 1817); Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Strahan and Cadell, 1776).

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Marketing

Marketing identifies unfulfilled needs and desires and satisfies those needs and desires in the target market. Marketing entails an entire process that involves identifying opportunities in the market that have potential to make a profit, developing a new product, attracting the customer to the product or service, keeping the customers, building brand loyalty, and creating value for customers. Companies that do this well are successful marketers. Marketing is no longer just a department in a company; various departments work together to market a product or service. Nowadays marketing starts even before there is a product. It is effective only if the company is successful in delivering the promised value and satisfaction.

In simple terms, marketing encompasses everything a company does to place its product or service in the hands of its target market. The target market is the potential customers of that product or service. People no longer just buy the product; they buy the ideas behind the product—ideas of what that particular product would do for them. Dunkin' Donuts and Starbucks both sell coffee and both are successful chains. Dunkin' Donuts' target market is serious coffee drinkers who need a quick inexpensive cup of coffee on their way to work.

Starbucks, on the other hand, is marketing not just coffee but an entire experience, lifestyle, variety, flavor, and music to its target market. The Starbucks target market is customers who want not just coffee but ambiance, a place to relax, read, work, meet friends, listen to new music, etc. At Starbucks, people are buying the concept of flavor, ambiance, and fun. Marketers today take time to discover who their target market is and how to reach them.

There are two types of marketing: lateral and vertical. Lateral marketing is to create a new market. In lateral marketing, an existing product is transformed to satisfy new customers. Cereal manufacturers realized that the market was saturated and there was no more room for growth. A European company took cereal and turned it into a healthy snack that can be eaten any time, not just for breakfast, and thus a new market for healthy cereal snacks was developed. In vertical marketing, potential customers are converted and a new market is developed. It is a niche market. An example is technology-oriented products. The real goal of marketing is to own a market rather than compete for a market. Apple, Ikea, Wal-Mart, and Amazon.com are all great examples of companies that realized that to invent a new market is better than competing for share.

Marketing decisions can be categorized as a mix of the 4Ps: product, price, place, and promotion. Professor Jerry McCarthy introduced the 4Ps framework in the first edition of his book *Marketing,* published in 1960. Marketers make decisions based on these 4Ps in the target market.

Product

The integral part of the marketing mix is the product. A product is anything that can satisfy the target market's needs and wants. A product includes more than a physical good or service. It can be a person (Tiger Woods, political figures, Madonna), a place (Niagara Falls, Disney World, Hawaii), an organization (Red Cross, Girl Scouts), and also ideas (quit smoking, drive safely). A product is designed, manufactured, and presented to the target market for sale. In order to decide what product to offer to the market, the marketer researches and thinks about what product will add value, provide a benefit, fulfill the end user's needs. A product can be an existing product line or a new product. Brand name, quality, style, features, functions, etc., have to be kept in mind in terms of the product. Characteristics of a product need to be defined.

Marketers need to ask themselves: What makes the product better than the competitor's? What is the brand image? How do consumers perceive the product? What does the customer want from the product? What needs does it satisfy? What features does it have to meet these needs? What shape, size, color? Name of the product? How is it branded? Branding is an important part of marketing that falls under the product category. People are willing to pay a premium price for strong, well-known, trusted brands. Consumers have become very brand conscious and brand oriented, and companies are spending millions to establish brand recognition and awareness in the eyes of consumers. A great brand brings to mind certain attributes, such as the product features and brand characteristics. It should also suggest a visual of the brand users and the company values.

Price

Price is the cost that the consumer pays to receive the product. It is an integral part of the mix. Costs to produce and sell the product and pricing strategies need to be determined. Should the price be lower than competitors' or higher? How much are intended customers willing to pay for the product? What are the costs to sell and produce the product? These are some questions marketers need to answer at this stage. A marketer can adopt various pricing strategies:

- Penetration pricing: This is usually when a new product is being introduced in the market. A low price is set to enter and gain the market, increase sales and market share.

- Competition pricing: Determine a price based on what the competitor's product price is.
- Bundle pricing: Bundle a group of products and sell as a package.
- Skimming pricing: Start by keeping the price of the product very high and then at a later stage lower the price to appeal to a mass market.
- Product-line pricing: Price different products within the same product range at different price points. This lets the company maximize its profits.
- Psychological pricing: When the product is sold at $0.99 instead of at $1, or $1.99 instead of at $2.
- Premium pricing: Price is set at a high level as the product is premium and offered to an exclusive target market.

Place

Place or distribution is making sure the product is available where the target market wants it. Marketers decide how to distribute the product at the right time and in the right place. Manufacturers can choose to sell their products directly to consumers or through wholesalers and retailers. At this stage, marketers research where consumers look for the product. Decisions on market coverage (inclusive, selective, or exclusive distribution) are made. What are the distribution channels? What distribution channels do competitors use? Is a sales force needed to sell the product, or are there other channels such as the internet, specialty stores, supermarkets, or direct mail? For example, Dell uses direct distribution from manufacturer to consumer.

Promotion

Promotion is the final P in the marketing mix. It deals directly with the consumer. Promotion includes the various tools of marketing communication. Some methods of promotion are advertising, public relations, sales promotion, personal selling, direct mail, internet promotion, and promotional strategy (pull and push strategy). All this increases consumer awareness of the products that exist in the market and also provides knowledge about the product features and benefits. These marketing communication channels also help educate, inform, and persuade consumers. Companies use these promotional vehicles to enhance the product's brand image and encourage consumers to try the new product or remain loyal to their brand.

Pepsi succeeded in India using culture-specific marketing, such as using locals as brand ambassadors.

Important questions need to be answered at this point: What mode should be used to get across the marketing messages to the target market? How do we reach the audience? Do we use advertising in the newspaper or TV ads or on the radio, billboards, or internet? If it is a new product launch, when is the best time to promote the new product? What are competitors doing to promote their product? What factors influence the choices the company makes on its promotions? An effective marketing communication is needed. No matter what the mode of marketing is, it has to be successful in delivering a clear, concise, effective message to the target market.

This last P in the marketing mix also comprises promotional strategies. The marketer needs to develop the message strategies. What message do we want delivered to the target market? Will it be through branding, or perhaps a new logo? The message should reinforce the benefits of the product and develop the positioning strategy of the product. Companies that have been successful with effective message strategies include McDonald's ("I'm Lovin' It") and Nike ("Just Do It").

There are two important kinds of promotional strategies: push and pull. A "push" promotional strategy uses methods to create consumer demand for a product. The producer promotes the product to wholesalers, the wholesalers promote it to retailers, and the retailers promote it to consumers. A push strategy tries to sell directly to the consumer, bypassing other distribution channels. In push strategy, consumer promotions and advertising are the most likely promotional tools. It is all designed to have the retailer promote one product to the end users over a different product.

A "pull" selling strategy requires high spending on advertising and consumer promotion to build up consumer demand for a product. If the strategy is successful, consumers will demand the products from their retailers, the retailers will ask the wholesalers, and the wholesalers will ask the producers. Examples are "50 percent off today" or "bring in this coupon to save 25 percent" or "buy one, get one free," "spend $100 and get $25 off your purchase."

A successful promotional strategy is not just claiming that the product is better than any other product in the market but making a claim that is true. Example: If a company promotes a sofa as a product that is comfortable and of superior quality but the sofa does not live up to the claim or the claim is incorrect, it will only hurt the company. Wal-Mart, Ikea, and Southwest Airlines have all claimed to have low-priced products with good quality and all three have innovated ways to keep costs down while maintaining good quality.

Marketing Communication and Promotions

Advertising is a tool of communication used by marketers to inform potential consumers about the product, product features, benefits, and availability. Advertising also reinforces the brand image to maintain brand loyalty. Advertising media include newspapers, television, radio, magazines, movies, the internet, and billboards. Advertisements are usually placed where the target audience can easily see it/hear it. Companies spend billions on advertising, and it is the most effective and expensive tool of communicating persuasive messages to the target audience.

Subliminal or covert advertising is becoming very popular. Marketers are placing their products or brands on popular TV shows or movies. The audience sees the brand being used by a famous, well-liked person on TV or in a movie and does not realize that the product is being advertised to them. Subliminal advertising is the technique of exposing consumers to product pictures or brand names without consumers having conscious awareness that they are being exposed to advertising. Example: Omega watches and Aston-Martin cars were seen in the James Bond movies.

Other tools include public relations, which manages a company's internal and external communication to build and maintain the company's positive image. Also, sales promotion is an integral part of the promotion mix. Sales promotion is used to increase demand to enhance market share and profits. Examples include contests, coupons, rebates, loyal customer rewards programs, sweepstakes, etc.

Personal selling is the oldest form of promotion. Companies use a sales force to communicate the product and its benefits to potential buyers and close the deal and make a sale. It also involves developing a relationship with the potential buyer and extending exceptional customer service. The major advantage of personal selling is that it involves a personal face-to-face activity that allows room to customize the message to the consumer's needs. For example, pharmaceutical and consumer product companies employ a large sales force to sell their products.

Direct mail is unsolicited mail sent to consumers to inform them about the products and services available. It is commonly referred to as junk mail. Direct mail is marketing in which companies market and advertise directly to consumers without using media. Direct mail includes advertising flyers and catalogs. A major advantage of direct mail is that marketers are able to target the exact consumers they want. A major disadvantage is the cost. In internet advertising, companies use the internet to advertise their brands and communicate messages to their audience. This includes banner advertising, e-mail spam, search engines, pop-up ads, and affiliate advertising.

Many marketing gurus are now talking about a fifth P in the mix: positioning. This is part of the promotion mix, but many marketers feel that extra emphasis should be made on product positioning, market positioning, and corporate positioning. Spending more time earlier on positioning goes a long way for marketers. The success of a new product depends on how consumers perceive it, what they think of the product, what they take from the positioning. Companies that differentiate themselves can position themselves as a brand that is different from competitors and offer a unique product with benefits that succeed and reap profits.

Product Life Cycle

Understanding the product life cycle is very important as it impacts the marketing mix. There are four stages in the product life cycle:

1. Introduction stage: In the introduction stage, the company wants to introduce the new product and build product awareness and develop a market for the product. This stage includes (a) product: branding is established; (b) pricing may be low in order to build market share; (c) distribution is selective, just enough to introduce the product to consumers; and (d) promotion is aimed at innovators and early adopters. Marketing strategy is to build product awareness and to educate consumers about the product.
2. Growth stage: In the growth stage, the company wants to build the brand and increase market share. Product quality is sustained and any needed improvements are made. Pricing is maintained as the firm tries to gain more market share and gain new consumers. Distribution channels are added as demand increases and customers accept the product. Promotion is increased and aimed at the entire target market.
3. Maturity stage: At the maturity stage, the strong growth levels off. Competition increases. Product features may be enhanced to differentiate the product from that of competitors. Pricing may be lower due to increased competition. Distribution increases and more incentives are offered to consumers. Promotion now includes product differentiation.
4. Decline stage: As sales decline, the firm can choose to maintain the product, perhaps repackage, redesign, and rejuvenate by adding new features and finding new uses; or to discontinue the product or sell it to another firm that is willing to continue the product.

International Marketing Versus Global Marketing

In international marketing, marketers apply the marketing mix decisions to more than one country. In global marketing, marketers integrate marketing decisions across multiple countries. As an international marketer, a firm may start exporting to a foreign country or, if doing business seems lucrative in a foreign country, a firm may enter and start marketing to that specific country. As a global marketer, the firm makes decisions keeping the entire world market in mind. The home country is not the focus—marketing decisions are made keeping in mind how they will affect the product or firm globally.

Globalization has changed the way companies do business. It has also impacted marketing. Companies are no longer competing in their respective regions only but are now competing on a global level. Even if some marketers had not planned it this way, global marketing is now an integral part. In the past, a company only had to worry about marketing within its national boundaries, but due to rapidly growing technology and globalization, companies now focus on their home market as well as outside competition in their home market. A global marketer views the entire world as one market. In this scenario the global marketer makes marketing and business decisions based on how they affect the regional markets.

The same 4Ps of the marketing mix apply in global marketing, but marketing decisions and applications are different in global marketing. A global marketing company launches a single product and makes changes to the same product depending on the demands of the different markets around the world. The logo and brand remains the same in all the regions, for example, Nike, Coca-Cola, Pepsi, Microsoft, and Apple.

Price is different in every market. How the product is distributed is also a region-by-region decision that depends on the target market and competition in a specific region. Promotion is usually the most important P in the marketing mix in global marketing. Decisions as to whether the message will be the same or will be different in every country are made at this stage. In global marketing the biggest advantage is that companies can achieve economies of scale, increase and sustain their brand image worldwide, and increase their presence and brand recognition worldwide. The disadvantage, on the other hand, is that the competitive environment and consumer needs are different in every region. Local companies know the market; they understand the consumers better than a foreign company.

Some products are easy to sell globally like beverages and electronics such as iPods, laptops, and cell phones, but some products like clothing and food require local adaptation. Global marketers need to analyze their markets, conduct market research, and get to know the consumers in all regions and cultures before they mass market a product globally. Many developing countries now have an increased demand for products that are mature or declining products in the West, thus giving many marketers the opportunity to sell their products globally at a greater profit. Today global multinational marketers are everywhere. A person can fly American Airlines to Asia, rent a car at Hertz, have a McDonald's burger with fries and a Coke, buy an Apple or Microsoft computer, and catch *The Bold and the Beautiful* on a brand new Samsung, Sony, or Panasonic TV. This is an example of marketing in a borderless world. Companies such as Coke, Pepsi, and McDonald's are successful marketers—they have worked hard to understand their markets and the culture, tastes, and attitudes of their customers. McDonald's has a similar marketing strategy but has customized its burgers according to region. It offers burgers with no bacon options in Muslim-oriented countries that do not eat bacon or ham.

Marketers who have not studied their markets are not successful globally and experience resistance from the market. For example, Toys "R" Us, after doing well in Europe and the United States, tried to capture the Japanese market but faced much opposition and difficulty. They had to find a local partner to enter the market. Coke, when marketing to Indian consumers, had based its advertising on its worldwide image and had not made any changes in its marketing strategy. Pepsi, on the other hand, had customized their marketing strategy and advertising, keeping the Indian locals in mind and using local heroes as brand ambassadors. This practice put Pepsi in a better position in India than Coke.

Car manufacturers such as Honda, Toyota, and Nissan have developed their own niche markets globally. They do not sell standardized cars but customize the product and marketing strategy based on the region and its demands. Procter & Gamble is a good example of a successful global brand that has expanded rapidly into new markets by tailoring their products to meet local consumer demands in each country.

See Also: Advertising; Branding; Brand Loyalty; Consumer Behavior; Global Brand Strategy; Globalization; Market Research; Media and Direct Marketing; Positioning; Product Development; Promotions; Sales.

Bibliography. Gary Armstrong and Philip Kotler, *Marketing: An Introduction* (Pearson Prentice Hall, 2007); Philip R. Cateora and John L. Graham, *International Marketing* (McGraw-Hill Irwin, 2007); Philip Kotler, *According to Kotler: The World's Foremost Authority on Marketing Answers Your Questions* (AMACOM, 2005); Philip Kotler and Kevin Lane Keller, *Marketing Management* (Pearson Prentice Hall, 2009).

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Market Maker

A market maker is a bank or brokerage company that continuously publicly displays (quotes) ask and bid prices (for a guaranteed number of shares) at which they will sell or buy during the trading days. This financial operator ensures the liquidity and efficiency of the financial markets (making easier the trade of blocks of shares) and, therefore, reduces the transaction costs.

There are two ways of treating financial orders: matching (fully or partially) the orders recorded in a book orders or having a market maker that accepts directly the orders given by the market participants. On the one hand, a book orders matches the bid prices with the ask prices. If the highest bid price is equal (or above) the lowest ask price and there are enough shares available, the trade is immediate. However, if the highest bid price is below the lowest ask price, the order is recorded and displayed to later traders. On the other hand, a market maker buys or sells the security, and adjusts the price after according to their beliefs. For example, when a customer places an order (with a broker) to buy (sell) shares of a stock, the market maker will actually sell (purchase) the stock (even if he does not have a buyer [seller]), "making a market" for the specific stock.

It is possible to run a market using both a market maker and a book orders. Indeed, a market maker will work better in a small market (few offers) and a book order will work better in a large market (plenty of offers). The rule is that the market maker's orders must have the priority. Using a market maker enlarges the set of potential trades. This observation is even more visible in thin markets where the book orders is almost empty. The inclusion of the book orders method simplifies the adjustment of the market to increasing volume. Then the book orders procedure intervenes more significantly when the market gets thicker (lowering volatility).

The majority of the stock exchanges operate on an order-driven basis (matching the buyer's bid and the seller's offer) instead of using market makers. However, the integration of market makers is growing rapidly and presents some advantages for investors. For instance, the NASDAQ is an operation of market makers (more than 500 member firms that act as NASDAQ market makers). Generally, each market maker competes with the other market makers (who are dealing on the same security) to obtain the deal with the client. In this way, this ensures the market to be more efficient and competitive. Note that many over-the-counter (OTC) stocks have more than one market maker. There is generally a clear separation between the market-making side and the brokerage side to avoid brokers' recommending specific securities for which the firm makes a market.

The market makers take no commission on the sale but instead make their money on the bid/ask spreads or on the offsetting of their positions. The bid/ask spread is the difference between ask and bid prices. This spread is rarely equal to zero, and the market maker will only make a trade when there is sufficient profit on the sale, i.e., a sufficient spread. On heavily traded stocks, this compensation for the risk they take (holding a certain number of shares of a particular security) can represent a handsome profit even if the bid/ask spread is very small. Note that a market maker makes a profit on every sale, whether the market goes up or down. Obviously, the opportunity to become a market maker is very rare and controlled.

Market makers support different principal kinds of risk:

- Liquidity risk: A market maker provides liquidity to his working market; however, he is not certain to find the necessary liquidity to reverse the positions that he has inherited. In this way, a market maker needs to find a trade-off between highly liquid markets (with low bid/ask spreads and therefore low profits) and illiquid markets (with high bid/ask spreads and therefore high potential profits).
- Operational risk: A market maker is also exposed to potential operational risk arising from business functions and the practical implementation of his management strategy. This concept integrates notably information, fraud, physical, and environmental risks.
- Information asymmetry: The market maker should pay the correct prices for his positions, but he will never have all the information because the markets are not perfectly efficient (the information is not homogeneous and not perfect).

There are some differences between a market maker and a market specialist (NYSE). However, they serve the exact same purpose.

See Also: Bid/Ask Spread; Financial Markets; Risk.

Bibliography. Investopedia, www.investopedia.com (cited March 2009); Securities and Exchange Commision, www.sec .gov (cited March 2009).

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Market Research

Market research examines the operating environment of a corporation. It includes all of the processes and operations that deal with the systematic acquisition of knowledge, including searching for, collecting, analyzing, and interpreting information. This knowledge supports the marketing activities of corporations.

Market research is generally divided into four categories: market research, consumer research, product research, and media research. It can be performed either by using secondary sources such as data and information that has been collected beforehand or through primary research that refers to collecting data on a specific topic directly in the market. When conducting market research, researchers apply qualitative and quantitative research methods.

Market research aims at investigating the conditions in which a corporation operates. The acquisition of market information has two main goals. First, market information can help to solve problems that the company is facing and allows managers within the corporations to make better decisions. If sales of a certain product decrease, market research can present answers as to why consumers do not buy the product anymore or why they prefer the product of a rival. Market research can help to locate and identify corporate problems and to develop solutions for them.

Second, market research helps to identify future trends and challenges for corporations. Firms are facing increasing competition from an ever-growing number of competitors. In order to bring successful and profitable product ideas to market as fast as possible, the corporation needs to identify any changes or trends in customer needs so that they can be integrated into marketing planning. Thus the company needs information about market potential, market share, and trends in consumer behavior.

Stages of Market Research

Market research is performed in several stages. At the beginning of the market research process, the problem or challenge the corporation faces has to be defined in order to be solved. Information to accomplish this can be found in the market. The company can either carry out the research activities itself or hire a market research agency to do so. In some cases, information on the topic of interest already exists within the company or in official organizations, such as ministries, research institutions, or market research agencies. The next step, namely the analysis and interpretation of the data and information acquired, is the most important one. Finally, the acquired data is integrated into the marketing activities of the corporation.

The acquired information is communicated via marketing-information systems within the company. A marketing-information system facilitates the organized and regular dissemination of information to all managers within an organization to support their decision-making processes. At the end of the market research process, collected information will influence the marketing activities of corporations.

Areas of Market Research

Market information has various forms. They include information about the researcher's own company, its market position, its development, and its growth prognosis as well as competitive strategies and information on rival corporations. As its name suggests, market research investigates the operating market of a corporation and the changes that can be observed in these markets. Another relevant area is the research of consumers, their attitudes, needs, and behavior. Market research can further investigate products and their acceptance and usability. Product research aims at avoiding problems in product usage and acceptance by applying product, color, or flavor tests. Market research is also conducted to investigate the effectiveness of media used in marketing activities. Questions investigated in this field concern the image of communication channels, how many and which consumers they reach, and the efficiency in communicating the corporation's advertising messages.

Market research is divided into secondary and primary market research. Secondary research is based on data, which has been investigated beforehand. Secondary data is often found in governmental organizations, such as chambers, ministries, or research institutes. Primary market research, on the other hand, is data that is only collected to answer particular questions that a company may have.

If a company is interested in offering a new product (e.g., yogurt) in a new market, it can support its market entry decision with secondary data on the market conditions. Secondary data may include information about market conditions, market volume, country sales numbers, or general market trends such as changes in consumption styles. The question of which yogurt flavor customers in a market prefer cannot be solved with secondary data. It must be investigated via primary research within the target consumer group. Primary market research involves product tests and integrating the results into new product development processes. This is to decrease the risk that the product will not be accepted by consumers.

Market information can be collected via internal and external resources of the company. Internal sources are company statistics, consumer data, and sales data as well as data on cost accounting. External sources refer to information that derives from market research institutes, consultancies, experts, journals and industry indexes, governmental organizations, commercial chambers, universities, or other research institutes.

Qualitative and Quantitative Research

Market research methods are further divided into qualitative and quantitative methods. Qualitative market research attempts to provide in-depth information on certain topics and can therefore find out consumers' attitudes or their changes in them, their values, and their reasons for making purchase decisions. Qualitative market research methods include qualitative interviews, focus groups, observations, and experiments. Qualitative interviews consist of open questions that allow identifying psychological and sociological backgrounds and the relationships of a certain topic. Focus groups are group discussions in which a group of consumers discuss their use and impressions of a certain product. This discussion is moderated and guided by a market researcher and in most cases also videotaped. During the discussion, different and often new aspects concerning the product are presented that enable the company to find out about consumer attitudes.

Observations investigate consumer behavior in greater depth. In consumer research, observations take place in the form of test purchases (mystery shopping), customer frequency surveys, or direct observations of consumers' purchasing processes. Observations permit investigation of consumer behavior without interference by interviewees. Despite these benefits, observations are only partly usable because market researchers are only observing consumer behavior without investigating the background and reasons for it. Observations are often considered a subjective research method.

Experiments simulate real situations and observe and analyze the behavior of consumers in them. Experiments are used to perform product tests on acceptance, usability, flavor, and store tests. Causal relationships can be discovered in this way. The company can find out the conditions, the store design, and the packaging that positively influence consumer behavior.

Quantitative research methods refer to methods that generalize consumer behavior. Whereas qualitative research methods investigate in depth the consumers' reasons and attitudes, quantitative research methods find out if these attitudes and reasons are representative for a majority of consumers. Quantitative research methods include surveys conducted in the form of standardized questionnaires. Another quantitative method is a panel, a regularly performed survey on media and purchase behavior of consumers.

See Also: Advertising; Focus Groups; International Marketing Research; Lifestyle Research; Market Audit; Marketing; Markets; Product Development; Research Methods: Qualitative; Research Methods: Quantitative.

Bibliography. Gilbert A. Churchill and Tom J. Brown, B*asic Marketing Research* (South-Western, 2009); Bonita M. Kolb, *Marketing Research: A Practical Approach. Los Angeles* (Sage, 2008); Carl McDaniel, Jr., *Marketing Research* (Wiley, 2009); William G. Zikmund and Barry J. Babin, *Essentials of Marketing Research* (South-Western, 2009).

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Markets

Almost everyone appears to understand the term *market*. However, different people answer the question "what is a market?" in different ways. Some consider a market as a designated geographical location where buyers and sellers meet to trade goods and services. Others define *market* in terms of specific characteristics of the potential buyers for a product or service. This entry examines the various ways in which *market* can be defined and understood.

Theodore Levitt argued that a market is composed of people who have various needs and wants. Economists across the world consider markets as the group of buyers and sellers. Marketers differ from economists in that they consider sellers as the constituents of industry and buyers as constituting the market. Jack Z. Sissors argued that market consists of many things related to selling products that meet consumers' needs and wants. He further argued that there are two main dimensions of a market: physical and behavioral. Physical dimension considers the physical attributes of the market for a product or product class such as market size, location, and prospective buyers' demographical characteristics. Physical dimension helps define the market in terms of the product or product class whereas behavioral dimension helps in developing a customer-oriented perspective of the market. Behavioral dimension focuses on behavioral characteristics of the prospective buyers such as the influences, reasons, quantities, frequencies, and timing of purchases as well as their social and psychological characteristics. There are several ways in which markets have been classified.

Traditionally, markets have been defined and classified either in terms of geographical locations or product class. Examples of markets identified by product class include a cotton market, cheese market, food grains market, fruits and vegetables market, etc. Some examples of location-based markets include New York market, London market, Calcutta market, Valencia market, etc. Some of these locations were also very strongly identified with a product class. For example, Valencia market in Spain was traditionally known for cotton and Calcutta market in India was known for jute.

Since more and more companies are selling their products and services abroad, it is now common practice to classify markets as domestic markets and global markets. Some of them classify and identify their international markets based on regions, e.g., U.S. market, European Union market, southeast Asian market, Asian market, Pacific market, Indian market, Chinese market, French market, etc. Many people continue to identify markets in terms of geographical location or product class. Markets are also classified as business markets and consumer markets based on the nature of consumption.

Business Markets and Consumer Markets

Business markets are constituted by those buyers who buy goods and/or services to resell to others or to use them to produce another product and/or service. These buyers are known as organizational buyers or business buyers, and they sell or rent or supply their outputs to other businesses or to individual consumers. Business buyers, although few in number, usually buy in bulk. Industrial markets, institutional markets, and government markets are among the key business markets. Industrial markets include buyers for raw materials, components, finished goods, and/or services. Organizations that are created to provide goods and/or services to people in their care constitute institutional markets. Medical and educational institutions are good examples of institutional markets. They usually operate with a low budget and hence look for good-quality products and services at lower prices. In several countries including the United States, government constitutes the biggest market for several firms. Some estimates show that the U.S. government is the largest customer in the world. Government markets are often good for domestic suppliers as most government organizations tend to favor them and formulate their purchasing systems and policies accordingly.

Consumer markets, on the other hand, are constituted by those buyers who buy things for their personal or household consumption. Professional marketers now use demographic and nondemographic (psychographic) characteristics of the prospective buyers to define and classify consumer markets. Age, family size, gender, income, occupation, education, ethnicity, etc., are among the key demographic characteristics used to identify and define consumer markets. A large number of consumer product companies use age as a criterion to categorize their markets as kids market, teenagers market, youth market, adult market, and seniors market. Some define markets even further, for example, classifying kids market into submarkets such as newborn market, infant market, toddler market, and preschooler market. Due to different genetic and social factors, markets for certain product classes such as clothing, grooming, entertainment, etc., require businesses to define their markets and products on the basis of gender. It has always been very easy to notice that airlines, hotels, clothing companies, banks, etc., often come up with different products and services for market classifications based on the income level of their prospective buyers. Similarly, many restaurants across the world thrive as they identify their market based on ethnicity. One can easily locate Chinese and Indian supermarkets outside China and India that define their markets on the basis of ethnicity.

A cluster of buyers' characteristics such as education, occupation, income, personal wealth, etc., create an enduring division in several societies that is commonly termed *social class*. Many businesses identify and define their markets on the basis of social class because social classes exhibit distinct preferences and behaviors. Automobile manufacturers often use social class to identify their markets and develop specific products and services to suit the taste of consumers belonging to a particular social class.

Characteristics

Advances in behavioral science discipline have made it possible for businesses to combine both demographical and psychological characteristics of prospective buyers to better define and classify their consumer markets. Since people within a demographic group often vary significantly in terms of their personality traits, attitudes, beliefs, values, self-image, lifestyles, and aspirations, businesses develop psychographic profiles of their prospective buyers to identify appropriate markets. It works very well for niche marketers because psychographics delves deeper into people's lifestyles and behaviors, including their interests and values.

More and more businesses today construct their markets on the basis of behavioral characteristics of prospective buyers. For this purpose, they attempt to understand who and what influences their buyers to buy what they buy, why they buy a particular product and brand, when and how often do they buy, are there any special occasions to buy for, in what quantities do they buy, and from where? They try to understand their consumption and postconsumption behavior including disposal behavior. Several purchases involve planning by buyers to varying extent. Yet, kids buy candies, chocolates, ice cream, chips, and toys; and adults buy beverages and tobacco products on impulse. Such buyers constitute an important market for marketers of such products.

Businesses also define their markets based on the benefits their prospective buyers seek. Buyers who always seek the lowest price for an item constitute a key market for many businesses. On the other hand, some businesses focus on those markets that are constituted by non–price sensitive buyers who are looking for specific benefits other than economy. Businesses charge premiums in such markets and thus make more money even though they sell fewer quantities.

Consumption quantity is another important behavioral characteristic of buyers that businesses use to identify their markets. Many firms develop bulk packages for their market of heavy users and small packages for their light users. Some firms invest huge amounts of money and effort to develop specific programs for the market constituted by nonusers as they expect them to become heavy users in the future.

Some buyers buy and consume certain products on specific occasions. For example, wedding dresses are purchased or rented at the time of wedding; families go on vacation during school holidays and thus significantly increase the demand for air travel and hotel rooms among many other things; some save throughout the year to splurge during Christmas time; Valentine's Day, Mother's Day, and Father's Day are other occasions on which many people across the world spend good amounts of money to buy gifts. Businesses use these temporal aspects of prospective buyers' lives to identify markets and develop unique products and strategies for such occasions.

Some businesses operate in several markets. Others focus on specific markets. They evaluate the attractiveness of markets by estimating the size, profitability, potential, and associated risk and then develop appropriate products, services, and programs to market them.

See Also: Business-to-Business; Buying Motives/Behavior; Consumer Behavior; Consumer Needs and Wants; Market Development; Marketing; Market Research.

Bibliography. J. C. Anderson and J. A. Narus, *Business Market Management: Understanding, Creating and Delivering Value* (Pearson Prentice Hall, 2004); R. J. Best, *Market-Based Management* (Pearson Prentice Hall, 2008); P. Kotler and K. L. Keller, *Marketing Management* (Pearson Prentice Hall, 2006); Per Krusell, Toshihiko Mukoyama, Richard Rogerson, and Ayseguel Sahin, "Aggregate Implications of Indivisible Labor, Incomplete Markets, and Labor Market Frictions," *Journal of Monetary Economics* (v.55/5, 2008); Theodore Levitt, "Marketing Myopia," *Harvard Business Review* (July–August 1960); Jack Z. Sissors, "What Is a Market?" *Journal of Marketing* (July 1966); Linda Tischler, "Where the Bucks Are," *Fast Company* (March 2004).

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Market-Seeking Investment

Market-seeking investment is one of the types of foreign direct investment. According to Rajneesh Narula and John Dunning, it occurs when companies internationalize to a particular country because they want to supply this particular market with goods or services to grow in that market, and to be competitive within the industry as well as to provide opportunities to achieve production economies of scale. To benefit from the production economies of scale requires a sizable population and the ability of the market to support the expected demand on which the investment is based. Therefore, Dunning states that market-seeking foreign direct investment is based on a single central location (L) advantage. According to Narula and Dunning, market-seeking investment becomes preferable either if there are substantial barriers to exporting from the home country or if the local markets offer potential foreign investors significant opportunities to achieve scope and production economies of scale as well as a chance to grow.

Therefore, for John Dunning, the most important reason for market-seeking investment is the attitude of host governments toward such investment and their encouragements. However, there are four other reasons to explain why and how firms engage in market-seeking investment in foreign markets through a subsidiary.

Companies engage in market-seeking investment in foreign markets through (1) becoming accustomed: When goods and services are modified to local culture, to indigenous resources and to standards, companies can survive and become more successful in a foreign environment. In particular, it is commonly believed that if foreign companies do not adapt themselves to local customs, they might find themselves disadvantaged compared to local firms; (2) lowering costs: One of the most important reasons for companies to establish a subsidiary in a foreign market is to reduce transportation costs in that particular market. Otherwise, serving that market from a distance by exporting from the home market to the foreign market would be much more expensive; (3) following customers or suppliers: When main suppliers or customers move overseas, the firm may need to follow them in order to retain their business. If they do not do this, there is a high risk that they might lose their business to another competitor; and finally, (4) global positioning: A multinational company establishes subsidiaries as part of its global production and marketing strategy to have physical presence in the leading markets served by their competitors.

Therefore, John Dunning, Bruce Kogut, and Magnus Blomstrom explain that companies aim either to maintain existing markets or to penetrate new markets. Nevertheless, it is argued that businesses are more likely to be pushed toward this type of investment out of fear of losing a market rather than discovering a new one.

According to UNCTAD Global Survey results, market-seeking investment mainly concentrates on industries such as chemicals, food, finance, transport, and communication largely because of local or neighboring multinational companies and their specializations. The multinational companies from a few developing countries specialize in manufacturing industries like China, information technology (IT) services like India, and consumer electronics like Korea, and invest mainly in other developing countries.

In addition, the motives of multinational companies from developing countries are substantially different from the motives of multinational companies from developed countries in the same industry. Whereas multinational companies from developing countries invest in extracting oil or gas for the reason of market-seeking investment, multinational companies from developed countries invest in these industries for resource-seeking motives. According to the UNCTAD *World Investment Report,* foreign direct investment in neighboring countries is the most common feature of internationalization because of cross-border spillovers, factor similarities, and cultural familiarities in different markets.

See Also: Foreign Direct Investment, Horizontal and Vertical; Internationalization; Multinational Corporation.

Bibliography. John Dunning, *Multinational Enterprises and the Global Economy* (Addison-Wesley, 1993); John Dunning, Bruce Kogut, and Magnus Blomstrom, *Globalization of Firms and the Competitiveness of Nations* (Institute of Economic Research, Lund University, and Chartwell-Bratt, 1991); R. Gilpin, *U.S. Power and the Multinational Corporation: The Political Economy of Foreign Direct Investment* (Basic, 1986); Rajneesh Narula and John Dunning, *Globalisation and New Realities for Multinational Enterprise-Developing Host Country Interaction,* MERIT Occasional Papers 2/98-015 (1998); Rajneesh Narula and

John Dunning, "Industrial Development, Globalisation and Multinational Enterprises; New Realities for Developing Countries," *Oxford Development Studies* (v.28/2, 2000).

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Market Share

Market share of a firm's product can be defined as the amount of product that the firm sells into a market expressed as a proportion of the total amount sold in that particular market. It is, as its name suggests, a measure of how much of the market a firm accounts for, given that it shares the market with its competitors. A firm's market share is often considered to be a strong market-based measure of its strength, but one must be wary of the limitations. These limitations tend to lie in one fact: many assumptions are made in the calculation of what appears to be an objective measure of firm (or brand) strength.

A simple illustration of market share is that a firm with 100 percent market share would be described as a monopoly, and that the average market share for a market that contains *n* competitors is equal to 100 percent divided by *n*. That is, a market with five competitors would give each competitor an average market share of 20 percent. From this illustration it can be seen that averages are misleading, and it would be a rare market, indeed, that is shared evenly between its players.

Sometimes it helps to think of a market as being comprised of different types of competitors. A market leader and a challenger may compete for the top position, with one or more market followers who do not directly challenge for the position of number one. Finally a "market nicher" may choose to operate in a very narrow section of the market, posing little direct threat to the market leader, challenger, and followers.

Furthermore, it may not be the firm itself that competes in a market. Often a firm will create a number of brands to compete in the same market. For example, Dutch consumer goods firm Unilever currently competes in the detergent category with the brand names Omo, Persil, Surf, and Drive. Therefore, a different market share exists for the parent company and also for each of the individual brands owned by the parent company. Often markets are simply described on a brand-by-brand basis regardless of which parent company owns which brand. From here on, brand-level competition will be referred to.

When discussing market share for a brand, one must be clear on how the market share measure is calculated. Prudent managers must decide on the unit of sales, define the geographical boundaries, and determine the product class. The unit of sales is normally either some measure of volume or some measure of monetary value. Therefore, a wine brand's volume share may be calculated by dividing the number of cases (of wine) they sell by the total number of cases sold in the market. The same company's share by value could be calculated by dividing the value of their sales by the total value of the market. Brands that sell for a higher price than their competitors will have a higher share by value than their volume share in the same market.

Market share often has a high correlation to brand penetration and customer loyalty.

The geographical boundary of the market is the first step a firm may take in defining its competitors. One may define a market very broadly (e.g., the United States) in order to address strategic concerns, or in a narrower sense (e.g., California). It is common for firms to consider market share on a number of geographical levels depending on the purpose of the analysis.

The product class is an important second indicator of a firm's competitors. Consider a brand of Australian cabernet sauvignon for US$8 per bottle. The brand may be thought of as belonging to one or more of the following product classes: all wine, Australian wine, table wine, red wine, cabernet sauvignon, wines in price tier US$6–10. The product class is largely a function of how the consumers see the market and is often the focus of some argument between brand managers and their colleagues. Different pictures of brand performance may be arrived at simply by deciding that one's brand competes in a different product class, because of a different set of competitors.

Market share has been shown to correlate very strongly with other measures of brand strength. An example is the law of double jeopardy; brands with lower market share are penalized twice. Smaller brands have a lower proportion of shoppers buying them—even once—in a given period of time than do larger brands. Second, smaller brands are bought slightly less frequently than are larger brands. Market share tends to have benefits for a brand that go beyond simply the amount of product sold—it tends to have a high correlation to brand penetration and customer loyalty.

Therefore, when discussing market share, one must be clear about whether they mean firm or brand market share, the unit of sales, which geographical market they mean, and the product class they are referring to. Finally, double jeopardy is an empirical law that recognizes the relationships between a brand's market share and its other performance measures in repeat purchase markets.

See Also: Brand Loyalty; Competition; Market Development; Marketing; Markets.

Bibliography. Robert D. Buzzell, "Are There 'Natural' Market Structures?" *Journal of Marketing* (v.45/1, 1981); A. S. C. Ehrenberg, *Repeat Buying: Theory and Applications* (American Elsevier, 1972).

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Mark-to-Market Valuation

Mark-to-market is an accounting and financial term used to define the act of assigning a value to an asset based on its present market value (for example, the value at which the asset is being traded), rather than the book value (price paid when it was purchased). This concept is used when the asset's expiration date is undefined, or when its value varies from one day to the next. For example, shares that have no "final value" are subject to mark-to-market valuation.

Regulators encourage the use of mark-to-market accounting by institutions because they believe it leads to greater transparency and better reflects the value of equities, while critics blame this accounting measure for increasing financial instability of traditionally "stable" assets (such as bonds and mutual funds) as well as triggering downward spiral evaluation of some securities.

In the United States, mark-to-market is regulated under Internal Revenue Code Section 475, which dictates that securities should be valued at fair market price, and that dealers should recognize gain or loss of the security as if it were sold at fair market value at the end of the current year. Gain (or loss) is taken into account in the financial statements for that taxable year.

In the case of highly liquid securities, fair market value is easy to estimate. This becomes much more difficult when equities are not frequently traded, or are structured in highly complex manners. As such, Statement of Financial Accounting Standards No. 157 (SFAS 157) recognizes that there are three levels of assets; a Level 1 asset is valued by comparing the price of identical assets or liabilities. Level II assets use directly or indirectly observable events to determine fair market price, while Level III asset values are reflected by management's best estimate of market participants' perception.

Typically, mark-to-market valuation is used with goods for which the final value cannot be formally evaluated. For example, in the case of stocks or mutual funds, the overall value changes daily, so they do not have a final value assigned to them. Hence, mark-to-market is used to give these assets a "current" value so they are properly priced in accounting statements.

Mark-to-market is also used in futures trading to ensure that trader margins are still positive; hence the financial institution protects itself against depreciation by verifying daily that futures traders have sufficient funds on hand. If they do not, the institution will emit a margin call to protect itself. Mark-to-market is also used by institutions managing mutual funds so that investors can ascertain the current value of their investment, rather than waiting for quarterly or monthly valuation.

Mark-to-market was initially introduced by legislators as a way to protect investors and is believed to be critical in managing the value of long-term assets. In the past, some companies valued assets at the purchase price. This valuation did not always reflect the current value of the product, allowing them to conserve an inflated value over prolonged periods. In some situations, valuing assets at the price purchased allowed companies to increase the value of assets while misinforming investors.

Some people have criticized that mark-to-market increases short-term valuation of equities by increasing the daily valuation of equities, even if these have traditionally been defined as long-term investments. For example, when bonds are reported with mark-to-market valuation, they essentially vary like shares and other volatile equity. Hence, some people criticize the shortsightedness that inevitably emerges from using mark-to-market.

Critics have also emphasized the unstable financial environment this type of valuation creates. The time period becomes shortened for valuations for financial elements that should be done over a long period of time, increasing market volatility of stable instruments due to human psychology; investors are at risk in mark-to-market valuation in markets where liquidity is limited and instrument issuers have an incentive to avoid markdowns by triggering a transaction.

Another critical issue is that in times of economic downturns, equities that are valued in mark-to-market terms can quickly deflate due to market psychology. Hence, as investors rush to sell equity, the market price drops further, lowering the value, leading more investors to sell until the asset is left with no value. Hence, mark-to-market can further inflate a bubble economy, while further encouraging a downward spiral. Nonetheless, the financial instability is perceived by regulators as an acceptable trade-off to miscounting of assets that have lost value, and is believed to be the best way to protect investors.

See Also: Financial Market Regulation; Revaluation; Risk.

Bibliography. Tobias Adrian and Hyun Song Shin, "Liquidity and Leverage," September 2007, www.princeton.edu/~hsshin (cited March 2009); Cornell Law School, Internal Revenue Code Section 475, "Mark-to-Market Accounting Method for Dealers in Securities," www4.law.cornell.edu/uscode (cited March 2009); Frank Gigler, Chandra Kanodia, and Raghu Venugopalan, "Assessing the Information Content of Mark-to-Market Accounting with Mixed Attributes: The Case of Cash Flow Hedges," *Journal of Accounting Research* (v.45/2, 2007); Daniel Gross, "The Mark-to-Market Melee—Did an Obscure Accounting Rule Cause the Credit Crunch?" *Newsweek* (April 1, 2008).

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Marshall-Lerner Condition

The Marshall-Lerner condition, named after British economist Alfred Marshall (1842–1924) and American economist Abba Lerner (1903–82), is an often-asserted economic statement that specifies the circumstances under which a downward movement of the exchange rate, arising from either market-determined depreciation or monetary authority devaluation, will exert a favorable influence on a nation's balance of trade.

A decrease in the value of the domestic currency with respect to a specified foreign currency will alter the relative price of imports and exports. The price of imports will increase, relative to domestically produced goods, while the price of exports will fall relative to other countries. Such price movements will result in a switching of domestic and foreign expenditure, with domestic consumers buying fewer imports and foreign consumers buying more exports. The net influence of these movements on a country's balance of trade will be determined by the price elasticities of demand for both exports and imports.

As a general definition, the price elasticity of demand is a descriptive statistic that represents the relative responsiveness (or sensitivity) of demand to changes in price. It is calculated as the percentage change in the quantity demanded divided by the percentage change in price. If the price elasticity of demand for a particular good is given as 2.7, it implies that a 1 percent reduction in price will, all other things being equal, lead to a 2.7 percent increase in the quality demanded (and visa versa).

Assuming that the economy begins in trade balance, the Marshall-Lerner condition states that, all other things being equal, depreciation/devaluation will improve a country's balance of trade, providing that the sum of the price elasticities of demand for the country's imports and exports, in absolute terms, is greater than one. A simple example will illustrate the condition. A nation's trade balance, *BT*, may be defined as $BT = X – pM$, where X = the value of exports, M = value of imports, and p = the ratio of the prices of imported goods to domestically produced goods. The value pM indicates that any alteration in the relative price of foreign to home goods will alter the cost of goods imported. All values are expressed in terms of the domestic currency for the nation. Assume that, prior to devaluation/depreciation, the economy is in trade balance with $X = 100$ and $pM = 100$. Assume also that the elasticity for demand for imports is 0.9, and the elasticity of demand for exports is 0.8. Following devaluation/depreciation, what will be the effect of a 1 percent rise in the price of imported goods to domestically produced goods? The respective elasticities dictate that imports will fall by 0.9 per cent to 99.1, while exports will rise by 0.8 per cent to 100.8. Total expenditure on imports will also increase given the alteration in the relative price of foreign to home goods. The new balance of trade will therefore show an improvement, $BT = 100.8 – (1.01 \text{ x } 99.1) = 0.709$.

Now let us violate the Marshall-Lerner condition by setting the sum of the elasticities for exports and imports, in absolute terms, to less than one. Assume, for example, that the elasticity of demand for imports is 0.3, and the elasticity of demand for exports is 0.4. Allow also, as before, for the nation to be initially in trade balance, and for a similar 1 percent rise in the price of imported goods to domestically produced goods. Under these conditions, the new trade balance will show a deterioration, $\text{BT} = 100.4 – (1.01 \text{ x } 99.7) = – 0.297$.

Although the Marshall-Lerner condition highlights the ways in which depreciation/devaluation could improve a nation's balance of trade, a number of complicating factors must be taken into account. For example, underlying the condition is the assumption that depreciation/devaluation will lead to an immediate switch of domestic production to satisfy both increased domestic demand and increased foreign demand. Yet in the short run, there will probably be insufficient spare capacity within the home country to successfully switch production in order to satisfy the increases in domestic and foreign demand. Furthermore, we cannot ignore factors that undermine the assumption of an immediate increase in domestic and foreign demand. The existence of long-term contracts, for example, would cause the home country's short-run elasticity of demand for imports to be relatively unresponsive to price changes, implying that the nation's imports would not immediately tend to decline. A similar consideration must be given to the short-run demand for exports, for if this demand is also relatively unresponsive to price changes, foreign consumers would take time to switch toward cheaper imports.

Given that the effects surrounding export creation and import substitution will not be instantaneous, but will only take effect over time, the initial effect of depreciation/devaluation would tend to be a worsening of the balance of trade. However, as circumstances adjust over time, the nation would gradually experience an improvement in the balance of trade. This initial deterioration and subsequent improvement is referred to as the "J curve" effect.

See Also: Devaluation; Exchange Rate; Export; Import.

Bibliography. Dennis R. Appleyard and Alfred J. Field, Jr., "A Note on Teaching the Marshall-Lerner Condition," *Journal of Economic Education* (1986); Derick Boyd, Guielmo Maria Caporale, and Ron Smith, "Real Exchange Rate Effects on the Balance of Trade: Cointegration and the Marshall-Lerner Condition," *International Journal of Finance and Economics* (v.6/3, 2001); M. O. Clement, R. L. Pfister, and K. J. Rothwell, *Theoretical Issues in Interna-*

tional Economics (Houghton Mifflin, 1967); A. P. Lerner, *The Economics of Control* (Macmillan, 1944).

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Masculinity/Femininity

Masculinity/femininity is one of the five cultural dimensions identified by Geert Hofstede in his book *Cultures and Organisations: Software of the Mind*, where he presents the results of research on cultural variability or national cultural differences using survey data collected from IBM in 50 countries. Hofstede argues that this dimension is fundamental to understanding how societies cope with the duality of the sexes, suggesting that coping strategies would indicate how sex roles are distributed in the division of labor and how they impact hierarchies of work goals at the national level. He states that the decision to use masculinity/femininity as a label for this dimension is rooted in the findings, which indicate that this was generally the only dimension where men and women surveyed scored consistently differently. Nonetheless, it must be highlighted that the main trait is masculinity, which can be identified in the use of the Masculinity Index (MAS), where feminine is the low or nonmasculine, used to construct the dichotomy.

In theoretical terms, the dimension draws on ideas about how people "do" sex differences in organizations or how dynamics of gendered normative are constructed around understandings of sex roles. In operational terms, it refers to the degree of value placed on behaviors associated with masculinity or femininity. It could be said that the use of the dimension aims to illustrate the interaction between understandings of masculinity/femininity, culture, and behavior by focusing on how specific orientations reveal differences in emotional roles, cultural constructions of gender, and traits of "national character."

In that respect, both masculinity and femininity behaviors are categorized based on socially accepted sex-role patterns in traditional societies. For instance, Hofstede suggests that the main associations with masculinity and femininity can be identified as male assertiveness and female nurturance. He argues that

> masculinity stands for a society in which social gender roles are clearly distinct: Men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life.

On the other hand,

> femininity stands for a society in which social gender roles overlap: Both men and women are supposed to be modest, tender, and concerned with the quality of life.

Based on the previous understandings, the dimension opposes ego-goals (masculinity) to social goals (femininity), therefore suggesting that masculine behaviors prioritize the self while feminine behaviors prioritize the social. Masculinity behaviors include assertiveness, wealth acquisition, and achievement, and femininity behaviors include offering social support, focus on quality of life, and caring for others. The impact and presence of these behaviors on culture norms would indicate the level of masculinity or femininity, hence the cultural orientation for this particular dimension.

Hofstede's Evidence

Using a Masculinity Index (MAS) based on social-ego factor scores, 14 work goals items were scored, asking participants to think about factors that would be important to them in their ideal job (regardless of whether these factors were present at their actual job). The score results represented the importance attached to these factors. In line with what was previously mentioned about the traits associated with masculine and feminine, results were classified based on importance given to earnings, recognition, advancement, challenge, relationship with manager, cooperation, living area, and employment security. Earnings, recognition, advancement, and challenge were considered masculine, while relationship with manager, cooperation, living area, and employment security were considered feminine.

The index used a range between zero and 100, where zero was the feminine or nonmasculine score and indicated high importance of manager and cooperation and low importance of earnings. Conversely, lower importance of manager and cooperation and high importance to earnings increased the score, hence a higher masculinity.

Findings suggested that the country with the highest MAS was Japan with a score of 95, and the country with the lowest MAS was Sweden, with a score of 8. In the case of the highest-scoring countries, the top positions after Japan comprised a mix of countries from different geographical and cultural regions, namely, Austria scoring 79, Venezuela scoring 73, Italy scoring 70, and Switzerland scoring 70. On the other side of the spectrum, at the lowest end, Nordic countries dominated, with Norway scoring 8, Denmark scoring 16, and Finland scoring 26. The middle scores of the index presented a combination of regions scattered throughout the scale; for example, South Africa (63) and the United States (62), Canada (52), Pakistan (50), and Iran and France both with a score of 43.

Countries with high MAS, such as Japan, Austria, Venezuela, Italy, and Switzerland, give importance to manliness and masculine traits, behaviors, and products. As such, in these countries, it is expected that national cultures stress tougher values in men and tender values in women. Countries with low MAS, such as Sweden, Norway, the Netherlands, Denmark, and Costa Rica, have a closer degree of equality between men and women and behaviors are less prescriptive in regard to gender roles.

In view of the general patterns of masculine/feminine orientation, Hofstede explains how dynamics operate in the workplace, within occupations, in the family, and at school. He stresses the importance of socialization as a key instance where understandings of individual sex/gender roles are learned and then continuously reenacted by individuals in different contexts.

Nonetheless, it is important to highlight that Hofstede suggests that a country's location within the masculinity/femininity dimension is relative and mainly reflects prioritization of specific work goals. Furthermore, for some dynamics gender is not considered a relevant variable for values. This in itself raises issues pertaining not only to the exact nature of Hofstede's work (what are the theoretical foundations of Hofstede's work in terms of gender dynamics, masculinities and femininities?), but also to its focus (is the study about national cultures or organizational cultures?) and the relevance of the data collected to illustrate the dimensions identified (can it be argued that the masculinity/femininity dimension illustrates gender normative?).

Criticisms

The work of Geert Hofstede has been both widely praised and severely criticized. Brendan McSweeney and Rachel Baskerville-Morley are the sharpest critics; they argue that the two main fundamental flaws in Hofstede's work are its methodology and theoretical foundations. In that sense, several points can be highlighted; for instance, methodologically, the lack of representativity of the sample in each of the countries raises questions about the possibility to speak of "national" cultures.

The research assumes that generalizations about entire national populations can be made based on a few questionnaire responses, that occupational cultures are universally the same, and that findings are situationally nonspecific. Furthermore, the research does not consider issues pertaining to the nation-state debate, such as dynamicity, variability, and complexity. This last point brings to light issues about the theoretical outdatedness of Hofstede's model. Lastly, the simplicity of Hofstede's model is particularly important as the bipolarity of Hofstede's dimensions is problematic because it obscures that organizational reality is not dichotomous; for instance, there are masculinity and femininity, and it is not always masculinity versus femininity.

The main theoretical criticisms that can be made broadly pertain to culture in terms of assumptions that it is measurable, objectively observable, immutable, shared, and homogenous and to organizational culture in terms of assumptions that it is uniform and monopolistic. This is particularly important in terms of how masculinity and femininity are understood, as understandings of masculinity/femininity vary across cultures and reflect wider matrices that include combinations of national culture, institutions, structures, occupations, and individuals.

See Also: Cultural Norms and Scripts; Culture-Specific Values; Hofstede's Five Dimensions of Culture; Power Distance.

Bibliography. R. F. Baskerville, "Hofstede Never Studied Culture," *Accounting, Organisations and Society* (v.28/1, 2003); R. F. Baskerville-Morley, "A Research Note: The

Unfinished Business of Culture," *Accounting, Organisations and Society* (v.30/1, 2005); G. Hofstede, *Culture's Consequences: International Differences in Work-Related Values* (Sage, 1984); G. Hofstede, *Cultures and Organisations: Software of the Mind* (HarperCollins, 1994); G. Hofstede et al., *Masculinity and Femininity: The Taboo Dimension of National Cultures* (Sage, 1998), B. McSweeney, "Hofstede's Model of National Cultural Differences and Consequences: A Triumph of Faith—A Failure of Analysis," *Human Relations* (v.55/1, 2002).

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Maslow's Hierarchy of Needs

One of the well-known complaints about the limitations of economics is that economic theorizing is often based upon unquestioned assumptions about the nature of human agents. The model of *homo oeconomicus* has often been taken as an abstraction of human behavior in order to highlight major rules of economic functioning in a simplified way. A fundamental problem is that *homo oeconomicus*'s underlying assumptions clash increasingly with everyday experiences by observers inspired by social sciences like psychology or sociology. According to these assumptions, human agents are isolated from social networks and they are reduced to rational calculating machines following ultimately egoistic aims of maximizing individual profit. The sterile world that operates with ideas of a *homo oeconomicus* takes motivation as granted and treats human behavior as a black box.

In contrast, the primary aim of psychology is to ask for forces, grades, and types of motivation. Abraham H. Maslow (1908–70), a psychologist, offers a systematized typology of human needs that are organized hierarchically and that operate as motivation incentives at different levels. Maslow's work has a prominent place within the academic area of psychology but is also very well known by a wide field of neighboring disciplines concerned with questions of needs and motivation. His book *Motivation and Personality* (1954) reads as an address not only to psychologists but also a plea to refer more systematically to a concept of meaning in science:

> A psychological interpretation of science begins with the acute realization that science is a human creation, rather than an autonomous, nonhuman, or *per se* "thing" with intrinsic rules of its own. Its origins are in human motives, its goals are human goals, and it is created, renewed, and maintained by human beings. Its laws, organization, and articulation rests not only on the nature of the reality that it discovers, but also on the nature of the human nature that does the discovering.

Maslow inspired a new school of thought in academic psychology that tried to establish a platform beside behavioristic and psychoanalytic approaches and that was coined *humanistic psychology*. The approach had clear proximity to phenomenological thought and was distant to methods employing large data sets. Maslow's taxonomy of needs serves as textbook knowledge still today, and it is basic introduction in courses on management training or personal development. Initially, Maslow suggested five stages of needs that were later further developed to seven and finally eight stages. The first edition of *Motivation and Personality* (1954) summarized Maslow's work undertaken between 1943 and 1954. Maslow's hierarchy of needs has been often misunderstood as a very strict corset by which "higher" needs only come into discussion when "lower" needs are already satisfied "but actually it is not nearly so rigid as we may have implied."

Distinguishing between higher and lower needs means that lower needs are—anthropologically viewed—basic needs that cover physiological necessities such as getting or having food and shelter but also warmth, sexuality, and sleep. Maslow argues that even physiological needs can be ordered in a subhierarchy. On the other side, a higher need signals a later phyletic or evolutionary development. The need for food is shared by all living entities whereas the need for love or self-actualization is shared by fewer species. Another point is that higher needs are later ontogenetic developments.

In Maslow's hierarchy model the first and lowest stage of needs is represented by those biological and physiological needs whereas the second stage represents safety needs as provided through stability, protection, and security. Maslow's idea is that a firm order, laws, and limits belong to this area of safeness. The third stage of Maslow's introduced needs represents love needs and belongingness needs that aim at affected and emotional inclusion of human beings into categories such as family, work groups, partnerships, or further social relationships.

Esteem needs represent the fourth stage of Maslow's hierarchy. Here, self-esteem, mastery, or independence are listed as well as status dominance, prestige, or managerial responsibility. With the third and fourth stages, Maslow proves to include clearly more sociopsychological dimensions into his framework of thought that regards human beings as being part of a social context and belonging to a social matrix of relations. The fifth stage, finally, is in line with those stages before: it is the level of self-actualization needs. By those needs, motivation for self-fulfillment is addressed. Realizing one's individual personal potential, seeking personal growth and personal aims, and collecting one's own experiences are moments that belong to this type of needs at the top of the hierarchy pyramid.

The principle of hierarchy organization is that the higher the need, the less imperative it is for sheer survival, and the longer gratification can be postponed. Maslow argues in line with psychometric and psychomotoric findings that meeting with higher need levels means greater biological efficiency, greater longevity, less disease, better sleep and appetite, and he says that psychosomatic researchers proved to find out that anxiety, fear, lack of love, or domination tend to encourage physical as well as undesirable psychological results, whereas higher need gratifications have survival value and growth value as well. Higher need gratifications result in better subjective results, e.g., more profound happiness.

Maslow's hierarchy of needs is led by a conceptualization of human beings that is not unidimensional. Later Maslow added further dimensions as cognition, aesthetic, and transcendence. Although Maslow's hierarchy of needs is primarily developed by conceptual reflection, the attempt is far from being abstract. Maslow sheds light on human motivation and different sources of needs as they are very often neglected in economic models where human incentives are reduced to principles of *homo oeconomicus*. All that has been learned by human relations theory in management research and organization theory is fitting well with Maslow's thought. As more differentiated and wealthy societies and organizations prove to be, intrinsic motivation is increasingly becoming a major source of organization and restructuring. Even current voices in leading international economics are going to refer explicitly for a better understanding of motivation and are matching with some pieces of principle thought provided by Maslow.

Motivation and Personality is not only a book by a psychologist for psychologists but it is of interest for all social scientists. The argumentation is based upon broad knowledge of the division of science. Maslow reads as presenting his hierarchy of needs primarily as a heuristic scheme knowing that this scheme has to be modified according to concrete societies. Even in the beginning of his study, Maslow expresses that sociology matters:

> The study of the sociology of science and of scientists deserves more attention than it is now getting. If scientists are determined in part by cultural variables, then so also are the products of these scientists ... these are questions of the type that must be asked and answered for fuller understanding of the "contaminating" effect of culture upon perception of nature.

During the last 50 years, Maslow has emerged as a classic for different academic disciplines.

See Also: Consumer Needs and Wants; Empowerment; Motivation.

Bibliography. Steven J. Hanley and Steven C. Abell, "Maslow and Relatedness: Creating an Interpersonal Model of Self-Actualization," *Journal of Humanistic Psychology* (v.42/4, 2002); Abraham H. Maslow, *Motivation and Personality* (Harper & Row, 1954).

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Maternity Leave

Maternity leave is a job-protected leave from employment provided to mothers around the time of childbirth, sometimes with full or partial income replacement. The purpose of maternity leave is to give mothers time to prepare for or recover physically from childbirth and to care for newborn children without losing their employment. Most developed countries have national legislation that specifies minimum levels of maternity leave benefits to workers meeting certain qualifications. Employers may also have firm-level maternity leave policies surpassing the legally required minimum.

Family leave policy in Europe originated in policies introduced more than a century ago in order to protect the health of working mothers and their newborn children. The first maternity leave law was enacted by Germany in 1883. In 1919 the International Labour Organization (ILO) Convention of Maternity Protection recommended paid maternity leave of 12 weeks with a compulsory six-week postpartum period. The development and expansion of maternity leave policies in several countries was based on the ILO recommendations. In 1952 a second ILO Maternity Protection Convention recommended leave of 14 weeks with full wage replacement, with six weeks prior to and eight weeks after the birth of the baby. However, family leave policies were not widely adopted in Europe until the 1960s. Beginning with Sweden in 1974, many countries introduced dual parental leave policies, either by extending benefits to fathers in addition to mothers (paternity leave) or by replacing maternity leave with gender-neutral policies (parental leave).

Among OECD countries, the average maternity leave provided is 10 months, but in the United States, it is only 12 weeks.

Across countries, maternity leave policies differ along three dimensions: benefit duration, replacement rates, and eligibility criteria. Benefit duration varies widely across countries. The developed nations that make up the Organisation for Economic Co-operation and Development (OECD) provide an average of 10 months of maternity leave. Continental European countries have generous leave policies relative to the United States, providing leaves ranging from 11 months in Italy to 3.3 months in Germany. Nordic countries guarantee leaves ranging from 18 months in Denmark and Sweden to three years in Norway and Finland. Canadian law mandates approximately six months of childbirth-related leave; in the United States, the legal requirement is less than three months (12 weeks) of maternity leave.

Nations also vary in the extent of income replacement required during maternity leave. Austria, Germany, and France require 100 percent income replacement during the initial period of maternity leave. Other European countries require between 60 and 90 percent income replacement. Canada requires the replacement of 55 percent of prior earnings. The United States stands out among developed nations in requiring no income replacement.

Finally, eligibility criteria for maternity leave vary across countries. Most developed nations have universal leave policies, covering all new mothers (maternity leave), all new fathers (paternity leave), or all new parents (parental leave). In the United States, only those who work in firms with at least 50 employees and only those who have worked 1,250 hours in the prior year are legally guaranteed maternity leave. As a result, only about half of private-sector employees in the United States are legally entitled to maternity leave.

Legally required maternity leave has both costs and benefits. Lengthy leaves may hinder women's career advancement and impede progress toward gender equity in the labor market. They may also reinforce the traditional gender division of labor in the home. Subsidized child care or early childhood benefits may be forms of assisting new parents more favorable to gender equity.

On the positive side, lengthy maternity leave (leave beyond the first few months) is associated with improved health outcomes for both mothers and children. Women who take leave are more likely to breast-feed, and breast-feeding is associated with a number of positive health outcomes. Studies have also found positive effects on children's cognitive and social development for children whose mothers stay home during the first year of life.

See Also: Benefits; Family Leave; Women in Business; Work/Personal Life Balance.

Bibliography. Michael Baker and Kevin Milligan, "How Does Job-Protected Maternity Leave Affect Mother's Employment?" *Journal of Labor Economics* (v.26/4, 2008); T. Ferrarini, *Families, States, and Labour Markets* (Elgar, 2006); P. Moss and F. Deven, "Leave Policies and Research: A Cross-National Overview," *Marriage and Family Review* (2006); S. Tanaka, "Parental Leave and Child Health Across OECD Countries," *Economic Journal* (2005); J. Waldfogel, *What Children Need* (Harvard, 2006).

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Matrix Structure

The matrix structure is one of the most prominent organizational structures used by multinational corporations (MNCs). Made up by the combination of some elementary organizational structures, the matrix structure is meant to cope with the increasing internal and external complexity MNCs face as a result of their growing internationalization and diversification. While up until the 1970s the matrix structure was embraced as a kind of best practice to organize large, multidivisional MNCs, the following years have seen some disenchantment, due to the many difficulties MNCs faced in designing and managing matrix structures. Nevertheless, many large MNCs nowadays still adopt a matrix structure.

The matrix structure is one of three basic structural models MNCs have at hand to cope with the problems that arise from the geographic dispersion of their business activities. If internationalization is still rather piecemeal, MNCs often opt for an international division structure in which all foreign business activities are taken together and managed separate from the domestic business. In a later stage of their internationalization many MNCs turn to elementary forms of global structures, i.e., to the global functional, the global geographical, or the global product structure. These elementary forms of global structures integrate national and international business activities according to one organizing principle. For instance, in a global product structure, business activities are organized in different product divisions that have worldwide responsibility. Elementary forms of global structures overcome some problems associated with the international division structure such as resource duplication or slow knowledge flow. However, they are not sufficiently responsive to the multiple and sometimes conflicting demands that strongly internationalized MNCs face. This is what the matrix structure is meant for. The matrix structure is a grid-like combination of two elementary organizational structures, which have equal priority. This implies two lines of command and reporting. For instance, in a matrix combining global product and global geographical structures, a foreign subsidiary reports to the headquarters simultaneously through a specific product division and a specific regional organization.

MNCs from many industries have adopted matrix structures, including aerospace, automotive, chemical, and banking. Three conditions seem to be instructive for a particular MNC to choose a matrix structure: (1) there are outside pressures for the equal recognition of two foci (e.g., product and region); (2) a high level of information-processing capability is needed to stay competitive; and (3) there is strong need to share resources (e.g., technologies or human resources) within the MNC. In such situations a matrix structure promises significant advantages. It allows for a mutual recognition of the different requirements global and local customers have. It facilitates access to resources, skills, and technologies across incumbent functional, geographic, or product-related divides. It supports economies of scale and increases information flow through the introduction and use of lateral communication channels.

However, these advantages are not easy to achieve, leading to a certain disenchantment and decline in the use of matrix structures by MNCs from the 1980s onward. For one, problems occurred in designing matrix structures. Matrix structures can take rather different shapes and depth. With only limited practical experience and theoretical understanding available, many MNCs found it rather difficult to design a matrix that represents a differentiated fit with their specific environment and strategy. Moreover, business goals and objectives turned out as rather difficult to align in the matrix. Many problems occurred with regard to managing the matrix structure; thus it turned out that keeping the two reporting lines equal in importance is difficult to achieve. This often resulted in strong political conflicts between the reporting lines. Moreover, roles and responsibilities in a matrix tended to be unclear and prone to misunderstandings. Overall, the speed of decision making slowed down.

There are two key remedies proposed to overcome these problems and to make the matrix a more successful and forward-looking organizational structure (again). First, more in-depth research needs to be conducted to better understand the functioning and applicability of different types of matrix structures. Second, the design and application of an appropriate matrix structure needs to be accompanied by measures that develop the abilities and behaviors of individual managers in order to successfully perform in a matrix structure. These measures include the development and communication of a consistent corporate vision, some training to broaden the individual perspectives, as well as the co-optation of managers in project teams that cross reporting lines.

See Also: Centralized Control; Global Product Divisions; Global Structure; Internationalization; Multinational Corporation; Subsidiary.

Bibliography. Christopher A. Bartlett and Sumantra Ghoshal, "Matrix Management: Not a Structure, a Frame of Mind," *Harvard Business Review* (v.68/4, 1990); Stanley Davis and Paul R. Lawrence, *Matrix* (Addison-Wesley, 1977); Jay R. Galbraith, *Designing Complex Organizations* (Addison-Wesley, 1973); Jay R. Galbraith, *Designing the Global Corporation* (Jossey-Bass, 2000); Nitin Nohria and Sumantra Ghoshal, *The Differentiated Network: Organizing Multinational Corporations for Value Creation* (Jossey-Bass, 1997); Robert A. Pitts and John D. Daniels, "Aftermath of the Matrix Mania," *Columbia Journal of World Business* (v.19/2, 1984); John M. Stopford and Louis T. Wells, Jr., *Managing the Multinational Enterprise: Organization of the Firm and Ownership of the Subsidiaries* (Basic Books, 1972); Thomas Sy and Stéphane Côté, "Emotional Intelligence: A Key Ability to Succeed in the Matrix Organization," *Journal of Management Development* (v.23/5, 2004); Joachim Wolf and William G. Egelhoff, "A Reexamination and Extension of International Strategy-Structure Theory," *Strategic Management Journal* (v.23/2, 2002).

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Matsushita Electric Industrial

Matsushita is a leading global provider of electronic products. The firm offers a diverse product lineup ranging from video equipment, information communications equipment, home appliances, components, and devices. In fiscal 2007, Matsushita had sales of over $77.9 billion—second among Japanese firms after Hitachi, and fourth worldwide. Matsushita is often viewed as Sony's rival, although the former is much stronger in entertainment and the latter more so in white goods. Based in Osaka, Japan, Matsushita has a truly international presence, with over 328,000 employees working in more than 45 countries worldwide. The company was renamed Panasonic Corp. in October 2008.

Established in 1918 as Matsushita Electric Housewares Manufacturing Works, Matsushita was formed by entrepreneur Konosuke Matsushita to launch his electric attachment plug. Under his leadership, Matsushita grew quickly during the interwar years, from 25 workers in 1918 to 6,672 workers in 1939. The firm offered a range of products, such as the electric iron, radio, and dry-cell battery. Matsushita offered 200 products by 1931, and more than 2,000 products by 1937. During World War II, Matsushita shifted away from the production of electric goods into the production of military goods.

During the Allied occupation of Japan, Matsushita's business was severely restricted because of the firm's participation in the war effort. Matsushita, however, gained permission to rebuild its business as an electrics firm. As Japan regained its independence as a sovereign nation in 1952, Matsushita moved quickly to strengthen its scientific and technological capacity through imports of foreign technology. The company formed foreign alliances with the Dutch electronics company Philips in 1952, established various manufacturing plants, and built a central research facility in 1953. By the end of the decade, Matsushita had established a strong market position in consumer electronics, particularly in white goods, and was prepared to expand abroad. Indeed, the firm established Matsushita Electric Corporation of America in 1959, National Thai in 1962, and a European sales office in 1963.

After listing on the Tokyo Stock Exchange in 1971, Matsushita gained much publicity in the 1970s and 1980s when it entered a videotape formatting war. Matsushita was the parent company of JVC, whose VHS format eventually won over Sony's Betamax format. The firm's success was attributed to its greater flexibility in collaborating with other firms, and responsiveness to consumers who tended to value longer running times and portability over technological sophistication.

Matsushita also gained some notoriety for its second-mover strategy. The company's sales strategy was to identify new products that proved successful among rival firms and to launch similar products. What it saved in product development, Matsushita invested in an extensive network of affiliated wholesalers dedicated to capturing greater market shares.

In the 1990s, Matsushita ventured briefly into the entertainment industry. But while it acquired MCA in 1990, it sold 80 percent of its stake to the Canadian alcoholic beverages firm Seagram's three years later. Matsushita also began to offer cell phones and digital television sets in step with the information technology boom. With rapidly changing market conditions, Matsushita also underwent a series of organizational restructurings that would streamline management and eliminate the duplication of businesses.

Matsushita is widely known for its founder, Konosuke Matsushita, who achieved renown as one of Japan's leading entrepreneurs. He was credited for creating Japan's first decentralized company in 1933. Under Matsushita's guidance, the firm was long managed as a group of subsidiaries organized along product lines. These subsidiaries competed against each other to produce superior products within the Matsushita Group.

Matsushita currently offers a diverse range of products through several business segments, including home appliances, components and devices, Matsushita Electric Works and Panahome, AVC Networks, Victor Company of Japan. Matsushita derives around half of its revenues from Japan. With a 60 percent share of the domestic market, it has particular strength in household appliances.

Matsushita faces several challenges amid globalization and increasing competition. One is a threat from foreign rivals such as Royal Philips and Samsung, who have larger global market share, larger research and development (R&D) facilities, and more expansive distribution networks. In addition, the firm faces competition from companies in developing countries who can offer low-priced alternatives. As well, Matsushita faces increasing cost pressures from rising raw material prices. Matsushita's future lies in its ability to capitalize on its brand image, form strategic alliances to pursue collaborative R&D, and expand its market reach, as well as invest in growing markets such as LCDs and semiconductors.

See Also: Hitachi; Japan; Samsung Electronics; Sony.

Bibliography. Mitsuru Kodama, "Innovation Through Boundary Management: A Case Study in Reforms at Matsushita Electric," *Technovation* (v.27/1–2, 2007); Matsushita Electric Industrial Co. *Matushita Denki 50 nenshi* [A 50-year History of the Matsushita Group] (Matsushita Electric Industrial Co., 1968); F. McInerney, *Panasonic: The Largest Corporate Restructuring in History* (St. Martin's Press, 2007); M. Shimotani, *Matsushita Gurupu no Rekishi to Kōzō* [The History and Structure of the Matsushita Group] (Yuikaku, 1998); T. Yamashita, *The Panasonic Way* (Kodansha International, 1987).

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Media

The media is a significant industrial sector in its own right and it is also part of the infrastructure of the global economy. Its dual function as a site of important business transactions and as a market creator has increased materially since World War II in conjunction with the emergence of computer technology, particularly the internet, and the return of globalization. Determining the boundaries of the global media industry and assessing its role in the international economy remain problematic. *Media* is a relatively porous term that encompasses the means of mass communication, which include the internet, newspapers, radio, and television. It is difficult to monitor accurately the global trade of media content and products or to measure their impact on the economy.

The word *media*, like other metonymies, elides important distinctions by aggregating disparate mediums under a single name. It remains a useful term because the variety of communication and content that falls within its wide remit share certain characteristics. These features are best observed in relation to technology and trade. The tripartite relationship, or nexus, of media, technology, and trade is not linear, but circular. New technology influences the media and the media may influence the structure of technology. Trade affects the media and the media may affect trade. Likewise, the media may act as a catalyst in the interaction between technology and trade.

Media and Telecommunications

The development of communication technology often gives rise to new media. The advent of telegraphy during the 19th century enabled the creation of news agencies, such as the Associated Press and Reuters, which permitted the rapid collection and distribution of news. An abundance of news matter, in conjunction with the availability of cheaper newsprint and improved printing presses, was a necessary precondition for the rapid increase of daily newspaper publication during the 1870s. Improved access to information facilitated publication of evening newspapers. The issuing of newspapers in the early afternoon and subsequent editions throughout the evening had hitherto been curtailed because morning newspapers containing the latest news circulated to suburban areas via train, forestalling publication of papers later in the day.

Subsequent advancements in telecommunications had similar effects. Radio gave rise to broadcasting and television to video. Satellites permitted companies such as CNN to provide round-the-clock televised news. This new medium operated on the same principle as telegraphy; namely, information collected was transmitted and then distributed to a variety of users before being translated into a secondary medium, such as stereos, television sets, etc., and relayed to the wider public. The internet has altered this order of operations by removing the intervening step between transmission and reception. Users may now directly access and contribute to the creation of information.

This development has led to the creation of “new media” and altered the structure and course of the industry. New media include platforms and tools for information gathering (internet search engines), production and editing (audio, publishing, and Web development), digital storage and retrieval, distribution (digital subscriber lines [DSL]), access, design, and display (GPS, voice recognition software, etc.). Changes in technology have generated potential economies of scale and scope that have led to concentration and conglomeration. The press barons of the late 19th and early 20th centuries—Beaverbrook, Hearst, Northcliffe, Pulitzer—controlled horizontally integrated businesses, such as films and magazines, and vertically integrated concerns, such as paper mills and publishing houses. These companies were behind a series of mergers, particularly during the interwar period, which led to industry concentration, especially in newspaper publishing. The economies permitted by the confluence of new and old media technologies, often referred to as *synergy*, have enabled the rise of global media conglomerates on an unprecedented scale.

These companies, among which AOL Time Warner, Bertelsmann AG, News Corporation, Viacom, and Walt Disney are the largest, may strategically employ one company product, such as television, to promote another, such as newspapers. By virtue of their ownership positions in a multitude of different sectors, these leviathans control a large percentage of media production and output. Scholars and critics of the mass media have perceived in the development of these conglomerates a threat to the public sphere, the civic utility of the press, and the marketplace of ideas. Conversely, others have seen in their emergence the rise of professionalism, improvement in content, and greater access to information. The internet has materially reduced the costs of production and thus the number of content providers has increased dramatically. Entrenched media interests are attempting to influence the structure of the internet and to control access to information in the face of competition from such independent organizations.

Established media concerns have historically attempted to shape, if not control, the development of telecommunications. The way in which these technologies are structured has depended upon policy decisions that are subject to influence. In England during the 19th century, publishers in the provinces and in London attempted to prevent legislative changes to the Stamp Taxes, which placed an onerous levy on newspaper publication, to prevent the establishment of competitors. In 1870, British newspapers successfully influenced telegram tariffs charged to the press by the General Post Office after telegraph nationalization. In the United States, newspaper publishers affected congressional debates about the ownership of telegraphy. In both countries, newspapers attempted to block and then to control the development of broadcasting. These conflicts, which were in part generated by the development of new technology, consistently turn on questions concerning access to information.

Contested conceptions of intellectual property and the juridical solutions devised to secure copyright and ownership of information may advantage particular media interests and shape the structure of the industry. For example, in 1918, the Associated Press gained a quasi-property right in news through the United States Supreme Court that enabled it to restrict the distribution and use of its news reports. More recently, media companies have filed copyright suits to prevent the sharing of music, images, and texts via the internet. Solutions to such problems have led to the creation of new platforms for the distribution of media, such as Apple's iTunes and iPod, which take advantage of copyright restrictions by vertically integrating music-purchasing and listening platforms. These questions of access to information thus also hinge on trade and telecommunications regulation.

Media and Globalization

Trade generates information and is generated by it. Reuters, the news agency, was established in London in 1851 after the completion of a telegraph cable connecting England and France. The company provided clients in England with commercial information from continental European bourses and vice versa. Scholars have shown how similar services contributed to price convergence, the development of arbitration, and the facilitation of trade. Flows in the direction and volume of information change according to patterns of trade. During the 19th century, Reuters' profit streams from foreign clients closely followed the ebb and flow of British foreign direct investment. This example also illustrates how the regulation of technology may affect the relationship between trade and media.

The development of an international network of telegraph cables during the 19th century contributed to the advancement of global trade by facilitating the rapid distribution of information around the world. These cables, although typically constructed and owned by private companies, were closely aligned with national and political interests. Cables often snapped and failed to function. To encourage companies to undertake the relatively risky business of laying submarine telegraph cables, governments often provided subsidies or concessions to domestic companies. Until World War II, Britain dominated international telecommunications. Its advantage lay in naval power and easy access via imperial possessions to the natural resources necessary for submarine telegraph cable insulation. In terms of miles of cable owned, France, Germany, and the United States lagged significantly far behind. Much of the world's news and commercial information passed through London, contributing to the development of British trade and financial services.

The way in which these international cables coupled with domestic telegraph lines determined how information traveled from country to country. Different regulatory environments, such as the nationalization of domestic telegraph lines, as in much of Europe, or private ownership, as in the United States, determined whether or not information passed from one carrier to another or moved seamlessly across national boundaries. European countries formed an International Telegraph Union in 1865 to develop standards, tariffs, and regulations pertaining to the transmission of information and to facilitate easy communication among their respective government-controlled telegraph and telephone networks. The United States for many years abstained from such organizations in part because it refused to restrict the movement of the private American companies that controlled domestic telecommunications.

In this environment the development of global media roughly adhered to the boundaries of imperial interest. Reuters, the news agency of the British Empire, was at the head of an international cartel consisting of numerous other national news agencies, among which the most prominent were Havas, the French agency; Wolff, the German agency; and the Associated Press, the U.S. agency. These organizations divided the international news market among them and exchanged their respective news reports, which raised barriers to entry against potential competing news organizations by controlling trade in and access to information. Although such practices restricted the distribution of information, exchange among cartel members generated a larger news report for each agency's clientele than would have been possible had they operated independently. International syndication of news content and foreign ownership of media outlets was rare at this time.

Changes in patterns of trade during the interwar period, particularly following the Great Depression, contributed to realignment in the international movement of information and the structure of the global media industry. The advent of international broadcasting during the 1920s also contributed to this process. Radio undermined the British advantage in international telegraphy. American, French, and German concerns actively competed in territories that had been the sole preserve of British firms. American news organizations, such as the United Press and the Associated Press, quickly infiltrated areas of informal empire, such as Japan, which Reuters had dominated. These developments contributed to a rearrangement of the news agency cartel according to which each agency obtained rights to enter, but not to actively compete with, the national territory of the others. After World War II, Reuters redirected its news services away from Britain's colonies and dominions and toward Europe and North America.

The development of computer, fiber-optic, and satellite technology contributed to the rise of media conglomerates and to the deregulation, privatization, and liberalization of international telecommunications. In the 1960s, these changes precipitated the final dissolution of the international cartel of news agencies and gave rise to new competition from emergent global media companies. Changes to the regulatory regime during the 1970s and 1980s, which coincided with shifts in domestic industrial policy, most notably in Britain and the United States, facilitated a significant expansion of the global media industry and enabled corporations to enter foreign markets. Foreign ownership of news and media outlets upset nationalistic conceptions of the fourth estate, but the number of global media products has not significantly increased. Global integration has tended to take place in the financing of media products rather than in the content of the products themselves. There has, however, been a significant increase in the international export of commercial information services since the collapse of the international monetary system since the 1970s.

Critics have noticed in these developments the perpetuation of traditional colonial power relationships and have bemoaned an imbalance in the transmission of information and media products between the developed and developing worlds. Concerns about cultural imperialism have rallied activists who perceive in globalization and the standardization of media content the seeds of hegemony and homogeneity. Concerns about the corporate pursuit of profit trumping public interest have motivated the development of alternative media projects and organizations empowered by the internet that aim to provide a voice to underrepresented parties. Conversely, proponents of deregulation and privatization of telecommunications argue that a competitive regulatory environment predicated on free trade is not only the best way in which to surmount market imperfections, but that government intervention in the free flow of information and cultural artifacts is circumspect and threatens to infringe upon freedom of expression.

Conclusion

The media, because of its importance to international trade as well as the dissemination of financially and culturally valuable information, is a contested and, therefore, visible industry. Everyone has an opinion on the news and where it derives. Changes in telecommunications and trade affect the media industry and the shared characteristics of the different means of communication that it comprises. These changes in turn have a profound effect on the way in which people receive information about the world in which they live. The tripartite relationship among media, telecommunications, and trade is cyclical and so too is the relationship among the media and the public.

Commercial media outlets operate in a dual market. They sell content to viewers, readers, and other participants. The attention of these consumers is in turn sold to advertisers. Since the rise of mass circulation newspapers during the 1870s, media outlets have depended less and less for their profits upon circulation and more upon advertising. Media companies have been thus propelled to devise methods for attracting either a large or a lucrative audience. A general effect of this development has been a reduction in the cost of media products. It has also meant that media companies must alter their means of attracting audiences in accordance with technological shifts affecting the way in which the public prefers to imbibe information.

Although radio and television have diminished newspaper sales in the past, there has hitherto been no written alternative to the press. The internet has challenged the newspaper by luring away its readers, and, in so doing, depleting its sources of advertising. Companies believe they can reach a larger pool of potential consumers more directly via advertisements placed on frequently visited Web sites. This development has led to a proliferation of internet-based platforms that combine the provision of information with advertising. A prime example of this phenomenon is Google, the internet search engine, which directs users to advertising Web sites based on the items for which they are searching. This sort of interactive ad placement has improved the efficacy of advertising and provided internet companies with the capital necessary to amass vast quantities of information that is then made accessible to people throughout the world. In light of this competitive threat to traditional media, pundits now speculate about the demise of the newspaper and the disappearance of the printed word.

See Also: Advertising; Deregulation; Globalization; Technology; World Trade Organization.

Bibliography. Jeremy Burke, "Primetime Spin: Media Bias and Belief Confirming Information," *Journal of Economics and Management Strategy* (v.17/3, 2008); W. J. Drake, "The Rise and Decline of the International Telecommunications Regime," in *Regulating the Global Information Society,* C. T. Marsden (Routledge, 2000); Lisa M. George, "The Internet and the Market for Daily Newspapers," *B E Journal of Economic Analysis and Policy* (v.8/1, 2008); D. R. Headrick, *The Invisible Weapon: Telecommunications and International Politics 1851–1945* (Oxford University Press, 1991); J. Hills, *Telecommunications and Empire* (University of Illinois Press, 2007); D. H. Johnston, ed., *Encyclopaedia of International Media and Communications* (Academic Press, 2003); Anu Mitra, Mary Anne Raymond, and Christopher D. Hopkins, "Can Consumers Recognize Misleading Advertising Content in a Media-Rich Online Environment?" *Psychology & Marketing* (v.25/7, 2008); P. Starr, *The Creation of the Media* (Basic Books, 2004); JoAnne Yates, Wanda J. Orlikowski, and Anne Jackson, "The Six Key Dimensions of Understanding Media," *MIT Sloan Management Review* (v.49/2, 2008).

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Media and Direct Marketing

Organizations and individuals seeking to reach a target audience have a growing array of media choices. While traditional approaches involving media such as newspapers, magazines, television, and radio are associated with reaching relatively large audiences, there are many other approaches such as e-mail, telephone, fax, and direct mail that may also be used to reach target audiences of substantial size, but which are also associated much more with efforts to elicit and obtain a measurable response from those within the target audience. This latter characteristic is an essential element of direct marketing and, further, is becoming increasingly prevalent as a result of increased availability and use of specialized databases. Ultimately, however, virtually any media can be used for direct marketing, also referred to as direct response marketing, provided there is an element of communication that asks the member of the target audience to take some specific action. Whether the action involves

Even with low reply rates, direct mail can provide companies valuable information from customer responses.

calling a telephone number, visiting a Web site, or returning a completed form by mail, the main benefit achieved from a direct marketing initiative is that it enables the response from the communication approach to be measured directly and often relatively quickly. A growing interest among marketers in being able to evaluate more readily both the effectiveness and efficiency of any given communication effort is clearly one reason why direct marketing is one of the most popular marketing approaches of any available to marketers today.

Beyond measurability, a further benefit of the use of media involving a direct marketing approach is the ability to tailor message content. For example, a car dealership seeking to promote interest in its new car models may find it beneficial not only to mail postcards to all of its past customers by name but also to tailor the message to each given the dealership's detailed knowledge of the customer's past car purchase including the purchase timing, price, and benefits sought.

Whether an organization or individual finds a direct marketing approach to be most beneficial relative to other communication approaches can also depend on the characteristics of any offering involved as well as consumer attitudes and preferences. Some consumers, for example, may consider a large-scale direct mail campaign that has a 1 percent response rate as wasteful while other consumers subject to telemarketing by a firm may view the approach as being intrusive. Even so, there are ways in which marketers can manage their media and direct marketing choices so as to increase consumer receptivity to such approaches, such as when consumers are initially given a choice of voluntarily "opting in" to a system where they will receive subsequent, periodic communications via e-mail, mobile phone text message, or posted mail. Alternatively, consumers may be able to "opt out" of a direct marketing approach upon request. Either way, an additional consideration in the management of media and direct marketing is ensuring there is conformance to legal and regulatory requirements relating to the use of customer information (e.g., sharing customer information with a third party)—something that may be clearly facilitated to the extent that recipients of direct marketing grant permission to those initiating such approaches.

Beyond legal and regulatory requirements involving consumer information, there may also be issues related to the nature of the products or services offered that demand attention and understanding by organizations or individuals seeking to engage in direct contact with current or prospective customers. In particular, in product markets where the relationship between consumers and manufacturers or other organizations is typically indirect, such as in the pharmaceuticals industry where doctors are important professional intermediaries between pharmaceutical firms and patients, there may be both opportunities and restrictions in pursuing what is termed *direct-to-consumer marketing*, an approach that is increasing in prevalence where there is direct communication between consumers and manufacturers and other organizations. Such an approach has the potential to educate consumers about a firm's offerings to a far greater extent than is possible or likely through intermediaries and, hence, another potential benefit of direct marketing more generally, although certainly not all direct-to-consumer marketing involves an effort to elicit a consumer response that can be easily assessed.

Ultimately, the media and associated message content and strategy chosen by the individual or organization seeking to engage in direct marketing must balance the short- and long-term objectives of the communication with the costs and benefits involved. To be sure, some direct marketing approaches are only increasing in cost (e.g., door-to-door marketing as a result of the associated labor expense) while others are predictably decreasing in cost (e.g., voice mail marketing that involves the use of telecommunications equipment and networks as a one-way medium for communicating indirectly with consumers by leaving automated voice messages on voice mail systems/answering machines). When one considers the possibility that multiple media and direct marketing approaches can ultimately be used in combination for synergistic effects, the communicator engaging in any aspect of global business can be seen as having an increasingly rich set of methods and strategies to employ in the pursuit of customer value creation and competitive advantages.

See Also: Advertising; Marketing; Media; Promotions.

Bibliography. Ming Cheung, "'Click Here': The Impact of New Media on the Encoding of Persuasive Messages in Direct Marketing," *Discourse Studies* (v.10/2, 2008); Scott G. Dacko, *The Advanced Dictionary of Marketing: Putting Theory to Use* (Oxford University Press, 2008); E. L. Nash and D. Jackson, *Direct Marketing: Strategy, Planning, and Execution* (McGraw-Hill, 2000); G. J. Nowak and J. Phelps, "Direct Marketing and the Use of Individual-Level Consumer Information: Determining How and When 'Privacy' Matters," *Journal of Direct Marketing* (v.11/4, 1997); B. Stone, *Successful Direct Marketing Methods* (NTC Business Books, 1996); A. Tapp, *Principles of Direct and Database Marketing* (Financial Times Pitman Publishing, 1998).

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Mediation

Mediation is a form of dispute resolution where a third party—an impartial mediator—assists two or more persons in finding a viable solution to problems. There are distinct differences between mediation and litigation. An obvious distinction is that the mediator, unlike a judge, has no say in the outcome of the case. Litigation is a process in where courts impose binding decisions in a determinative process. Now, more than ever, mediation has found widespread use in the realm of business, especially in the field of international law.

Generally, one can define mediation as a simple, informal approach to resolving disputes. Litigation, by contrast, entails a more complex proceeding. No formal rules of evidence or procedure control mediation: the parties agree to the terms. Although these two processes—litigation and mediation—sound very different, both are used to resolve disputes. Mediation often aims at resolving problems associated with litigation: high costs, excess duration, and the complexity of the judicial process. Still, mediation does not result in binding agreements, unless the parties agree to it.

Arbitration is not uncommon when engaging in mediation. Mediation has proven to be effective when paired with arbitration or even binding arbitration. In these cases, the mediator becomes an arbitrator, converting mediation into arbitration after the parties have been unable to come to an agreement through mediation. As a result, the arbitrator seeks additional evidence from witnesses, unlike a mediation proceeding, where witnesses are not called upon by a mediator. Sometimes the purpose of mediation is to improve relationships among parties who will have to deal with each other again. Other times mediation is for the sole purpose of helping the parties learn how best to handle conflicts in the future.

Voluntary agreements by the parties are central to the mediation process. Consequently, a mediator should conduct the process to maximize its voluntariness. Parties to mediation can decide whether to submit their dispute to mediation prior to arbitration. Conversely, parties may also decide to forego mediation and immediately delve into arbitration. For instance, the parties may decide that if the dispute cannot be settled through negotiation, they will first try to settle the dispute by mediation in good faith. Additionally, the parties may agree that the proceeding be administered by the American Arbitration Association under its Commercial Mediation Procedures. But if the parties immediately want to adopt mediation as a part of their contractual dispute settlement procedure, they can insert a mediation clause into their contract in conjunction with a standard arbitration provision.

The mediator plays an integral role; yet, his or her role is attenuated. This, of course, varies from case to case. A mediator works to help the parties fashion an agreement. But he or she does not have the authority to make a binding decision or award—that is, a mediator has no power to impose a solution. The mediator, therefore, serves as a catalyst between opposing interests, attempting to define issues and eliminate obstacles to communication. On the one hand, it can be said that the stronger the parties' need for settlement, the more leverage the mediator has. On the other hand, the weaker the parties' need for settlement, the more the mediator must work to create the perception of greater need; moreover, the mediator must create external leverage by way of incentives. Finally, the mediator helps the parties draft an agreement. If signed, a legally binding contract is formed.

Mediation is used in the United States and other countries for handling divorce and child custody cases. Additionally, it is used for interpersonal disputes—between employees, family members, and even friends—and has gained popularity with environmental and international disputes. As mediation continues developing, an increasing trend in the public and judicial spheres toward using mediated negotiation as an alternative to more traditional means of dispute resolution will become even more prevalent. Accordingly, mediation will continue gaining widespread use and may eventually replace many of the formal judicial processes used in many countries today.

See Also: Arbitration; International Centre for Investment Disputes; International Law; Negotiation and Negotiating Styles.

Bibliography. Nadja Alexander, *Global Trends in Mediation*, 2nd ed. (Kluwer Law International, 2006); James J. Alfini, Sharon B. Press, Jean R. Sternlight, and Joseph B. Stulberg, *Mediation Theory and Practice* (Matthew Bender and Co., 2006); Klaus Peter Berger, *Private Dispute Resolution in International Businesss* (Kluwer Law International, 2006); Kenneth Cloke, *Mediating Dangerously: The Frontiers of Conflict Resolution* (Jossey-Bass, 2001); Barry M. Goldman et al., "The Role of Ideology in Mediated Disputes at Work: A Justice Perspective," *International Journal of Conflict Management* (v.19/3, 2008); Christopher Moore, *The Mediation Process: Practical Strategies for Resolving Conflict*, 2nd ed. (Jossey-Bass, 1996); Alice F. Stuhlmacher and Melissa G. Morrissett, "Men and Women as Mediators: Disputant Perceptions," *International Journal of Conflict Management* (v.19/3, 2008).

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Mentoring

Mentoring, from the Greek word meaning enduring, is defined as a sustained relationship between a youth and an adult. This word explains the relationship between two individuals where one individual (mentor), ensures the overall development of another individual (mentee). The mentor is responsible for the personal as well as professional growth of the mentee. Mentor can also be defined as coach, counselor, facilitator, teacher, sponsor, and model for the other individual. The mentoring partnership may be defined as an agreement between two individuals sharing experiences and expertise to help with personal growth and development through continued involvement. The adult offers support, guidance, and assistance as the younger person goes through a difficult period, faces new challenges, or works to correct earlier problems. In particular, where parents are either unavailable or unable to provide responsible guidance for their children, mentors can play a critical role.

The word originates from Greek mythology. Around 1200 b.c.e., when Odysseus left for the siege of Troy, he requested his friend Mentor to take care of his son Telemachus. Over a period of time Mentor looked after the personal and professional growth of Telemachus. In fact, at one time he saved his life. Thus the word originates from there, explaining the relationship between two individuals.

There are two types of mentoring: natural mentoring and planned mentoring. Natural mentoring occurs through friendship, collegiality, teaching, coaching, and counseling. In contrast, planned mentoring occurs through structured programs in which mentors and participants are selected and matched through formal processes. The mentor shares personal wisdom, technical expertise, and life experience with the mentee. He or she has to be a good listener, empathizing and understanding the goals and interest of the mentee. But a clear distinction must be made between friendship and favoritism.

To be a mentor, one must have time, desire, knowledge, and skill to share with the mentee. He or she first assesses the mentee's skills, discusses goals, and facilitates the mentee's becoming a confident person who may make good decisions. Mentors get a chance to pass on their successes, which can give great personal satisfaction. Mentors get an opportunity to practice their interpersonal and management skills on an ongoing basis, which can help the mentor to succeed even more. Mentors often become recognized as positive role models and are sometimes sought out by others. Many mentors find that being in a mentoring partnership helps them expand their own horizons and keeps them in touch with what's going on at other levels of the organization. Mentors often insist that they gain more from the mentoring partnership than their mentee does.

The role of mentee is also important in the mentoring process. Mentees must be willing to learn. They must be able to accept constructive feedback. Mentees must be willing to "stretch" to try new things and take risks. Many people have achieved success because someone encouraged them to aim higher. They must be able to identify short-term and long-range career goals and accept that those goals may change.

The ancient education system in India followed the same system and was known as *Guru-Shishya Parampara* (teacher-student relationship), where the student resided in the teacher's *ashram* (campus) and *guru* (teacher) took care of the student and ensured his overall development according to his capabilities.

Every one of us is ultimately responsible for our own career. However, it can help tremendously to have someone to talk with who can provide a listening ear and share what they have learned about the organization and the things that helped them succeed. Mentors can provide valuable direction and clarification in uncertain times. Mentors can help the mentee figure out what they need to do to fill in the gaps between where they are now and where they want to be in the future. Mentors can sometimes serve as "door openers," informing the mentee of opportunities they may not be aware of (for example, referral to a program or training, introducing them to people in their field of interest, or recommending them to assist in a project that expands their skills). The most valuable and important assets mentors contribute are a listening ear and a different perspective.

The mentoring process emphasizes clear expectations, clear context, and commitment of both parties involved in the process using clear and precise communication, coordination, and cultural change.

See Also: Coaching; Empowerment; Training.

Bibliography. Anne Bruce, *Be Your Own Mentor* (McGraw-Hill, 2008); Brian Caldwell, *The Return of the Mentor: Strategies for Workplace Learning* (Routledge, 1993); W. Brad Johnson and Charles R. Ridley, *Elements of Mentoring* (Palgrave Macmillan, 2008); Jane Renton, *Coaching and Mentoring: A Guide to What They Are and Getting the Most Out of Them* (Bloomberg, 2009); "Workplace Mentoring," www.mentoring.org (cited March 2009).

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Mercantilism

Mercantilism is a system of economic and political doctrines about how to organize and carry out international commerce. Mercantilism generally advocates that governments should regulate international trade in order to gain competitive advantage. While variations and differences in what constitutes mercantilism have existed over the centuries, the essential and commonly accepted characteristic of mercantilism is "the assignment to the state of the central role in shaping economic well-being." Consequently, mercantilism is a system that justifies—indeed, demands—government regulation and creative state control and, therefore, rejects the free-market theories of Adam Smith and David Ricardo. Because mercantilism was (and is) as much a political as economic theory, it has been called the "most comprehensive theory of the modern state."

The underlying principle of mercantilism is a "net zero sum" concept of international economies. This principle—also referred to as "cash box thinking"—states that the wealth in the world is constant and so the gain of one economic player or country must come about through loss to another. Mercantilism as a concept and policy directly opposes the capitalistic ethic. The latter embraces the "Net Positive Sum" view of international economics that contends that, in markets unhindered by regulations, buyer and seller both gain optimally (net gain in social welfare) through the unhindered movements and interactions of supply and demand mechanisms.

At its most practical level, mercantilism directs governments to regulate in such a way as to increase exports out of the country and to reduce imports into the country, thus increasing the net amount of cash (or gold) that a nation possesses. For mercantilists, government policies should especially compel the importing of low-valued materials and products and the exporting of higher-valued finished goods.

An extensive collection of options are open for a mercantilist government to regulate its trade. Tariffs, quotas, local content requirements, antidumping actions, and administrative barriers and (or nontariff trade restrictions) serve to reduce imports into a country; and the broad range of government actions that we term subsidies as well as other industrial and monetary policies (including currency manipulations) can effectively spur the growth of exports. Today, penalties to individuals and institutions for flaunting a government's trade policies generally involve economic sanctions of varying degrees of severity.

Various arguments have been leveled against mercantilism, especially by advocates of free trade. Critics point out that mercantilist policies can instigate disastrous trade wars internationally as well as cause severe inflationary pressures within a country. Overall, those opposed to mercantilism stress that government regulations involving international commerce subvert the proper functioning of comparative advantage and thus result in inefficient (or nonoptimal) allocation of resources and long-term reduction of the true wealth of a nation.

History

Mercantilism emerged with the rise of the centrally governed nation-state. It was perceived by sovereigns of the 16th and 17th centuries as an important instrument by which the states can amass wealth and influence among other nations. Important writers of the time who developed the concept of mercantilism include John Hales (*Discourse of the Common Weal of This Realm of England,* 1581) and Thomas Mun (*England's Treasure by Foreign Trade,* 1620).

These and other writers and economic thinkers showed that the ultimate purpose of mercantilism was not simply to increase the wealth of a nation (or nation-state) as an end in itself, but as a means—through increased purchasing power—to the ability to carry out war and conquest and to defend one's land from the attempted conquest of others. Jean-Baptiste Colbert, minister of finance under Louis XIV, famously expressed the notion that the rising state had to control trade in order to amass the means to defend the nation against aggression.

Mercantilist thinkers traditionally emphasized that the ability of princes to employ mercantilism to accumulate gold (and equivalent) has a decisive effect upon the fates of government. In his famous summary of the principle, 17th-century writer Sir Francis Bacon wrote: "The increase in any estate must be upon the foreigner, for whatsoever is somewhere gotten is somewhere lost." It was generally believed at the time, for example, that if he had been as successful in acquiring the wealth that Philip II of Spain amassed through mercantilist policy, England's Charles I could have "bought off" the Parliament and ultimately saved his throne (and his head). Consequently, in these centuries, the most severe punishments—imprisonment, torture, and execution—were commonly ordered upon those who attempted to subvert a government's mercantilist policies since such "traitors" in effect were acting to weaken the state's ability to protect itself.

The Habsburgs, who dominated 16th century Europe, were arguably the most successful practitioners of mercantilist principles, and none more so than Philip II of Spain. By the 17th century, France, England, and Holland replaced Spain as dominant European powers. France and England remained rigorous mercantilists; but the Dutch merchants, accumulating wealth through their shipping operations, offered a free trade model of economic prosperity. The wars waged between England (and France) against Holland in this century can be interpreted as a conflict between the "old" (mercantilist) and "new" (free trade) ways of structuring business and international commerce.

By the mid- to late 18th century, mercantilism was in a brisk and ever-accelerating retreat. In addition to the continuing stream of evidence as to the advantages of free trade that had come to the fore for over a century and had been noted as early as the 17th century by perceptive observers (such as Samuel Pepys), the continued rigorous exercise of mercantilist practice began having disastrous political consequences as well. The British monarchy suffered mightily when it attempted to institute a mercantilist regime upon its American colonies. By imposing mercantilist regulations that compelled the Americans to export cheap raw materials to England and import more highly valued manufactured products from the mother country, the government of King George III stirred up severe discontent within the colonies and so created conditions ripe for revolution.

It is no coincidence then that the first great theorists of free trade came from the United Kingdom. Adam Smith's *The Wealth of Nations* threw down the gauntlet against the centuries-old mercantilist assumptions of the constancy of the world's wealth and the need to strategize policy from a net zero sum position. In its place, Smith (and a few decades later, his disciple David Ricardo) thrust into the world the revolutionary idea that the true wealth of a country is the sum—not of the amount of gold and silver in its treasury—but of the goods and services available to its people. He further stated that a laissez-faire policy of government—that is, no government regulation at all—assures that all trading nations must optimize true wealth because of the principles of "absolute advantage" (a net-positive sum principle). This new force unleashed by Smith was nothing less than a call to arms of modern capitalism against the traditional and economically inefficient mercantilist system. The decline of monarchism following in the wake of the American and French Revolutions urged further to undermine the legitimacy of mercantilism, which traditionally was seen as an important instrument for augmenting the wealth and security of both king and state, two entities inextricably bound together by "divine right." By the 19th and 20th centuries, free trade policy, if rarely implemented in its pure form, seriously challenged regulated commerce in political discourse as the most efficient means to accumulate wealth within an increasingly global world.

Neomercantilism

Mercantilism is not merely a relic of the past, of interest only to historians. Indeed, mercantilism never has really died off; it has remained a living force in some form in the political economy of governments. Since the time of Smith and Ricardo, national governments have had to contend with balancing the pros and cons of regulated versus free trade. Political as well as economic arguments play an important role in these decisions. Today, economists and policy makers debate how a modern form of mercantilism ought to be shaped. Countries continue to search for securing that mercantilist ideal: a favorable balance of trade, and a modern form of mercantilism—neomercantilism—has emerged. Neomercantilism advocates the regulation of trade for economic, social, or political objectives. For example, import restrictions might be imposed to protect a crucial industry or an industry in a politically sensitive region against external competition. This policy is especially crucial for protecting fledgling industries that can "upgrade" a country from predominantly low-value (e.g., agricultural) to high-value (advanced technology) production. Also, countries impose trade regulations to advance human rights internationally—such as trade embargoes—against countries to force social agendas (e.g., trade embargoes against South Africa in the 1980s to speed the demise of apartheid).

Then, too, neomercantilism plays the central role in strategic trade policy (also known as "new trade theory"). Strategic trade policy is relevant in industries such as aircraft production where economies of scale come into play and total market demand globally is limited and can support only one or two multinational companies (MNCs) efficiently. In these cases, government regulations of international commerce, such as providing subsidies to an MNC (e.g., Boeing), can be instrumental in that company achieving a first-mover advantage. In this way, the MNC achieves sole producer status in international markets thus allowing it to manufacture its products (airplanes) the most efficiently for customers (airlines) worldwide. In this sense, neomercantilism posits government regulation within a new positive sum context.

In response, critics of neomercantilism point to the influential work of Michael Porter. Calling upon Porter's "Diamond" model of national competitive advantage, they argue that, rather than directly regulating international trade through subsidies to selected industries, and tariffs against certain products, it is far better for governments to focus internally on generally upgrading high-value-added industries by adopting domestic incentives for fostering clustering, skills (education), infrastructure (transportation, communications, capital markets, utilities) and by strategically inducing demand, thus making their industries more competitive internationally and allowing comparative advantage to "kick in."

See Also: Hanseatic League; Neomercantilism; New Trade Theory; Trade Barriers; Trade War.

Bibliography. F. Braudel, *The Wheels of Commerce: Civilization and Capitalism, 15th–18th Century* (Harper & Row, 1982); J. D. Daniels, L. H. Radebaugh, and D. P. Sullivan, *International Business: Environments and Operations,* 11th ed. (Pearson Prentice Hall, 2007); C. J. Friedrich, *The Age of the Baroque: 1610–1660* (Harper & Row, 1952); J. Hagelstram, "Mercantilism Still Influences Practical Trade Policy at the End of the Twentieth Century," *Journal of World Trade* (1991); C. W. L. Hill, *International Business: Competing in the Global Marketplace,* 6th ed. (McGraw-Hill Irwin, 2007); E. S. Hunt and J. M. Murray, *A History of Business in Medieval Europe: 1200–1550* (Cambridge University Press, 1999); M. Porter, *The Competitive Advantage of Nations* (Free Press, 1991); S. Schama, *The Embarrassment of Riches: An Interpretation of Dutch Culture in the Golden Age* (Vintage Press, 1997); H. W. Spiegel, *The Growth of Economic Thought* (Duke University Press, 1991).

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Mercosur/Mercosul

The Southern Common Market—Mercosur in Spanish, Mercosul in Portuguese—is an international and intergovernmental organization with the objective to create first a free trade area, and subsequently, a customs union and a common market. It was instituted on March 26, 1991, by the signing of the Treaty of Asunción that constituted a common market between Argentina, Brazil, Paraguay, and Uruguay, as a culmination of the process of a bilateral program of integration and cooperation already engaged by Brazil and Argentina since 1985.

The initial stage of the Latin American integration process was the creation of the Latin American Free Trade Association (LAFTA) with the first Treaty of Montevideo in 1960. The objective was a free trade area in South America, with expanded markets and facilitated trade with the elimination of protectionist measures through multilateral negotiations.

Political problems and a lack of flexibility posed practical difficulties to this negotiating process. Thus, a more flexible Regional Integration Agreement was created in 1980, the Latin American Integration Association (LAIA), with the signature of a second Treaty of Montevideo. It is an intergovernmental organization that continues the process started by LAFTA. Its main objective is the establishment of a Latin American common market in order to assist economic and social development of the region.

Under the LAIA system, Brazil and Argentina in 1986 signed the Brazil-Argentina Integration Treaty, at Foz de Iguaçu, among 12 commercial protocols. The Integration, Cooperation and Development Treaty was signed in 1988 and the Economic Cooperation Agreement in 1990, setting the stage for a common market between the two countries within 10 years with the gradual elimination of all tariff barriers, harmonization of the macroeconomic policies of both nations, and with the achievement of the free movement of goods, services, and production factors in line with the objective of creating a bilateral common market. These agreements were the immediate precursors of Mercosur.

Uruguay and Paraguay feared becoming isolated economically, leading to their joining these agreements, and later to the creation of Mercosur. With them, the integration process evolved from bilateralism to multilateralism, as first envisaged in the LAFTA model.

In 1996 free trade agreements were signed with the governments of Bolivia and Chile, thereby enhancing the geographic scope of the group, but both countries are just partners of Mercosur, not members yet. Colombia and Peru have already evinced interest in joining, and on July 4, 2006, Venezuela became the fifth member of Mercosur with the signing at Caracas of a membership protocol.

The integration of these four member states represented an effort toward the progressive development of Latin American integration through the free transit of goods and services and factors among them, with, inter alia, the elimination of customs rights and lifting of nontariff restrictions on the transit of goods, or any other measure with similar effect. It also fixed a common external tariff (TEC) and adopted a common trade policy with regard to nonmember states, and the coordination of positions in regional and international commercial and economic meetings.

The agreements contained the coordination of macroeconomic and sectorial policies of members relating to foreign trade, agriculture, industry, taxes, monetary system, exchange and capital, services, customs, transport, and communications in order to ensure free competition between member states. And it provided, in addition, the commitment by the member states to make the necessary adjustments to their laws in relevant areas to allow for the strengthening of the integration process.

In December 1994 the Protocol of Ouro Preto was adopted, establishing Mercosur's institutional structure and providing it an international juridic director. Because it has no supranational institutions or authority, the negotiation and conclusion of agreements within the organization require the consensus of all the members, and international agreements have to be accepted or ratified by each member in order to become binding.

The main institutional organs are the Common Market Council, the political body that issues decisions; the Common Market Group, the executive organ that issues resolutions; the Mercosur Trade Commission, the central organ for trade policy that issues directives and proposals; the Joint Parliamentary Commission, which acts as a liaison between Mercosur and the parliaments of the members; the Economic and Social Consultative Forum, the channel between civil society and the private sector and Mercosur; and the Mercosur Administrative Secretariat, which provides operational support to the organization and its organs.

In 2000 the states' parties decided to take a new step in regional integration called the "relaunch of Mercosur," with the objective to strengthen the customs union in both intralevel and foreign relations. In this context, the governments recognized the central role that convergence and macroeconomic coordination play. Additionally, the new common trade policy tends to reaffirm and strengthen the individual processes of market openness of the state parties, and their integration into world trade, as Mercosur is part, now, of the international agenda concerned with production, foreign direct investment, and trade.

See Also: Customs Union; Free Trade; Latin America; Regional Integration; Regional Trade Agreements.

Bibliography. Daniel Chudnovsky and Andres Lopez, "Foreign Direct Investment and Development: The Mercosur Experience," *Cepal Review* (v.92, 2007); European Commission External Relations, "Mercosur," ec.europa.eu (cited March 2009); Gian Luca Gardini, *The Origins of Mercosur Democratization and Regionalism in South America* (Palgrave Macmillan, 2009); Laura Gomez-Mera, "How 'New' is the New Regionalism in the Americas? The Case of Mercosur," *Journal of International Relations and Development* (v.11/3, 2008); Riorden Roett, ed., *Mercosur: Regional Integration, World Markets* (Lynne Rienner, 1999).

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Merrill Lynch

Merrill Lynch is one of the world's leading wealth management, capital markets, and advisory companies, with offices in 40 countries around the world. It was founded in 1914 and employs approximately 60,000 people; its total client assets are approximately $1.6 trillion (as of June 2008). The company offers capital markets services, investment banking and advisory services, wealth management, investment management, insurance, banking, and related products and services on a global basis.

Merrill Lynch has organized its activities into two interrelated business segments: Global Wealth Management and Global Markets and Investment Banking. Global Wealth Management offers proprietary and third-party wealth management products and services globally to individuals, small and mid-sized businesses, and employee benefit plans. It comprises two business divisions: Global Private Client and Global Investment Management.

The Global Private Client group provides advice-based wealth management services and products to individual clients and businesses. The group's business model is based on its network of more than 15,930 financial advisers in approximately 680 offices around the world and on one-to-one relationships with clients. It provides support to financial advisers through five core functional areas: global banking, marketing, investment and wealth management, retirement, and direct services. Its financial advisers integrate guidance with a range of products and services.

First Republic Bank, a division of Merrill Lynch Bank & Trust, Co., in the Global Bank Group focuses on personalized services including private banking, private business banking, real estate lending, wealth management, and trust services delivered through a team of financial professionals. An International group serves the needs of investors outside the United States. Products and services include advice and market intelligence, professional money management, investments, wealth protection, cross-border solutions, banking and cash management, and tracking progress.

The Global Investment Management group focuses on businesses that create and manage wealth management products for individual investors and small businesses, including (1) a business that creates and manages hedge funds and other alternative investment products; unlike traditional investments such as mutual funds, whose performance is largely dependent on the direction of the broader market, many alternative investment strategies seek positive returns in any market or economic environment; and (2) Merrill Lynch's ownership positions in investment management companies, including BlackRock. The latter manages assets on behalf of institutions and individuals worldwide through a variety of equity, fixed income, cash management, and alternative investment products.

Finally, Multicultural Marketing is a division of the Global Wealth Management group's Strategic Marketing and Brand Management. It works to build brand relevance and assists financial advisers in the development and expansion of new business from high-net-worth investors and businesses.

Global Markets and Investment Banking provides institutional sales and trading, investment banking advisory and capital-raising services to corporations, governments, and institutions worldwide. The Global Markets group deals with financial markets around the world, providing liquidity, industry-leading insights and analytics, and added value across the spectrum of debt and equity markets.

The Fixed Income, Currencies, and Commodities group deals with interest rate, credit, and asset-based products, liability management, foreign exchange, commodities, derivatives, and other securities. The group also offers a wide range of risk management solutions to clients around the world. The Global Equities group provides a full range of equity and equity-linked sales and trading services, including sophisticated portfolio analytics and electronic trading. The group's brokerage services include transaction and portfolio financing, stock lending, clearing, settlement, reporting, and custody.

The Global Investment Banking group serves a diverse client base that includes corporations, financial institutions, financial sponsors, hedge funds, governments, and government agencies. It has presence in the Americas, Europe, the Middle East, Africa, and the Pacific Rim, serving clients in virtually all countries. It offers strategic advice, financing, restructuring, and risk management, as well as capital-raising from both public markets and private sources.

In the midst of the 2008 mortgage credit crisis Bank of America acquired Merrill Lynch, which had suffered steep losses, and the two companies were scheduled to officially join forces on January 1, 2009.

See Also: Bank of America Corp.; Financial Markets; Investment Banks; Mortgage Credit Crisis of 2008; Multinational Corporation.

Bibliography. Russell J. Bruemmer and Andrew L. Sandler, *Subprime Credit Crisis: Everything You Need to Know Now* (Practicing Law Institute, 2008); Keith Michael Hearit and Jennifer Brown, "Merrill Lynch: Corporate Apologia and Business Fraud," *Public Relations Review* (v.30/4, 2004); Merrill Lynch, www.ml.com (cited March 2009); Paul Muolo and Mathew Padilla, *Chain of Blame: How Wall Street Caused the Mortgage and Credit Crisis* (John Wiley & Sons, 2008).

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MerVal

The Mercado de Valores (MerVal) is the most important index on the Buenos Aires Stock Exchange (BASE), the primary stock exchange of Argentina. The BASE was founded in 1854, succeeding the Banco Mercantil that had been established in 1822. The MerVal Index is computed continuously throughout every trading

The MerVal and MAR indices track important Argentinian businesses such as utilities, sugar producers, and banks.

day, and is available online and displayed on screens on the trading floor.

The Burcap and MerVal indices track the same stocks, those stocks deemed most important on the BASE, based on the volume and number of their trades over the last six months (the composition of the indices is redetermined quarterly)—up to 80 percent of the total stocks on the exchange. The Burcap index weights the stocks proportionally to their capitalization, while the MerVal weights according to the number of trades and the stock's value. In addition to this, the MAR (Merval Argentina) Index specifically tracks the performance of Argentinian corporations on the MerVal Index. Argentina is not a highly industrial nation; much of the MAR is taken up by banks. Notable companies on both MerVal and MAR include Pampa Holdings (a holding company for power companies), Telecom Argentina, Molinos Rio de la Plata, Grupo Clarin (a media company), and sugar and ethanol company Ledesma.

See Also: Argentina; Bonds; Company Profiles: South America; Dow Jones Index; Emerging Economies; Latin America.

Bibliography. Paul Blustein, *And the Money Kept Rolling In (and Out): Wall Street, The IMF, and the Bankrupting of Argentina* (PublicAffairs, 2005); MerVal, Mercado de Valores de Buenos Aires Merval, www.merval.sba.com.ar (cited March 2009); Seeking Alpha, "Argentina's Merval Index, An Overview," seekingalpha.com (cited March 2009); Augusto de la Torre and Sergio L. Schmukler, *Emerging Capital Markets and Globalization: The Latin American Experience* (Stanford University Press, 2007).

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MetLife

MetLife, Inc., is one of the biggest insurance companies in the world. It represents a group of companies offering insurance and other financial services in the United States and internationally. MetLife maintains its operations from the principal executive office in New York City. It was incorporated in 1999 and now employs around 49,000 people (as of January 1, 2008). MetLife is quoted in the New York Stock Exchange with the ticker symbol MET. The company has approximately 87,000 shareholders (as of January 1, 2008).

In addition to its U.S. operations, MetLife provides direct insurance products in Asia-Pacific, Europe, and Latin America. However, the United States is MetLife's largest geographical market (87 percent of 2006 revenues). MetLife operates in five business areas: institutional, individual, auto and home, international, and reinsurance, which generated revenues in 2006 as follows: institutional (42 percent), individual (31 percent), reinsurance (11 percent), international (10 percent), and auto and home (6 percent).

Metlife's products include life insurance, annuities, automobile and homeowners insurance, and mutual funds to individuals, as well as group insurance, reinsurance, and retirement and savings products and services to corporations and other institutions. Metlife's institutional division offers group insurance and retirement and savings products and services to corporations and other institutions. These include group life insurance and nonmedical health insurance. The individual segment offers insurance products such as traditional, universal, and variable life insurance and variable and fixed annuities. Auto and home division offers personal property and casualty insurance through employer-sponsored programs, as well as through a variety of retail distribution channels, including career agency system, independent agents, specialists, and direct response marketing. The international segment provides life insurance, accident and health insurance, annuities, savings, and retirement products to both individuals and groups, and auto and homeowners coverage to individuals primarily within Latin America and the Asia-Pacific market. MetLife operates in international markets through subsidiaries and joint ventures. The reinsurance segment provides traditional life, asset-intensive products, and financial reinsurance primarily in North America. This involves indemnifying another insurance group for all or a portion of the mortality insurance risk it has written.

MetLife has numerous subsidiary companies. These include RGA Reinsurance Company, MetLife Life and Annuity Company of Connecticut, Metropolitan Property and Casualty Insurance Company, New England Life Insurance Company, Texas Life Insurance Company, MetLife Limited, Sino-U.S. MetLife Insurance Company, and United MetLife Insurance Company.

The executive team of MetLife includes C. Robert Henrikson (chief executive officer and chairman), Ruth A. Fattori (chief administrative officer), Steven A. Kandarian (chief investment officer), James L. Lipscomb (general counsel), Maria R. Morris (subsidiary officer), William J. Wheeler (chief financial officer), William J. Mullaney (division officer), William J. Toppeta (division officer), and Lisa M. Weber (division officer). MetLife's board of directors includes Sylvia Mathews Burwell, Eduardo Castro-Wright, Cheryl W. Grise, William C. Steere, Lulu C. Wang, John M. Keane, Hugh B. Price, Kenton J. Sicchitano, Burton A. Dole, R. Glenn Hubbard, James M. Kilts, and David Satcher.

The success of MetLife is a result of many factors including its strong market position. It is a well-known company. In the sales of some of its products, MetLife is the largest provider in the U.S. market. Its leading role in insurance sales gives it a key competitive advantage. Considering the hypercompetitive insurance market, MetLife performs better than its rivals in many insurance products, especially in group life insurance and group auto and home insurance sales. Another reason may be regarded to be the company's well-organized sales network. MetLife is able to reach a wide range of customers through multiple distribution channels. These include direct marketing, independent agents, agency network, brokerage, direct employer sales, and the internet. Also, MetLife's multiple range of products makes the company stronger than its rivals. Its life and nonlife insurance, savings, and investment products are among the highest-selling products in the insurance industry. Using its massive financial power, MetLife can provide insurance solutions designed specifically for diverse customers by considering their differentiated needs. This is not limited to institutional customers with sales of life, nonmedical health, and retirement and savings operations, but also available to individual customers via individual life and annuities operations. These several revenue-generating operations with their similarity in relevant products and services enhance cross-selling opportunities between product segments. At the same time, they decrease MetLife's business risk across various market segments.

See Also: American International Group; Berkshire Hathaway; United States.

Bibliography. MetLife, www.metlife.com (cited March 2009); Todd Raphael, "Well Done—MetLife Shifts Culture Quickly," *Workforce* (v.80/7, 2001); SEC-EDGAR, www.sec.gov (cited March 2009).

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METRO

METRO AG is the holding company of the METRO Group, an international retail company headquartered in Dusseldorf, Germany. METRO AG was formed through a merger of Asko Deusche Kaufhaus AG, Kaufhof Holding AG, and Deutsche SB-Kauf AG and became a public company on July, 25, 1996. The METRO Group employs approximately 280,000 people working at some 2,200 outlets in 31 countries in Europe, Africa, and Asia. Total sales for METRO for fiscal year 2007 were approximately €64.3 billion. Its 2007 sales from outside Germany represented 59.1 percent of revenues. The company is organized around four customer-centered sales brands and a group of shared-services companies. Its four brands are Metro

Cash & Carry (wholesale), Real (food retail), Media Markt and Saturn (consumer electronics and appliances), and Galeria Kaufhof (department stores).

Retail Brands

Metro Cash & Carry operates some 619 locations totaling 4.9 million square meters of selling space across 29 countries and employs approximately 103,915 persons. Its total sales for its fiscal year 2007 were €31.7 billion. Metro Cash & Carry stores typically stock about 20,000 food items and 30,000 nonfood items. This self-service wholesaler began as Metro SB-Grossmarkte Gmbh & Co. KG in Mulheim/Ruhr in 1964. This food and nonfood business is targeted at commercial customers such as hotels, restaurants, kiosks, caterers, small food retailers, hospitals, and institutions. The company tailors its assortment of offerings to each respective location and nationally based demand patterns. Its slogan is "from professionals to professionals." Metro Cash & Carry also has a wholly-owned subsidiary C+C Schaper that involves wholesale plus a delivery service. This Hanover, Germany–based unit operates some 63 stores.

The METRO Group brand Real operates 350 hypermarkets throughout Germany and about 90 additional markets in Poland, Russia, Romania, and Turkey totaling 3.1 million square meters of selling space and employs approximately 54,734 persons. Its total sales for its fiscal year 2007 were €11 billion. Real stores typically stock about 80,000 food and nonfood items. Real was formed from the merger of several regional hypermarkets in 1992, and has expanded, in part through the acquisition of the Allkauf and Kriegbaum companies, Wal-Mart's former German hypermarkets, and the Polish hypermarkets of Geant. The Real hypermarkets are targeted at young families with children and seniors (age 50+), segments particularly interested in value. The food offerings, with emphasis on freshness and quality, account for the bulk of Real sales, though it offers other typical hypermarket goods such as books, clothing, electronics, household goods, leisure products, shoes, sports products, and toys. As part of its customer-value orientation, Real was a founding member of the German PAYBACK bonus program, the country's most successful customer loyalty system.

Media Markt and METRO Group Saturn are the leading European retailers of consumer electronics, totaling 2.2 million square meters of selling space and employ approximately 49,046 persons. Their combined total sales for fiscal year 2007 were €17.1 billion. Media Markt operates 508 locations in about 15 countries and Saturn operates 200 stores in nine countries. Media Markt stores offer a comprehensive assortment of about 45,000 items encompassing telecommunications, computers, photographic equipment, audio systems, and electrical appliances. The first Media Markt opened in Munich in 1979. The core concepts behind the brand were to offer customers a broad selection at permanently low prices, professional advice, repair services, and a guaranteed low price vis-à-vis its competitors, in a location close to a given city but away from parking limitations. In 1988, the brand was acquired by Kaufhof Warenhaus AG, which acquired Saturn consumer electronics stores in 1990.

Saturn offers a comprehensive assortment of about 100,000 items encompassing telecommunications, computers, photographic equipment, audio systems, and electrical appliances. Historically, Saturn stores were known for their extensive selection of music compact discs, some 60,000 titles available. Unlike Media Markt, Saturn stores are located in central downtown locations, as well as in shopping centers. Saturn's 18,000-square-meter store on Hamburg's Monckebergstrasse has been described as the world's largest consumer electronics selling space. The first Saturn opened in Cologne in 1961. The two independent brands became part of METRO in 1996. Media-Saturn Holding Gmbh is headquartered in Ingolstadt, Germany. One unique aspect to both Media Markt and Saturn is the organizational structure in which each managing director of a store is a co-owner of the store, thus linking manager rewards to store success.

Kaufhof Warenhaus AG is the management company for the METRO Group's department stores, operating 141 stores totaling 1.5 million square meters of selling space in Germany and Belgium and employing approximately 18,820 persons. The total sales for METRO Group's department stores was €3.6 billion for fiscal year 2007. METRO Group department stores are mostly located in prime inner-city locations and are known for providing fashionable premium products and international brands, merchandise presentation, and customer service. Galeria Kaufhof began in 1879 in Stralsund, Germany. Inno, S.A. was the sole department store in Belgium when the 100-year-old retailer was acquired in April 2001, and subsequently all of its 15 stores were converted to Galeria Inno by 2004. The Galeria concept is targeted to consumers who are seeking shopping experiences centered on brands, fashion, and lifestyles combined with lavish merchandising and extraordinary service.

Services

METRO's shared services units provide for centralized efficiency for its operating brands. Its cross-divisional service companies provide the following services: procurement, logistics, information technology support, advertising, real estate, catering, and invoice settling. These pooled services create synergies for the METRO Group that cut its costs.

METRO Group's market capitalization of €18.7 billion makes it one of Germany's largest corporations and places it on the DAX blue-chip index. Three principal shareholders, Franz Haniel, Schmidt-Ruthenbeck family, and Otto Beisheim, control 68.47 percent of the voting rights in METRO AG.

See Also: DAX Index (Germany); Germany.

Bibliography. Michael Cesarz, Manina Ferreira-Erlenbach, Murat Pulat, and Cornelia Tomerius, *Meydan Shopping Square: A METRO Group Project in Istanbul* (Jovis, 2007); Icon Group, Ltd., *METRO AG: International Competitive Benchmarks and Financial Gap Analysis* (Icon Group International, 2000); METRO Group, www.metrogroup.de (cited March 2009); Anne-Lise Wang, *Responsive Retailing and RFID Best Practices in Western European Retail: Metro Group Case Study* (IDC Research, 2007).

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Mexico

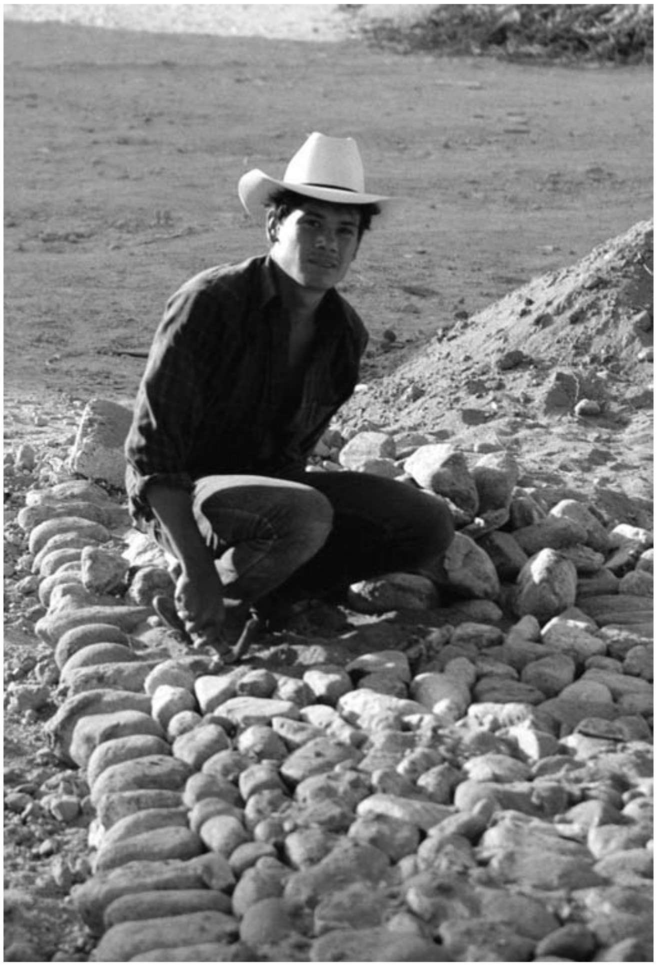
Mexico (population 106,682,500 in 2008, the 11th most populous country in the world; gross domestic product $1.022 trillion in 2007) is a nation in search of itself. Over the last century it has undergone changes which, while fundamental, have not yet enabled it to sustain substantive improvements to the welfare of its population. A federal republic composed of 32 states, its most urgent problems are unemployment, poverty, migration, violence, and public safety. The free market initiatives of the last 25 years have brought about major changes to the country's industry, but have not yet translated into the sort of economic growth rate necessary to reduce unemployment and poverty to more reasonable levels.

In the political arena, changes have been slower and less profound because theoretical democracy has not quite translated to practical democracy. The leadership of the country remains authoritarian in its approach, and many of the old structures remain intact, obstructing the administration of justice and the objective rule of law. Corruption is rampant, deteriorating public confidence in the government both domestically and abroad, where such confidence is necessary to encourage foreign investment in Mexico.

Politics has prevented various factions in government from agreeing on the model of development that Mexico should be following, the shape of its future, and the means of getting there. Political parties have served their constituencies and special interests at the expense of building strategic agreements on the structural transformations necessary to long-term national development. Such agreements would in the long run benefit those same constituencies, by leading to fairer, more efficient government.

Mexico's principal challenge in the 21st century is the need to develop a new social contract that will allow the country to participate competitively in the world economy. Its geographical location is a huge potential benefit because of its extensive border with the United States, the largest market for goods and services in the world. The abundant natural resources, favorable climate, and biodiversity are still virtually untapped compared to the use to which a healthier nation could put them, and the nation's history and culture contribute to its appeal as a tourist destination.

In terms of human capital, Mexico is one of the largest countries in the world, with a population expected to reach 130 million by 2030. A mere generation away, that population will be primarily middle-aged, with extraordinary potential in production, skills, experience, and intellectual capital. The promotion of science, technology, and education today represents an investment in that near future.



Mexico is one of the world's largest exporters of labor, with 9 percent of its total population working in the United States.

History

Mexico's origins are in the splendor of the Aztec Empire, still an object of fascination to the modern world by dint of its prowess in agriculture, mathematics, science, and the arts. The Spanish conquest of Mexico then put it on the path of a difficult transition toward modernity, the start of its mestizo heritage. In the 19th century, Mexico gained independence, but saw an extensive period of instability and chaos marked by disputes between conservatives and liberals, monarchists and republicans. A long period of wars, invasions, and losses of territory to the United States and Texas marked the national consciousness, and led to the establishment of the Porfiriato regime from 1876 to 1911, a dictatorial regime masquerading as a democracy. Mexico entered the 20th century rife with instability, with the Mexican Revolution of 1910 eventually leading to an adoption of a constitution in 1917, and a firm commitment to modernization.

After a period of struggle among the factions of the Revolution, the political class that emerged succeeded in creating new institutions that brought economic growth and political stability to the country. The new government called for sharing benefits and power among economic groups, and state-controlled institutions promoted social stability. The successive governments of the Mexican Republic ensured political stability through education, housing, and improvements to public health, leading to a period from the 1950s through the 1970s called the "Mexican Miracle." The Miracle period also saw improvements to industrialization, based on a model of import substitution that protected national corporations from foreign competition through tariffs and import bans. Inflation remained low, domestic consumption and economic growth remained high.

However, the development model showed its limitations by the end of the 1960s, in a series of internal conflicts that are remembered for the student movement of 1968 that led to the brutal massacre at Tlaltelolco. The model's flaws reached crisis levels in the following decade, when the growth fueled by the domestic market began to exhaust that fuel, and the government made no significant move to take advantage of the availability of foreign markets. The government's handle on macroeconomics was shaky, its activity in that arena erratic, and it quickly lost face and public confidence. The government's economic policy was based on public spending, the monetary policy was inadequate, the problem of balance of payments was ignored, and the government was not prepared to handle the resources of an oil surplus in the 1970s. The deficit and external debt rose unacceptably, devaluing the currency.

The cost of the government's missteps was tremendous. Mexico has faced cyclical crises since, with particular increases in poverty and unemployment in 1976, 1981, and 1994. The annual economic growth from 1970 to 2000 barely averaged 1.5 percent, and the job market has not been able to keep pace with the growth of the population. The last decades have been marked by the devaluation of the erratic peso, rampant inflation, and rampant migration, largely to the United States. Additionally, the "informal economy" has become gradually institutionalized. Two out of three jobs in the country are informal, paying under the table with no tax revenue yielded to the government to keep up with the costs of infrastructure and public welfare. The excessive procedures and regulations imposed by the government, and its reputation for corruption especially at the local level, do much to maintain this situation. Most alarming has been the growth of drug trafficking and a kidnapping industry (ransoms are small, but so are legitimate paychecks).

Challenges

The transformation of Mexico's economy dates to the beginning of the 1980s, when the country faced a deep economic crisis from which it has been attempting to depart ever since. The government has done its best to adopt the recommendations of international financial institutions like the IMF and the World Bank in order to improve the health of its economy through fiscal discipline, monetary stability, and restrictions on public spending. It has renegotiated its external debt, privatized many public enterprises and the banking system, encouraged foreign direct investment, and redefined the social security institutions.

In a short time, Mexico became one of the most open economies in the world. In order to promote economic growth and competition, the government opened the economy to external markets and joined the GATT treaty, eliminating many of its foreign tariffs and domestic subsidies, and signed more than a dozen free trade agreements leading up to the North American Free Trade Agreement (NAFTA). But after almost three decades, this new model has not yet been able to solve the deep problems of economic inequality facing the country. Social problems have shown that the necessary solution cannot be simply economic, because growth without distribution is not wealth. Mexico's socioeconomic problems require a political transformation as well, to encourage democratic government, eliminate corruption, and administer justice correctly. It is in these areas that advancements have been most insufficient.

At least half of the population lives in moderate poverty, more than 20 percent in extreme poverty. Mexico is one of the largest exporters of labor in the world, with 9 percent of its population working in the United States; 10.6 million Mexicans were living in the United States in 2005, half of them undocumented. Out of every 100 criminal offenses, 97 go unpunished. The country operates on arbitrariness and arrangements outside the law, from the court systems to the informal economy of the typical employer.

For Mexico to shape its future, it needs to design and implement a new model of economic growth and political health to reduce poverty, retain its citizenry and reduce immigration to the United States, and reduce the scope of the informal economy. It needs to maintain an economic growth rate of at least 4 percent, and to strongly support education, science, and technology for the sake of the coming generation. It must boost its export capacity through the promotion of competition in the market, the improvement of infrastructure, and the attraction of foreign direct investment. In politics, democracy must be upheld, corruption eliminated, and human rights protected.

See Also: CEMEX; Latin America; Maquiladora; North American Free Trade Agreement; Pemex; Privatization; Tequila Effect.

Bibliography. Sarah Babb, *Managing Mexico: Economists From Nationalism to Neoliberalism* (Princeton University Press, 2004); Janine Berg, Christoph Ernst, and Peter Auer, *Meeting the Employment Challenge: Argentina, Brazil, and Mexico in the Global Economy* (Lynne Rienner, 2008); Emily Edmonds and David A. Shirk, *Contemporary Mexican Politics* (Rowman & Littlefield, 2009); Gilbert M. Josephe, *The Mexico Reader: History, Culture, Politics* (Duke University Press, 2005); Yevgeny Kuznetsov and Carl J. Dahlman, *Mexico's Transition to a Knowledge-Based Economy: Challenges and Opportunities* (World Bank, 2008); Dag MacLeod, *Downsizing the State: Privatization and the Limits of Neoliberal Reform in Mexico* (Pennsylvania State University Press, 2005); Gerard Otero, *Mexico in Transition: Neoliberal Globalism, the State and Civil Society* (Zed Books, 2005); Fernando Romero, *Hyperborder: The Contemporary U.S.-Mexico Border and Its Future* (Princeton Architectural Press, 2008); Jon Shefner, *The Illusion of Civil Society: Democratization and Community Mobilization in Low-Income Mexico* (Pennsylvania State University Press, 2008).

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MibTel Index (Milan)

The MibTel Index tracks stocks on the Borsa Italiana, Italy's main stock exchange, located in Milan. Privatized in 1997 and purchased by the London Stock Exchange 10 years later, the Borsa is responsible for Italy's stock market, derivatives market, and fixed-income market. One hundred thirty brokers, both domestic and foreign, operate on the market through its purely electronic trading system. Bonds, stocks, options, and warrants not admitted to the exchange are traded on the Mercato Ristretto (restricted market).

There are several indices tracking stocks on the Borsa Italiana. The MibTel tracks all Italian stocks and a selection of foreign ones. The MIB30, no longer as relevant as it once was, tracks the performance of 30 top stocks from the MibTel. Increasingly important is the S&P/MIB, a capitalization-weighted index of 40 companies chosen both for their size and to represent 10 specific economic sectors. Since 2004, this has been considered the benchmark index for the Italian market.

The 40 companies as of summer 2008 are A2A, a utility company formed in 2007 by the merger between AEM and ASM Brescia; Alleanza, a Milanese insurance company; Assicurazioni Generali, Italy's largest insurance company (with a controlling stake in Alleanza), dating back to the Austro-Hungarian Empire; Atlantia, a holding company; Autogrill, a multinational retail and catering company; Banca Monte dei Paschi di Siena, the oldest bank doing business today—it was founded in 1472, 20 years before Columbus sailed to the Americas, and is known internationally for its sponsorship of Italian basketball; Banca Popolare di Milano, a cooperative bank; Banco Popolare, a cooperative bank; Bulgari, a jeweler and luxury goods retailer; Buzzi Unicem, a producer of cement and concrete; Enel, the third-largest power company in the world; Eni, an oil and gas company; FASTWEB, a broadband communications company; Fiat, best known as an automobile manufacturer, but also a financial group; Finmeccanica, a high-tech conglomerate working in defense, aerospace, energy, and other fields; Fondiaria-Sai, a financial services company; Geox, a shoe and clothing manufacturer; Gruppo Editoriale L'Espresso, publishers of a weekly Italian newspaper; Impregilo, a construction and civil engineering company; Intesa Sanpaolo, a banking group; Italcementi, a cement and concrete company; Lottomatica, a company responsible for lotteries and gambling; Luxottica, the world's biggest eyewear manufacturer, owners of the Ray-Ban and Oakley brands of sunglasses.

Others included in the index are Mediaset, Italy's major television network; Mediobanca, an investment bank; Mediolanum, a financial services company; Mondadori, Italy's biggest publishing company; Parmalat, a dairy and food producer, best known for their shelf-stable milk; Pirelli, a multinational company focused principally on tire manufacturing; Prysmian, a producer of cables for energy and telecommunications; Saipem, an oil and gas contractor; Seat Pagine Gialle, a publisher of phone directories; Snam Rete Gas, a gas company; STMicroelectronics NV, a semiconductor manufacturer; Telecom Italia, a telecommunications company; Tenaris, a manufacturer of pipes, especially for the oil and gas industries; Terna, a Roman company that owns and operates 98 percent of the Italian power grid; UBI Banca, a cooperative bank; Unicredito, a pan-European bank based in Milan; Unipol, the third-largest insurance provider in Italy.

See Also: Bonds; Common Market; Company Profiles: Western Europe; Dow Jones Index; European Union; Italy.

Bibliography. Borsa Italiana, www.borsaitaliana.it (cited March 2009).

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Microfinance

The development of the microfinance sector is based on the assumption that the poor possess the capacity to accomplish income-generating economic activities but are limited by lack of access to and inadequate provision of savings, credit, and insurance facilities. The microfinancial services capture the various financial needs of the poor, and currently microfinance is a major component of poverty reduction and economic regeneration strategies around the world. As a concept, microfinance pays close attention to the incentives that drive efficient performance in the context of small transactions and large numbers of clients. Most of the institutions in microfinance are based on group-based lending approaches and thus reduce the administrative costs of gathering information, contract design, and enforcement of credit transactions, including loan recovery. Recently, the microfinance sector has come more into the domain of commercial organizations and the idea of sustainable microfinance has become an integral part of the development of financial markets in many countries.

Microfinance activities usually involve (1) small loans, (2) informal appraisal of borrowers and investments, (3) collateral substitutes such as group savings or compulsory savings, (4) access to repeat and larger loans, based on repayment performance, (5) streamlined loan disbursements and monitoring, and (6) secure savings products.

According to the Consultative Group to Assist the Poor (CGAP), the key principles of microfinance are (1) the poor need a variety of financial services, not just loans; (2) a powerful instrument against poverty; (3) the need to build financial systems that serve the poor; (4) financial sustainability; (5) the need to build permanent local financial institutions; (6) requires more than microcredit; (7) interest rate ceilings can damage poor people's access to financial services; (8) the role of government as an enabler of financial services; (9) donor subsidies should complement private sector capital; (10) the lack of institutional and human capacity; and (11) the importance of financial and outreach transparency. These principles are generic and provide a broad foundation to the core idea of enhancing access to finance.

The CGAP principles suggest the need for a wide range of financial services that are suitable, flexible, and reasonably priced. The financial diaries prepared by poor households in urban and rural areas in Bangladesh and in India reveal that the respondents patch together a wide array of informal arrangements with semiformal and formal services. These diaries reveal that poor people want reliable, convenient, and flexible ways to store and retrieve cash and to turn their capacity to save into spending power, in the short, medium, and long term on a continuing basis.

The ideas of sustainability in microfinance allow the continued operation of the microfinancial services without subsidies and help from the donor. Financial sustainability helps to reduce transaction costs, which leads to client-based products and services. The idea of the poor as a heterogeneous group of vulnerable households with complex livelihoods demonstrates the need for client-based microfinancial services. In some cases nonfinancial services are essential for the effective use of financial services, and many microfinance institutions integrate both services in their operations. According to CGAP, microfinance combines banking with social goals, and capacity needs to be built at all levels, from financial institutions through the regulatory/supervisory bodies and information systems, to government entities and donor agencies.

New Institutions

There is an increasing level of interest from formal sector financial institutions in microfinance activities. For instance, Bank Rakyat Indonesia's (BRI) experience shows that with attractive savings and credit products, appropriate staff incentives, and an effective system of internal regulation and supervision, the microfinance operation can be highly profitable. The flexibility in saving services, an important part of Unit Desa Scheme of BRI, offers convenient banking hours, a friendly atmosphere, unconstrained withdrawals, and a range of incentives such as bonuses and raffles.

In India, the Self Help Group (SHG) program, a distinctive microfinance program, is based on the existing banking network in delivering financial services. The formal financial sector institutions extend loans to highly performing SHGs in certain multiples of the accumulated savings of each SHG. The Reserve Bank of India (RBI) has instructed all commercial banks to participate and extend financing to SHGs, extending this to cooperative banks and regional rural banks. However, by the early 21st century, microfinance institutions have become a vast global industry involving large numbers of governments, banks, aid agencies, nongovernmental organizations (NGOs), cooperatives, and consultancy firms and directly employing hundreds of thousands of branch-level staff. The presence of more players in microfinance has raised certain concerns about the quality and sustainability of the services for several reasons.

The higher number of players attracts competition and brings high levels of professionalism to the industry. But there are concerns about more players targeting the same market, which questions the

This family in Santa Cruz, Bolivia, stands in their food stall in December 2007; they had just been able to rebuild their business after a fire because of their access to microcredit. Like Bangladesh, Bolivia has been an important market for microfinance efforts.

absorptive capacity limits on the part of both lenders and of borrowers. Irrespective of the successful citations of microfinance, there is a view that microfinance has failed to see the slippery slope toward consumerism. This type of concern goes back to the ages of the previous debates on whether microfinance is a successful tool to address poverty alleviation. It is beyond doubt that microfinance raises the prospects for low-income households, and some poor people, to achieve their goals—in business, consumption, education, health, and other areas—and is not a magic bullet that automatically lifts poor people out of poverty through microenterprise. The time has come for microfinance institutions as well to take up the challenge to develop diversified financial services while maintaining financial sustainability.

See Also: Bangladesh; Bolivia; India; Indonesia; Microfinance Institution.

Bibliography. T. Arun and D. Hulme, eds., *Microfinance: A Reader* (Routledge, 2008); T. Arun, D. Hulme, I. Matin, and S. Rutherford, "'Finance for the Poor: The Way Forward?" in *Finance and Development: Surveys of Theory, Evidence and Policy*, C. J. Green, C. H. Kirkpatrick, and V. Murinde, eds. (Edward Elgar, 2005); T. Arun and P. Mosley, "SHGs in India: A Magic Bullet for Poor Rural Women," Paper presented to the ESRC Seminar Series on Finance and Development, University of Manchester (October 30, 2003); Consultative Group to Assist the Poor (CGAP), "Key Principles of Microfinance," www.cgap.org (cited March 2009); Alex Counts and Alex Counts, *Small Loans, Big Dreams: How Nobel Prize Winner Muhammad Yunus and Microfinance Are Changing the World* (John Wiley & Sons, 2008); T. Dichter, "Can Microcredit Make an Already Slippery Slope More Slippery? Some Lessons From the Social Meaning of Debt," in *What's Wrong With Microfinance?*, T. Dichter and M. Harper, eds. (Practical Action Publishing, 2007); D. Hulme and T. Arun, "The Future of

Microfinance," in *Microfinance: A Reader*, T. Arun and D. Hulme, eds. (Routledge, 2008); K. G. Karmakar, *Microfinance in India* (Sage, 2008); Daniel Lazar and P. Palanichamy, *Micro Finance and Poverty Eradication: Indian and Global Experiences* (Pondicherry University, 2008); J. Ledgerwood, *Microfinance Handbook: An Institutional and Financial Perspective* (World Bank, 2000); J. Morduch, "The Microfinance Promise," *Journal of Economic Literature* (v.37/4, 1999); J. Morduch and S. Rutherford, Microfinance: Analytical Issues for India," Paper Submitted to the World Bank, South Asia Region (2003); Stuart Rutherford, *The Pledge: ASA, Peasant Politics, and Microfinance in the Development of Bangladesh* (Oxford University Press, 2009); H. D. Seibel, "The Microbanking Division of Bank Rakyat Indonesia: A Flagship of Rural Microfinance in Asia," in *Small Customers, Big Market*, M. Harper and S. S. Arora, eds. (ITDG Publishing, 2005); Rajdeep Sengupta and Craig P. Auchubon, "The Microfinance Revolution: An Overview," *Federal Reserve Bank of St. Louis Review* (v.90/1, 2008).

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Microfinance Institution

Microfinance institutions (MFIs) provide financial services to the poor, who are normally excluded from the formal banking sector. The failures in reaching out to the poor by government schemes had generated a group of MFIs to engage in income-generating activities due to inadequate provision of savings, credit, and insurance facilities in several countries, especially in Bolivia, Bangladesh, and Indonesia. In 2006 Grameen Bank—the first microcredit institution, started with loans of less than $1 each to 42 destitute Bangladeshis—had grown to reach 7 million clients. Over the years, Grameen Bank is credited with proving that "the poor are bankable," and the Grameen model has been copied in more than 40 countries.

Currently, there are 3,316 MFIs reportedly reaching over 133 million clients by the end of 2006, and loans to 92.9 million poorest clients benefit a total of 464.6 million people, including both clients and their family members. In terms of ownership patterns, the microfinance institutions provide different structures such as government-owned (rural credit cooperatives in China), socially minded shareholders (transformed NGOs in Latin America), member-owned (credit unions in west Africa), and profit-maximizing shareholders (microfinance banks in eastern Europe).

In the early stages, the MFIs had only concentrated their activities on micro credit, but changed to a range of services in due course. The MFIs introduced concepts such as group-lending contract, character-based lending, short-term repeat loans, and incentives for loan repayments. The extensive Microcredit Summit Campaign Report 2007 argues that although microfinance is not a panacea, it is still a powerful tool to fight global poverty and works well with other development interventions that promote health, nutrition, housing, democracy, and education, offering dignity and empowerment to the very poor.

The flexibility in repayment options allows borrowers to repay out of existing income, freeing the borrower to invest the loan in relation to their needs. Many microfinance institutions permit people to access useful lump sums through loans and allow borrowers to repay the loan in small, frequent, manageable installments, which is further supported by quick access to larger repeat loans. Most of these institutions are successful financially due to high repayment rates and an enhanced awareness of the levels of subsidy. These features make microfinance institutions different from small-scale commercial and informal financial institutions and from large government-sponsored schemes, and are either independent of government and/or have a high degree of autonomy from bureaucrats and politicians. However, a better understanding of the financial service preferences and behaviors of the poor and poorest is still required to expand the scope of microfinance in addressing the concerns about welfare implications of MFIs.

In the 1990s a debate emerged around two leading views in microfinance services available to the poor—financial systems approach and poverty lending approach, both of which share a commitment to make these services available to the poor. The financial system approach framework is based on the principles of financial self-sufficiency, as seen in institutions such as Banco Solidario (BancoSol) in Bolivia and the Bank Rakyat Indonesia (BRI). The poverty lending approach focuses on credit and other services funded by donor and concessional funds as an important mechanism for poverty reduction. This approach is interested in improving the well-being of participants and their families. The examples of this category are Bangladesh Rural Advancement Committee (BRAC) and FINCA-style village banking programs in Latin America. However, this debate is largely resolved now and the microfinance sector is adopting operating on commercial lines or systematically reducing reliance on interest rate subsidies and/or aid agency financial support. This is evident by the experience in Bangladesh where the Grameen Bank has shifted from its classic "Grameen I" group—lending to the poor model—to "Grameen II," which is much closer to the financial systems model.

Recently, the growth in new products such as smart cards and the use of technology in developing new points of sale has been helping microfinance institutions to enhance their outreach. Even the conventional banking institutions have entered into the provision of microfinance in a big way. The private sector has built a significant presence in microfinance operations and the microfinance institutions are successfully raising commercial funds from the capital market and social investors.

See Also: Bangladesh; Bolivia; Indonesia; Microfinance.

Bibliography. Denis T. Carpio, *Financing Micro, Small, and Medium Enterprises: An Independent Evaluation of IFC's Experience With Financial Intermediaries in Frontier Countries* (International Finance Corporation, World Bank Group, 2008); S. Daley-Harris, "State of the Microcredit Summit Campaign Report 2007," (Microcredit Summit Campaign, 2007); D. Hulme and T. G. Arun, eds., *Microfinance: A Reader* (Routledge, 2008); Ingrid Matthäus-Maier and J. D. Von Pischke, *New Partnerships for Innovation in Microfinance* (Springer, 2008); Craig McIntosh, Alain de Janvry, and Elisabeth Sadoulet, "How Rising Competition Among Microfinance Institutions Affects Incumbent Lenders," *Economic Journal* (v.115/506, 2005); J. Morduch, "The Microfinance Promise," *Journal of Economic Literature* (v.37/4, 1999); Maria E. Pagura, *Expanding the Frontier in Rural Finance: Financial Linkages and Strategic Alliances* (Practical Action, 2008); S. Rutherford, *The Poor and Their Money* (Oxford University Press, 1999).

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Micro-Multinational

A micro-multinational (mMNE) is a firm that, from birth or soon thereafter, controls and manages value-added activities in more than one country. Other common terms for the phenomenon of a rapidly internationalizing firm are *international new venture, born global, global start-up, metanational downstairs*, and *infant multinational*. The major differences between a micro-multinational and a large multinational enterprise (MNE) are firm size and age, and speed and choice of market internationalization. Micro-multinationals are, by definition, young and small—often classified by having 250 or fewer employees. Unlike most MNEs that embark on a staged, incremental process of internationalization to countries of geographic and psychic/cultural proximity, mMNEs' international choices are influenced by market-efficiency and strategic asset (often physical and knowledge resources)–seeking factors.

A key distinction between mMNEs and other early internationalizing firms is that mMNEs tend to utilize more advanced service modes (beyond exports) in controlling and managing value-added activities around the world. Kevin Ibeh, Jeffrey Johnson, Pavlos Dimitratos, and Jonathan Slow report the following service model usage by Scottish MNEs: overseas office (42.6 percent), foreign subsidiary (29.9 percent), international joint venture (24 percent), overseas manufacturing (22.5 percent), international licensing (21.1 percent), and international franchising (4.9 percent).

There are increasing numbers of micro-multinationals starting in countries all over the world, and these firms play a key role in the growth and development of their home and host national economies. The growing numbers of mMNEs is attributed to factors related to the competitive environment, firm, and manager experience. First, a number of developed and developing country governments have established policies intended to assist the development of "home grown" MNEs. Second, the growing use of the internet and the dominance of companies such as Google, Yahoo, MSN, eBay, and Amazon makes it easy for micro-multinationals to reach potential customers all over the world. Third, although micro-multinationals can be found across all industry sectors, the highest potential mMNEs are found in but are most prevalent in fast-growing sectors that are knowledge based, such as software development. Fourth, across the world, individuals are gaining experience living in other countries. Increasing numbers of students pursue part or all of their degrees overseas and managers devote substantial time and energies to overseas projects. Through this experience, individuals gain knowledge about how to function and succeed in foreign markets and may also see viable opportunities for new businesses. For example, many of China's micro-multinationals are founded by "sea turtles": Chinese nationals who studied and/or worked abroad, often in the United States, for many years before returning to China to start export-oriented firms.

Ben Oviatt and Tricia McDougall classify international new ventures on two dimensions: coordination of value-chain activities (few versus many) and the number of countries involved (few versus many). They identified four types of firms that export directly from near their incipience: export/import start-up, multinational trader, geographically focused start-up, and global start-up. The export/import start-up and multinational trader firms are "new international market makers" that coordinate few activities across countries, most commonly systems and knowledge of inbound and outbound logistics to aid import and export. These firms' advantage generally depends upon their ability to discover and act upon an imbalance of resources across countries, create new markets, and attract and maintain local business networks. Geographically focused start-ups focus on the specialized needs of a particular region and coordinate a range of activities beyond simple inbound and outbound logistics that often require socially complex networks with tacit knowledge. Global start-ups describes those firms that derive a significant competitive advantage from coordinating multiple activities across multiple countries. These firms are often the most time- and resource-intensive to develop but can have the most sustainable long-term competitive advantages due to the inability of other firms to mimic their historically unique, casually ambiguous, and socially complex alliances.

Micro-multinationals face a number of barriers to entry, including a lack of financial, information, management, and intellectual property protection resources. In order to compete overseas, firms often require access to financial capital; however, new firms are generally less able to receive financing or access foreign collateral. Overseas operations often require new knowledge about legal, bureaucratic, and social structures, and new venture management may lack this expertise. Finally, overseas markets may not protect intellectual property rights. Small firms attempting to go overseas may not be able to protect against the theft of intellectual property while large firms' greater credibility and ability to pursue retribution might limit their theft.

Given these obstacles, micro-multinational managers seek integration in key business networks. These collaborations can be formal or informal and enable the mMNE to acquire greater access to resources (including financial), learn new skills, gain legitimacy and control, guard property rights, and control transaction costs. Zoltan Acs, Siri Terjesen, and Colm O'Gorman describe how micro-multinationals often begin by pursuing an indirect path to internationalization using intermediaries to facilitate exports. Micro-multinationals often internationalize by becoming one or more of the following: suppliers of foreign MNEs, licensors/franchisors of foreign brands, and alliance partners of foreign direct investors. Intermediaries include agents and distributors located at home or abroad or the local subsidiaries of multinational firms; they can help their clients overcome knowledge gaps and reduce uncertainties and risks associated with operating in foreign markets. Jolanda Hessels and Siri Terjesen's study of Dutch SMEs reports that exporters were most likely to have an owner/manager that perceived an increased international presence of their domestic competitors, customers, and suppliers and an increased use of foreign suppliers. Micro-multinationals that exported directly were most likely to have owner/managers who perceived favorable home market access to knowledge and technology and reasonable production costs and government regulation.

See Also: Entrepreneurship; Entry Mode; Globalization; Internationalization; Internationalization Model; Multinational Corporation.

Bibliography. P. Dimitratos, J. E. Johnson, J. Slow, and S. Young, "Micro-Multinationals: New Types of Firms for the Global Competitive Landscape," *European Management Journal* (v.21/2, 2003); J. Hessels and S. Terjesen, "Direct and Indirect Internationalization by SMEs: A Test of Resource Dependency Theory and Institutional Theory," *Small Business Economics* (Forthcoming); K. Ibeh, J. E. Johnson, P. Dimitratos, and J. Slow, "Micro-Multinationals: Some Preliminary Evidence on an Emergent 'Star' of the International Entrepreneurship Field," *Journal of International Entrepreneurship* (v.2, 2004); G. A. Knight and S. T. Cavusgil, "The Born Global Firm: A Challenge to Traditional Internationalization Theory," in *Export Internationalizing Research-Enrichment and Challenges: Advances in International Marketing*, S. T. Cavusgil and T. K. Madsen, eds. (JAI Press, 1996); B. M. Oviatt and P. P. McDougall, "Toward a Theory of International New Ventures," *Journal of International Business Studies* (v.25/1, 1994); A. Rialp, J. Rialp, and G. Knight, "The Phenomenon of Early Internationalizing Firms: What Do We Know After a Decade (1994–2004) of Scientific Inquiry?" *International Business Review* (v.14, 2005); S. Terjesen, C. O'Gorman, and Z. Acs, "Intermediated Internationalization: Evidence From the Software Industry in Ireland and India," *Entrepreneurship & Regional Development* (v.20/1, 2008).

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Microsoft

Microsoft is a multinational information technology company that manufactures, licenses, acquires, and supports a range of software for use on computing devices. Its portfolio of interests also includes publishing, computer hardware, and a cable TV channel. The history of Microsoft is, to a great extent, the history of its products. Due to the manner of the development of its product portfolio and the strategies behind it, Microsoft is often portrayed as aggressive and predatory; an innovator, rather than a creator. However, the same evidence can also be construed as demonstrating a vigorous competitor that has benefited the global marketplace by supplying innovative, integrated products, enhancing the productivity of businesses and the lifestyles of consumers, and promoting corporate philanthropy while meeting new threats to profitability.

Microsoft was founded in 1975 by Bill Gates and Paul Allen in Albuquerque, New Mexico, to produce a programming language for the popular Altair 8800 computer. The pair had met at Seattle's Lakeside School over their interest in computers, and together they had dropped out of Harvard to pursue the Altair opportunity. In 1981 Microsoft won the contract to produce an operating system (OS) for the IBM personal computer (PC). For this, Gates purchased an OS from Seattle Computer Products, developing and rebranding it as MS-DOS. This gave them a pricing and a first mover advantage over competing products. In a masterstroke of contracting, Microsoft was allowed to license the operating system to other PC manufacturers, essentially becoming a premium paid to Microsoft on sales of all PCs as the market exploded. For most of the 1980s, MS-DOS accounted for 40–50 percent of revenues.

Although a usable OS was significant, it was "productivity" application software such as the VisiCalc spreadsheet that established the PC as an office tool. As users became accustomed to the possibilities offered by these kinds of software, a need for multitasking between applications and increased usability became apparent. A "windowing" graphical user interface (GUI) was seen as the solution, such as Apple had produced in 1984. In 1985 Microsoft released Windows as a GUI to the MS-DOS. This set the ground for Microsoft's growth in the 1990s from integrated productivity applications for office workers. Bundling MS Word, Excel, and PowerPoint into MS Office allowed Microsoft to build the cash reserves necessary to take on established one-application specialists such as WordPerfect and Lotus.

In the mid-1990s, after a momentary error in reading the strategic opportunity of the internet, Gates moved Microsoft strongly in that direction with MS Internet Explorer (IE), a Web browser that began as a separate application but became an integrated part of the Windows OS. The major controversies over Microsoft's strategies became apparent in this phase of its development—first over MS Windows, where Apple Computer claimed copyright infringement of their GUI, and then with MS Internet Explorer with charges of bundling and monopoly leveraging. This second charge included tactics in the so-called Browser Wars against the competitor Netscape, such as bundling IE with Windows. These various strategic moves and legal/commercial consequences contributed to a growing anti-Microsoft sentiment in popular culture.

On April 3, 2003, following the antitrust case brought against Microsoft by the U.S. government, Microsoft was broken into two divisions: operating systems and software. It has subsequently been divided into the platform product and services division, the business division, and entertainment and devices division. How U.S. action will reduce Microsoft's monopoly on the personal computing market is unclear. It is likely that the divisions will exploit their commonality and Microsoft's users will continue to seek integrated products. Despite the breakup, for the fiscal year ended 2007, Microsoft revenues saw a 15 percent increase over the previous year. However, Microsoft profits have been built on charging for OS and productivity software that runs on PCs. Such software is increasingly available as a free online service, developed by open communities of programmers. It is often OS-independent, representing a double threat to Microsoft's traditional sources of profit. Microsoft has been successful due to its founders' ability to discern opportunity. The diversification represented by its business units demonstrates Microsoft's response to threats to its core business. As Bill Gates leaves to pursue philanthropic activities, new generations of leadership will be required to sustain that ability across an increasingly diverse set of activities.

See Also: Antitrust Laws; Competition; International Business Machines.

Bibliography. Martin Campbell-Kelly et al., "Not Only Microsoft: The Maturing of the Personal Computer Software Industry, 1982–1995," *Business History Review* (v.75/1, 2001); Ali F. Farhoomand, *Microsoft's Diversification Strategy* (Asia Case Research Centre, University of Hong Kong, 2006); Richard Gilbert and Michael Katz, "An Economist's Guide to *U.S. v. Microsoft*," *Journal of Economic Perspectives* (v.15/2, 2001); Benjamin Klein, "The Microsoft Case: What Can a Dominant Firm Do to Defend Its Market Position?" *Journal of Economic Perspectives* (v.15/2, 2001); Daniel Lyons, "Media by Microsoft," *Forbes* (v.180/5, September 17, 2007); Microsoft, "Going Beyond Timeline," www.microsoft.com (cited March 2009); William H. Page and John E. Lopatka, *The Microsoft Case: Antitrust, High Technology, and Consumer Welfare* (University of Chicago Press, 2007); Brent Schlender, "Gates After Microsoft," *Fortune* (v.158/1, 2008).

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Middle East

The term *Middle East* has no objective basis. It is an idea of late-19th-century imperial geography used to define a group of countries that stretch around the Mediterranean. Depending on which countries are included, the Middle East is said to encompass the region of modern-day Turkey; the eastern Mediterranean (Levant) on some accounts extending to Iran and Afghanistan; down into the Gulf and Arabian Peninsula; and along the southern shores of the Mediterranean. The International Monetary Fund (IMF) and the World Bank treat the Middle East and north Africa as a single region. The Middle East incorporates the area once seen as the cradle of civilization, the fertile crescent of Mesopotamia and the Nile Valley. In terms of medieval religious geography, this area was seen by Christians, Jews, and Muslims as the center of the world. But by the late 19th century, European industrialization and expansion made it seem an intermediate "middle Eastern" area separating Europe from the East. The continued use of this term reflects the ongoing importance of geopolitical considerations and the way that they are sunk into popular consciousness. The Middle East is often thought to be synonymous with the Arab world, but the definition of an Arab is itself contested. The region is often associated with Islam, but there are substantial Islamic minorities in some states, and most of the world's Muslims do not live in the Middle East.

Politically, much of the area of the Middle East was once part of the Ottoman Empire. The modern-day states emerged from imperial conflicts, and especially Anglo-French influence as the Ottoman Empire collapsed. The secret Sykes-Picot agreement of 1916 formalized Anglo-French spheres of influence, and in 1917 the British made the Balfour Declaration, viewing with favor a national home of the Jewish people in Palestine. In this division, too, the Kurds must not be forgotten as they emerged the losers as the world's largest stateless people.

After World War II, Anglo-French influence gradually gave way to U.S. influence. This reflected a continuation of older strategic concerns over the area, the Cold War, and, most importantly, the role of the area as an oil-producing region. These concerns led to U.S. support for local forces—states, princes, families, and the military—that might help it achieve its aims. But it also accounts for continuing hostility to Western intervention and pressure. History plays an important role in the area and helps to explain the continuing tensions. Some sensitivity to the complexity of the region and even the term *Middle East* itself is therefore necessary. Often the term carries a negative connotation, as when David Ben-Gurion said that "the state of Israel is a part of the Middle East only in geography."

Standard accounts of business in the Middle East point to positive factors encouraging trade and investment. These include the geographical ease of access, cultural uniformities (the Arab language, Islam), pressures to emulate Western consumption practices including the worst aspects of environmental degradation, public sector demand, and so on. Against these must be set more negative issues.

In the 1960s much of the debate about the Middle East tended to exaggerate its potential. Today there is a pessimistic concern with "failure." This has been heightened by Western concerns related to the war on terror. One major trend of Western opinion sees the region in terms of a "clash of civilizations." Writers like Bernard Lewis ask "What went wrong?" and talk of the way in which the region is characterized by "the politics of rage" against Western modernity and a misplaced sense of victimhood and grievance. Others insist that such arguments stand in a long tradition of what is called Orientalism. This exaggerates the threat from a region where demoralization is widespread. The alleged negative traits are explained by culture and then reduced to religion and its most fundamentalist forms.

Much discussion of the alleged deficiencies of Middle Eastern, Arab, Islamic culture is ill informed. Culture is no less significant in the Middle East than elsewhere, but it is also no more important. If culture is such a decisive and unifying force, it is difficult to see, for example, why economic performance varies so much. Too often culture in the region is seen as an independent variable whose content can be deduced from ancient religious texts. It is more often a dependent variable formed from the modern world. It varies in the Middle East, as elsewhere, by country area, minority, social class, and so on. Regional averages and generalizations can be quite misleading.

It is important to be aware of the scale and breadth of diversity in the Middle East as well as the linking elements. The stereotypical Middle East and the stereotypical Arab of Western popular culture, and even some business culture books, are misleading bases for relationships. The diversity and even clash of interests help account for the weak political unity of the region. Turkey is a member of NATO and a long-time aspirant for membership in the European Union. Pan Arabism as an ideology quickly faltered. The League of Arab States was founded in 1945 and has grown to include 21 members, but it has weak influence and unity. An attempt to merge Egypt and Syria into a United Arab Republic lasted only between 1958 and 1961. The Organization of Petroleum Exporting Countries (OPEC) was founded in 1960 to bring together oil producers, but it incorporates non–Middle Eastern states and has not been able to sustain agreements. In 1965 an Arab Common Market was created, but it is of minimal significance compared to the European Union. Even where seemingly common political ideas exist, such as Ba'athism—an ideology that combines nationalism and state socialism—interstate conflicts and tensions still occur.

Geographical and Economic Diversity

Diversity is apparent in the geography of the region. Its climate tends to be arid to semiarid, which makes agriculture difficult in many areas and helps account for low population densities. Contrary to many Western images, the topography is extremely varied. The region has a population in excess of that of the United States but a total output level of perhaps only one-tenth the U.S. total. Many Middle Eastern states are small in population terms. The largest, with populations of around 70 million, are Turkey, Iran, and Egypt. Levels of development vary from the very-low-income Yemen to the high-income states of Kuwait, the United Arab Emirates (UAE), and Qatar. Most states are middle ranking in terms of development.

Since oil was first commercially produced in Iran in 1908 it has come to play a major role in the region's fortunes. The main energy producers are Saudi Arabia, Iran, UAE, Kuwait, Iraq, Algeria, Libya, and Qatar, but other states have indirectly depended on oil as the oil producers have given out various loans and attracted several million workers who have sent back remittances.

Dependence on oil also means dependence on its changing price. This has proven volatile. In the first three to four decades after 1945, economies in the region grew quite fast. Growth then decelerated to the start of the 21st century, and the region acquired its more negative reputation for poor economic performance. But the price of oil surged again, bringing with it an economic upturn.

Socially, the Middle East has experienced rapid modernization and urbanization. Its demographic transition has been fast, but there is still a legacy of very high labor force growth. Educational levels have risen but job opportunities have not kept pace with these. There is a relatively high level of unemployment and a past pattern of poor real wage growth. State policy has tended to be interventionist with strong public sectors run by undemocratic governments. Both political and economic reform continues to prove difficult, but this seems in line with what is sometimes called "the natural resources curse." Oil revenues enable governments to avoid the need for a more popular mandate.

State redistributive policies mean that the level of absolute poverty is relatively low compared to other developing regions. Social inequality, however, is real and extends far beyond the notorious wealth of the oil families of the Gulf. But in many countries there is a reluctance to admit and explore the scale of social inequality. Governments have used social provision as a way of consolidating an "authoritarian bargain" to reduce discontent and the pressure for change.

Prosperity in the oil states has been the basis for large-scale imports of manufactured goods, consumer goods, and foodstuffs. Oil revenues have also provided the basis for huge sovereign wealth funds in the Gulf States, which have then been invested in the West. In addition, the Gulf States have also developed a tourism industry and shipping services. Dubai is one of the largest free trade zones in the world. By contrast, the larger states and especially Iran, Egypt, and Turkey have much more diversified economies with important agricultural and industrial sectors. Israel, too, has a diversified economy with a significant high-technology defense sector.

Major sources for an understanding of the situation in the Middle East are the Arab Development Reports of 2002–05 prepared by the United Nations Development Programme (UNDP). These not only provide information but were intended as part of a reform program to deal with a "crisis of human development in the Arab region." This is explained not by alleged traditional shortcomings but institutional problems reflecting the rentier nature of key states and the narrow self-interested visions of their rulers. The reports regretted that "the Arab spring has yet to bloom" and that in some respects the global and regional context was worsening.

Women learning sewing skills in a 2006 summer program in Yemen, one of the poorest countries in the Middle East.

Three related areas of regionwide reform were identified—knowledge, political freedom, and the empowerment of women. The Middle Eastern states have too often depended on importing knowledge without creating the structures to generate and use it. Rising education levels sit alongside a fear of unrestricted knowledge—a crude but telling indicator is the low level of book publishing. The result is an inability to capitalize on knowledge transfer and a significant brain drain. This can be contrasted with the breadth and generosity of the region's culture at a previous stage of human history when the West was relatively backward.

Social and Political Flashpoints

Freedom is associated with economic, civil, and political rights, and good governance based on political representation and democratic accountability. Most Middle Eastern states perform badly here. This helps to create frustration as education levels rise. The fear of democracy and the attempt to repress forces for change or to buy off parts of the opposition inevitably push those who want change in a more radical direction.

Images of the Middle East are often molded by the perception of the subordinate position of women. But Islam does support male and female equality—it is only certain interpretations (as in Christianity) that insist on female subordination. There is a need to recognize that there have been real achievements. On a regional basis, male to female school years have converged from around 2.5:1 in 1960 to 1.4:1. But some states still need to achieve the relatively modest goals of ensuring the elimination of female illiteracy and universal education for girls to the age of 12 by 2015. Reformers see no intrinsic reason why the Convention on the Elimination of All Forms of Discrimination against Women is inconsistent with the traditions of the region.

These arguments can be used to appeal to the enlightened self-interest of the ruling groups in the Middle East. The difficulty is that leaders do not necessarily recognize the merits of these arguments. Even if they do, they are reluctant to allow an opening up of the political systems for fear of where this might lead. Western policy too remains caught on this contradiction—encouraging "democratization" in the abstract but fearing its real consequences.

Readers should refer to the separate entries on individual states, but no survey would be complete without a brief identification of the major regional flashpoints. The Middle East has been one of the least stable, most conflict-ridden regions in the world since 1945. The first flashpoint is Israel. What some see as the "victim" state, others see as the "oppressor state." There can perhaps be some agreement that it is a "fortress state," having for many years been the most important recipient of U.S. aid. What it sees as its necessary defenses (including its unofficial nuclear weapons), others see as a regional threat. Moreover, the attempt to link anti-Semitism to any criticism of the Zionist ideology on which Israel is built is seen by its critics as a way of delegitimizing any attempt to criticize the long-running sore of Palestinian oppression and repression and the continual ignoring of UN resolutions. This polarization of views seems likely to continue.

The second flashpoint is Egypt. Once the leading state of Arab nationalism, its leaders have gradually accommodated to the West and Israel to such an extent that Egypt has also been a recipient of huge U.S. aid. This has done little to enhance its leadership in the eyes of some of its population. Much attention has been focused on radical Islamic tendencies, but arguably more important are the social tensions in Egypt and the emergence of a significant labor movement that challenges the social basis of that society.

The third is Saudi Arabia. This highly secretive state claims a quarter of the world's oil reserves. It is seen as a key Western strategic ally. This has allowed the West to tolerate both the backward nature of its society and its role as a base for the extreme Wahhabi form of Islam that is especially associated with one aspect of the fundamentalist tradition.

Fourth is Iraq, which claims the world's fourth-largest oil reserves. The U.S. invasion of 2003 has increased regional instability, without securing either the Iraqi state or its oil supplies. Fifth is Iran. Before 1979, like Saudi Arabia, this state was considered central to Western influence. The popular revolution of that year put into power an anti-Western regime that combined nationalism and religion. Today Iran is the subject of enormous suspicion and hostility with little attempt to understand it.

Western policies in the region have often backfired, partly because they have tended to support the status quo, but also because they have been frequently opportunistic. Support of the mujahideen resistance to the Soviet occupation in Afghanistan helped create the threat of Osama bin Laden and Al Qaeda. Support for Saudi Arabia has helped to give a strategic role to its Wahhabi religious extremism. Support for Israel alienates the mass of the population of the Middle East and also puts Western policy in the hands of the leaders of that society. They too have experienced "blowback." Israel, for example, is alleged to have supported the Gaza Islamic University to weaken the Palestine Liberation Organization (PLO) only for it to become a center for the more radical politics of Hamas.

The Middle East, therefore, is best approached with an open mind and a willingness to demonstrate some empathy with its diverse inhabitants and cultures.

See Also: Algeria; Bahrain; Company Profiles: Middle East; Egypt; Iran; Israel; Kuwait; Libya; Oman; Qatar; Saudi Arabia.

Bibliography. Rawi Abdelal, Ayesha Khan, and Tarun Khanna, "Where Oil-Rich Nations Are Placing Their Bets," *Harvard Business Review* (v.86/9, 2008); Al Jazeera, english .aljazeera.net (cited March 2009); Robert Fisk, *The Great War for Civilisation: The Conquest of the Middle East* (Alfred A. Knopf, 2005); Samir Kassir, *Being Arab* (Verso, 2006); Bernard Lewis, *What Went Wrong?: Western Impact* *and Middle Eastern Response* (Oxford University Press, 2002); Janet K. Mullin Marta, Anusorn Singhapakdi, Ashraf Attia, and Scott J. Vitell, "Some Important Factors Underlying Ethical Decisions of Middle-Eastern Marketers," *International Marketing Review* (v.21/1, 2004); Alan Richards and John Waterbury, *A Political Economy of the Middle East* (Westview Press, 2008); Edward W. Said, *Covering Islam: How the Media and the Experts Determine How We See the Rest of the World* (Vintage, 1997); David S. Sorenson, *An Introduction to the Modern Middle East: History, Religion, Political Economy, Politics* (Westview Press, 2008); UNDP, *Arab Human Development Reports*, Geneva 2002–2005, hdr.undp.org (cited March 2009); Robin B. Wright, *Dreams and Shadows: The Future of the Middle East* (Penguin Press, 2008).

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Millea Holdings

Millea Holdings, Inc., a holding company headquartered in Tokyo, Japan, was created in April 2002 as the umbrella structure for the international insurance businesses of Tokio Marine and Nichido Fire. Millea Holdings was the first publicly owned holding company in Japan integrating life insurance and nonlife insurance operations. One of the key objectives in the corporate vision of Millea Holdings is to become one of the world's top-tier insurance groups through customer trust and to make a positive contribution to society by offering safety and security products and services.

Millea Holdings breaks its insurance lines into five segments plus another category. These segments and their percent of premiums written are as follows: fire and allied lines (15.6), hull and cargo (4.2), personal accident (7.5), voluntary automobile (45), compulsory automobile liability (15), and other (12.6). The Millea Group plans to grow its businesses through the expansion of products and services (prevention services and care services), sales channel expansion as a result of government regulatory liberalization, and the expansion of its global regional businesses through mergers and acquisitions, equity partnerships, and business alliances.

The operating subsidiaries of Millea Holdings include the following: Tokio Marine & Nichido (nonlife insurance), Nisshin Fire (nonlife insurance), Tokio Marine and Nichido Life (life insurance), Tokio Marine & Nichido Financial Life (life insurance, especially variable annuity and life policies), Millea Nihon Kosei (small-amount, short-term insurance), Tokio Marine & Nichido Anshin Consulting (agent for nonlife and life insurance, as well as, individual financial consulting services), Tokio Marine & Nichido Career Services (staffing and employment services), Tokio Marine Nichido Samuel (operator of elderly care facilities), Tokio Marine & Nichido Facilities (property and equipment management), Tokio Marine & Nichido Medical Services (medical care and health-related services), Tokio Marine & Nichido Risk Consulting (insurance underwriting risk investigations and risk consulting services), Millea Mondial (assistance and business process outsourcing services), Millea Real Estate Risk Management (real estate investment advisory services), Tokio Marine Asia (a subsidiary holding company for Asian insurance operations excluding Japan), Tokio Marine Bluebell Re (reinsurance for variable annuities), and Tokio Marine Seguradora (life and nonlife insurance in Brazil).

The Millea network of companies, subsidiaries, affiliates, branches, offices, and agents has a worldwide presence. In North America it is represented in the United States, Canada, Bermuda, and the Cayman Islands. In Central and South America it is represented in Mexico, Brazil, and Paraguay. In Europe it is represented in the United Kingdom, France, Germany, the Netherlands, Belgium, Italy, Spain, Ireland, Norway, Denmark, and Greece. In Eurasia it is in Russia. In the Middle and Near East it is represented in the United Arab Emirates, Saudi Arabia, Bahrain, and Turkey. In Oceania and Micronesia it is represented in Australia, New Zealand, Guam, and the Commonwealth of the Northern Mariana Islands. In Asia it is represented in Korea, mainland China, Hong Kong, Taiwan, the Philippines, Vietnam, Thailand, Malaysia, Singapore, Brunei, Indonesia, India, and Myanmar.

Millea Holdings has a market capitalization of some 150 billion yen for the approximately 824,524,375 shares issued. For fiscal year 2007, Millea reported net assets per share of 4,127.60 yen. The Millea Group uses embedded value (EV) and return-on-equity (ROE) as its method of evaluation value and performance in its insurance businesses. For its fiscal year 2006, Millea had an EV of 335.2 billion yen, which consisted of the sum of its net asset value of 97.6 billion yen and its in-force business value (net earnings) of 237.5 billion yen. Millea contracts with Tillinghast, the financial services consulting unit of Towers Perrin, to verify its reported EV. The Millea Group targets an adjusted ROE of approximately 5 percent annually.

Millea Holdings is listed on the Tokyo Stock Exchange and the Osaka Stock Exchange. American depository receipts (ADRs) for its common stock are handled by JPMorgan Chase Bank and quoted on the over-the-counter market in the United States. Typical of ownership patterns in Japan, about 31.2 percent of its shares are held by some 10 shareholders: State Street Bank and Trust Company (6.2), Moxley & Co. (5.4, representing the ADRs), Master Trust Bank of Japan (4.5), Japan Trustee Services Bank (3.7), Meiji Yasuda Life Insurance Company (2.5), Trust & Custody Services Bank (1.7, retirement trust account for Mitsubishi Heavy Industries), Mizuho Corporate Bank (1.7), State Street Bank and Trust Company 505103 (1.6), and Master Trust Bank of Japan (1.4, retirement trust account for Asahi Glass Company).

The consolidated subsidiaries of Millea Holdings are intensely engaged in a variety of global derivative transactions for risk management purposes and to maximize their investment gains. Millea subsidiaries engage in currency-related derivative transactions that include forward contracts, currency swaps, and currency options. For fiscal year 2007, Millea subsidiaries had a total of 2,108,029 million yen in foreign-currency related instruments. Millea subsidiaries engage in equity-related derivative transactions that include equity index futures and equity index options. For fiscal year 2007, Millea subsidiaries had a total of 148,423 million yen in equity-related instruments. Millea subsidiaries engage in bond-related derivative transactions that include bond futures, bond future options, and over-the-counter bond options. For fiscal year 2007, Millea subsidiaries had a total of 171,633 million yen in bond-related instruments.

Millea subsidiaries also engage in other derivative transactions such as credit derivatives and weather derivatives, among others. For fiscal year 2007, Millea subsidiaries had a total of 13,707,398 million yen in interest-related instruments, 1,157,328 million yen in credit-related instruments, 72,528 million yen in commodity-related instruments, and 1,909 million yen in weather-related instruments.

See Also: Dai-ichi Mutual Life Insurance; Japan; Mitsubishi UFJ Financial Group.

Bibliography. Millea, www.millea.co.jp (cited March 2009).

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Millennium Development Goals

The Millennium Development Goals are outcome-based international development targets that were agreed at the United Nations Millennium Summit in New York in September 2000. Eight Millennium Development Goals are defined. These goals incorporate 18 more precisely defined targets with a total of 48 indicators. Development targets were set out initially by the Organisation for Economic Co-operation and Development (OECD) in 1996, following previous attempts to set out aims and objectives for the promotion of economic growth and basic needs between the 1970s and the 1980s, and the definition of the aim of sustainable development in the 1990s incorporating environmental concerns next to the aim of poverty reduction. The agreed set of targets was set out in the *Road Map Towards the Implementation of the United Nations Millennium Goals* in 2001.

The Millennium Development Goals define the objectives of development policy based on the desired outcome. They act as a measurable set of objectives against which the performance of the international community and individual nations in their development efforts can be measured. It is also argued that accepted development goals and targets ascertain international responsibility and establish a common purpose for the international community.

The first seven Millennium Development Goals are the following:

1. Eradication of extreme hunger and poverty. This goal contains two targets: first to halve, between 1990 and 2015, the proportion of people whose income is less than a dollar a day, and second, to halve, between 1990 and 2015, the proportion of people who suffer from hunger.
2. Achievement of universal primary education. The target here is to ensure that by 2015 all children will be able to complete a full course of primary schooling.
3. Promotion of gender equality and empowerment of women. The fourth target related to this goal is to eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.
4. Reduction of child mortality. The target is to reduce by two-thirds, between 1980 and 2015, the under-five mortality rate with the indicators of the under-five mortality rate itself and to increase the proportion of one-year-old children being immunized against measles.
5. Improvement of maternal health. This goal has the target to reduce by three-quarters, between 1980 and 2015, the maternal mortality ratio. This is to be measured by the maternal mortality ratio and proportion of births attended by skilled health personnel.
6. Combat HIV/AIDS, malaria, and other diseases. One target is to have halted by 2015, and begun to reverse, the spread of HIV/AIDS that is indicated by the HIV prevalence among 15-to-24-year-old pregnant women, contraceptive prevalence rate, and the number of children orphaned by HIV/AIDS. Another target is to have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.
7. Ensuring environmental sustainability. This goal integrates the principles of sustainable development into country policies and programs as a target and is to reverse the loss of environmental resources. The proportion of land area covered by forest, land area protected to maintain biological diversity, GDP per unit of energy use as an energy efficiency measure, and carbon dioxide emissions per capita are utilized as indicators. Furthermore, this incorporates the target of halving, by 2015, the proportion of people without sustainable access to safe drinking water, as well as the target of having achieved, by 2020, a significant improvement in the lives of at least 100 million slum-dwellers. The proportion of people with access to improved sanitation and the proportion of people with access to secure tenure acts as a means of measurability.

Many of these indicators linked to the first seven Millenium Development Goals are accessible via the *World Bank Atlas* of the Millennium Goals. The eighth goal is the Development of a Global Partnership for Development. This goal encompasses seven further targets. It is aimed at developing an open, rule-based, predictable, nondiscriminatory trading and financial system with a commitment to good governance, development, and poverty reduction—both nationally and internationally. It addresses the special needs of the least developed countries (LDCs) and includes tariff- and quota-free access for LDC exports, an enhanced program of debt relief for heavily indebted countries, and cancellation of official bilateral debt as well as more generous official development assistance (ODA) for countries committed to poverty reduction. It addresses the special needs of landlocked countries and small island developing countries, whereby a comprehensive consideration is given to the debt problems of developing countries with the aim of making debt sustainable in the long term.

In cooperation with pharmaceutical companies, the provision of access to affordable essential drugs in developing countries is aimed at, as well as making available the benefits of new technologies, especially information and communication, in cooperation with the private sector. This broad goal uses indicators that focus on ODA, the target for which is 0.7 percent of a developed country's gross income, the allocation of ODA to social services, transport, and environmental areas. Another category of indicators focuses on market access, whereby a calculated proportion of exports is admitted with no tariffs or quotas, with a particular focus on agricultural products. A further set of indicators aims to measure the achievement of debt sustainability.

See Also: Less Industrialized Countries; Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development; World Bank, The.

Bibliography. Richard Black and Howard White, *Targeting Development: Critical Perspectives on the Millennium Development Goals* (Routledge, 2006); Jane Nelson and Dave Prescott, *Business and the Millennium Development Goals: A Framework for Action* (Prince of Wales International Business Leaders Forum, 2003); Organisation for Economic Co-operation and Development, *Shaping the 21st Century: The Contribution of Development Cooperation* (1996); Mark Sundberg, *Millennium Development Goals: Confronting the Challenges of Gender Equality and Fragile States* (World Bank, 2007); UN Chronicle, "The MDGs: Are We on Track?" *UN Chronicle* (v.44/4, 2007); United Nations, *Claiming the Millennium Development Goals: A Human Rights Approach* (United Nations, 2008); United Nations, United Nations Development Programme, and Asian Development Bank, *The Millennium Development Goals: Progress in Asia and the Pacific 2007* (United Nations Economic and Social Commission for Asia and the Pacific, 2007); United Nations, United Nations Millennium Declaration, Document A/RES/55/2, 2000, www.un.org/millennium (cited March 2009).

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Mitsubishi

Mitsubishi is the name of the one of the most powerful Japanese *keiretsu*. A keiretsu is a business group loosely held together through cross-holding of stock, meetings of the chief executive officers of the constituent companies, and use of a common logo. It is a format that has flourished in Japan in the aftermath of the postwar American occupation.

During the occupation the largest of the prewar financial cliques, *zaibatsu*—conglomerates that were tightly held together through subordination to a holding company that served as the zaibatsu head office—were dissolved, their stock sold off. Along with other great zaibatsu like Mitsui, Yasuda, and Sumitomo, Mitsubishi was dissolved by the Holding Commission Liquidation Commission during the late 1940s. In tandem with most of the other former zaibatsu, the companies that had operated under the Mitsubishi logo prior to World War II reassembled as the Mitsubishi keiretsu, albeit forging ties that were far weaker than those characteristic of the prewar period when the typical structure was extremely hierarchical.

The Mitsubishi zaibatsu began as a shipping company created by former samurai Yatoro Iwasaki in the 1870s. Brought into an alliance with another important zaibatsu, Mitsui, the two emergent financial cliques became the backbone of the N.Y.K., a great steamship company designed to be competitive with the Western shipping firms that had captured most of Japan's oceanic trade after the Meiji Restoration in 1868. Iwasaki soon diversified into other activities, including both light and heavy manufacturing and mining.

Why did the zaibatsu emerge in early industrializing Japan? Economic historians point to three factors: scarcity of entrepreneurial talent; scarcity of professionals, engineers, and accountants who could successfully import and adapt techniques already developed in the West; and "distance," both cultural and geographic. Writing and speaking a language radically different from European languages, few Japanese active in industry during the period between 1870 and the 1920s could master English, French, or German, the global languages of the day. A scale economy is created by bringing together skilled professionals under a single structure, one that mobilizes capital by diversifying into banking, one that carries on international trade largely through a single large shipping company, one that centralizes global trade negotiations in a few competent hands.

To some extent these same arguments can be used to explain why the dissolved zaibatsu reassembled as keiretsu after the American occupation ended, and why they continue to operate to this day. For instance, the global information-gathering capacity of a great keiretsu like Mitsubishi is considerable, greater than that marshaled by many governments in the world. Other potential advantages of the keiretsu format include reputation—exploiting the common brand or logo name—and the fostering of externalities in innovation, breakthroughs in one industry within a keiretsu potentially spilling over and stimulating technical advance in other industries that operate under the same keiretsu umbrella. This is the logic behind the idea of "one-setism," all major Japanese keiretsu seeking to foster or acquire through takeover the same set of companies that are in each of their competitor keiretsu. In short, under the "one-set" principle keiretsu aggressively compete against other keiretsu. Competition in mainstream manufacturing is largely competition among the few, among great keiretsu like Mitsubishi.

It should be noted that some scholars are skeptical about the strength of the ties that supposedly hold together postwar keiretsu, being particularly critical of the view that a main bank provides the crucial financial glue holding together the group, ridiculing the idea that weekly get-togethers of keiretsu executives are more than social.

A typical post-1960 keiretsu includes a bank, marine and fire insurance, heavy and light manufacturing firms, and a general trading company. For instance, the Bank of Tokyo-Mitsubishi (formerly the Mitsubishi Bank prior to 1996) is in the Mitsubishi keiretsu, as is Mitsubishi Motors, Mitsubishi Electric, Nikon, Mitsubishi Chemical, Mitsubishi Heavy Industries, Mitsubishi Plastics, Mitsubishi Steel, Mitsubishi UFJ Securities, and Mitsubishi Paper Mills Limited. The symbol for Mitsubishi is derived from its name—"three water chestnuts" is one translation, "three diamonds" another—looking most like three diamonds connected at a common central point.

Are keiretsu like Mitsubishi likely to survive indefinitely? In the wake of the bursting of Japan's bubble economy in the early 1990s and the subsequent slow growth, the position of many Japanese banks became precarious, leading to mergers of banks that were supposedly central to particular keiretsu. A good example of this is Mitsubishi Bank that merged with the Bank of Tokyo in 1996. Presumably, consolidation in the financial field may lead to an attenuation of the networking ties holding together keiretsu like Mitsubishi.

See Also: Chaebol; Economies of Scale; Fujitsu; *Keiretsu*; Mitsubishi Electric; Mitsubishi UFJ Financial Group; Mitsui; Sumitomo Mitsui Financial Group; *Zaibatsu*.

Bibliography. T. Bisson, Zaibatsu *Dissolution in Japan* (University of California Press, 1954); Mitsuru Kodama, "Innovation and Knowledge Creation Through Leadership-based Strategic Community: Case Study on High-Tech Company in Japan," *Technovation* (v.27/3, 2007); Y. Miwa and M. Ramseyer, *The Fable of the* Keiretsu*: Urban Legends of the Japanese Economy* (University of Chicago Press, 2006); H. Morikawa, Zaibatsu*: The Rise and Fall of Family Enterprise Groups* (University of Tokyo Press, 1992); Tadao Sumi and Michio Tsuruoka, "Ramp New Enterprise Information Systems in a Merger and Acquisition Environment: A Case Study," *Journal of Engineering and Technology Management* (v.19/1, 2002); W. Wray, *Mitsubishi and the N.Y.K., 1870–1914: Business Strategy in the Japanese Shipping Industry* (Harvard University Press, 1984).

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Mitsubishi Electric

Mitsubishi Electric is one of the world's largest industrial electronics companies. The firm conducts its business through six business segments: energy and electric systems, industrial automation systems, information and communication systems, electronic devices, home appliances, and others. Mitsubishi Electric offers a range of products, from security systems to circuit breakers to air conditioners. In the fiscal year ending March 2007, the company employed over 102,000 workers and recorded sales of over $30 billion. Based in Tokyo, Japan, Mitsubishi Electric operates primarily in Japan with overseas business in Europe, Asia-Pacific, and the Americas.

Mitsubishi Electric is most commonly associated with the Mitsubishi group of companies, one of Japan's largest corporate groups. Member firms of the Japanese corporate groups have been credited with playing a major role in Japan's economic development. Despite its prominence as a leading integrated industrial electronics manufacturer, however, the Mitsubishi Electric name is not widely recognized beyond Japan. This is largely because Mitsubishi Electric has grown much more from a national rather than international base—and still derives most of its business from the Japanese market.

Mitsubishi Electric evolved out of the Mitsubishi shipping business founded by Yataro Iwasaki in the late 19th century. This shipping business developed into a family-owned conglomerate (*zaibatsu*) in the years up to World War I, as the company diversified into coal mining, shipbuilding, and electrical equipment. Mitsubishi Electric itself was spun off in 1921 as an independent company.

The firm grew rapidly during the interwar years, mainly through imports of technology from foreign firms. Perhaps most prominent was Mitsubishi Electric's alliance with the American electrical firm, Westinghouse Electric, in 1923. As might be observed from Toshiba's alliance with General Electric or NEC's alliance with ITT, it was a time when Japanese firms tried to develop their own modern industries by learning from Western firms. Building upon foreign knowledge, Mitsubishi Electric produced its first hydraulic generator in 1924, followed by an elevator in 1931, and an escalator in 1935. By 1937, the firm had listed on the Tokyo Stock Exchange.

Like many zaibatsu firms at the time, Mitsubishi Electric began to provide supplies for the Japanese military during World War II. As a result, the firm's operations were suspended during the Allied occupation of Japan between 1945 and 1952. But Mitsubishi Electric reemerged after the occupation as part of a more loosely affiliated group of firms that featured interlocking shareholdings and were centered around a main bank (*keiretsu*).

Much like the interwar years, Mitsubishi Electric rebuilt its postwar business through technology imports from foreign firms. In fact, many of these imports were based on relationships formed in the prewar era. Over the 1950s and 1960s, the firm launched its first television, computer, and domestic satellite. Equipped with a strong product range, Mitsubishi Electric then began to expand into overseas markets, such as the United States, Britain, and Germany. The firm also began to collaborate with foreign firms to codevelop and distribute original products. These included projects with leading global firms such as AT&T, Westinghouse, and Siemens.

Mitsubishi Electric is unique among the former zaibatsu firms in its continued business of military procurement. The firm has been a major provider of Japan's Self Defense Forces, in products such as avionics and radars—which has been useful in developing civilian industrial products such as for air traffic management.

Mitsubishi Electric struggled to adjust to competitive pressures stemming from globalization and the information technology revolution in the 1990s. The firm still featured many traditional characteristics of Japanese business, such as lifetime employment and consensus-based decision making. Facing a new business environment that demands greater flexibility and swift responses, Mitsubishi Electric has been pushed to reform.

Mitsubishi Electric's logo makes use of the famous three-diamond symbol, tying it to other Mitsubishi companies.

Mitsubishi Electric faces intense competition from domestic firms such as Hitachi and Toshiba as well as foreign firms such as Schneider and Solectron. Rising raw material prices have also placed a burden on the firm's finances. The company's future lies in its ability to capitalize on its research strengths and diversified product range and expand further into global markets.

See Also: Hitachi; Japan; *Keiretsu*; Mitsubishi; Mitsubishi UFJ Financial Group; Toshiba; *Zaibatsu*.

Bibliography. Mitsuru Kodama, "Innovation and Knowledge Creation Through Leadership-based Strategic Community: Case Study on High-Tech Company in Japan," *Technovation* (v.27/3, 2007); Mitsubishi Electric, *Mitsuishi Denki Shashi* [A History of Mitsubishi Electric] (Mitsubishi Electric, 1982); Sol W. Sanders, *Mitsubishi Electric* (Penguin Books, 1996); R. Takeuchi, *Mitsubishi Denki Henshin no Himitsu* [The Secret Behind the Transformation of Mitsubishi Electric] (Nihon Keizai Tsushinsha, 1980).

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Mitsubishi UFJ Financial Group

Mitsubishi UFJ Financial Group is headquartered in Tokyo, Japan; its main business areas are banking and securities. As of September 30, 2007, it included

44 affiliated companies and 525 consolidated subsidiaries with 47,124 employees (BTMU, MUTB, MUS) and 78,300 employees worldwide. It reported gross profits of 3.512 trillion Japanese yen and net income of 636.6 billion Japanese yen as of March 31, 2008.

The Mitsubishi UFJ Financial Group (MUFG) was founded in October 2005 with the merger of two holding groups: Mitsubishi Tokyo Financial Group (MTFG) and UFJ Holdings (UFJH). It is a diversified comprehensive financial services group offering a wide range of services in retail, corporate, and securities. The bank's origins date back to 1870 with the establishment of Mitsubishi by Yataro Iwasaki. Its financial arm, the Mitsubishi Bank, was founded in 1919.

In 2001 the Bank of Tokyo-Mitsubishi Ltd., the Mitsubishi Trust and Banking Corporation, and Nippon Trust Bank Ltd. created MTFG through a share transfer. That same year, Sanwa Bank Ltd., the Tokai Bank Ltd., and the Toyo Trust and Banking Co. Ltd. created UFJH through a share transfer. MUFG is the holding company of three entities: the Bank of Tokyo-Mitsubishi UFJ Ltd. (BTMU, established in 2006); Mitsubishi UFJ Trust and Banking Corporation (MUTB); and Mitsubishi UFJ Securities Co., Ltd. (MUS). In 2007 MUFG created Mitsubishi UFJ Lease & Finance and Mitsubishi UFJ Nicos to manage real estate financing and the like and credit card services, respectively.

BTMU has it origins in the Bank of Tokyo-Mitsubishi (a 1996 merger between the Bank of Tokyo Ltd. (BOT) and the Mitsubishi Bank) and the UFJ Bank Ltd. (a 2002 merger between the Sanwa Bank Ltd. and the Tokai Bank Ltd.). In Japanese, the bank is called Mitsubishi Tokyo UFJ, indicating that Mitsubishi is the strongest entity, although BOT had become Japan's leading foreign exchange bank with 10 times as many foreign branches as domestic. BOT and Mitsubishi Bank both developed strong relationships with what became the Union Bank of California, now part of MUFG.

MUTB was created by a merger between the Mitsubishi Trust and Banking Corporation and the UFJ Trust Bank Ltd. The Mitsubishi Trust and Banking Corporation was formed as a result of a merger between Nippon Trust Bank Ltd. and Tokyo Trust Bank Ltd. The UFJ Trust Bank Ltd. was the name given to the former Toyo Trust and Banking Co. in 2002.

MUS is a result of a merger between Mitsubishi Securities Co., Ltd., and UFJ Tsubasa Securities Co., Ltd., the latter of which had become a wholly-owned subsidiary of UFJH in 2004. In 2002 Mitsubishi Securities Co., Ltd., was created through the merger of Tokyo-Mitsubishi Securities Co., Ltd., Tokyo-Mitsubishi Personal Securities Co., Ltd., Kokusai Securities Co., Ltd., and Issei Securities Co., Ltd.

MUFG positions itself as an integrated group transcending traditional business boundaries in three core business areas: retail, corporate (handled mainly by BTMU), trust assets, i.e., asset management (handled mainly by MUTB), and asset administration (handled mainly by MUS). The group targets expansion especially through the retail side through the provision of a global standard of services, products and advice, and excellence in security and compliance. Retail is essential to building the group's portfolio for sustained growth. In corporate, the group targets include positioning itself as a key financial services provider to large firms while being a lead bank for Japanese small and medium-sized companies. MUFG positions itself globally as one of the world's top five financial institutions. In trust assets, the group's target is to be number one in Japan in both size and quality of service.

Nobuo Kuroyanagi is the current president and chief executive officer of MUFG, beginning his banking career at the Mitsubishi Bank in 1965. Ryosuke Tamakoshi, who became chairman of MUFG at its establishment in 2005, was president and chief executive officer of UFJ Holdings Ltd., the successor of Sanwa Bank Ltd., where he began his career. Haruya Uehara, deputy chairman of MUFG and president of MUTB, began his banking career with the Mitsubishi Trust and Banking Corporation in 1969.

MUFG aims to be a global financial group, and has extended its overseas network to over 40 countries, ranking them first among Japanese banks. Their largest overseas subsidiary is the Union Bank of California. Mitsubishi UFJ Securities International (MUSI) was established in 1983 in England and Wales. In 1990 the BTMU Capital Corporation was created in London and Boston. Other MUFG subsidiaries are in the United States, the Netherlands, the Cayman Islands, and Canada.

See Also: Japan; Mitsubishi; Mitsubishi Electric; Retail Sector.

Bibliography. Mitsubishi UFJ Financial Group, Inc., www.mufg.jp (cited March 2009); Union Bank of California, www.uboc.com (cited March 2009).

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Mitsui

Mitsui & Co., Ltd. (Mitsui), is a Japanese company with headquarters in Tokyo. Its main business areas are mineral resources and energy, global marketing, consumer services, and infrastructure; its workforce numbers 42,621 employees worldwide in 161 offices in 68 countries. As of March 31, 2008, it reported gross profits of 988.1 billion Japanese yen and net income of 410.06 billion Japanese yen.

Mitsui & Co., Ltd.'s main business units range from manufacturing and import/export to retail and financial services. Mitsui is currently diversifying in services, exploring for and developing natural resources, and developing new technologies and businesses. Mitsui's global network is organized to access essential strategic information and business engineering capabilities. "Comprehensive business engineering capabilities" as defined by Mitsui are real-time information on customers and markets; know-how and sophisticated specialties; trust among business associates worldwide; and problem-solving capabilities.

Dai-ichi Bussan was established in 1947 with JPY 195,000 in capital and 39 employees. The company took the name Mitsui & Co. (Mitsui Bussan in Japanese) in 1959 when it integrated with other trading companies, thereby returning to its Mitsui origins. Mitsui & Co. was originally the trading company arm of the pre–World War II business group known as the House of Mitsui (established in 1673), which was founded as a dry goods store called Echigoya (now the Mitsukoshi Department Store) in Nihonbashi, Tokyo, by Hachirobei Takatoshi Mitsui. Mitsui & Co. was seen as a model and had a major influence on other trading companies in Japan.

Mitsui & Co. has a long history in mining and mineral extraction and as a source of reputable international business information and services for firms entering new markets. During the 1960s when the Japanese economy was growing rapidly, Mitsui's trading and mining units helped meet the demand for foodstuffs, industrial raw materials, and energy such as oil and coal. The firm also worked to build efficient systems to manage raw materials from extraction to finished product. As Japan's—and the world's—markets have evolved, Mitsui has used its extensive international network to build new businesses in, e.g., training engineers, supplying skills and know-how, and developing high-technology networks and communications services. The firm's major projects are in mineral resources, liquid natural gas, oil, hydroelectric power, wind power, and automotive-related businesses. Mitsui is also actively developing infrastructure projects to access natural resources and/or to provide methods for transportation from source to customer.

Mitsui focuses on four main areas of business: mineral resources and energy; global marketing; consumer services; and infrastructure. The company has 121 major subsidiaries and associated companies worldwide, which serve a range of industries with operations spanning the globe.

Mitsui's subsidiaries and associated companies are distributed as follows: iron and steel products (8 companies); mineral and metal resources (13 companies); infrastructure projects (12 companies); motor vehicles (10 companies); marine and aerospace (3 companies); chemicals (19 companies); food and retail (11 companies); consumer services (18 companies); IT business (7 companies); financial markets (6 companies); transportation logistics (5 companies); and Americas (6 companies). In addition, there are other units working to develop new businesses regionally in the Asia-Pacific and in new industries.

In fiscal year 2007, Mitsui & Co. divested several energy and mineral (i.e., titanium) operations due to unfavorable market conditions. These gains offset the softening residential, energy, and steel products in the Americas units affected by the subprime mortgage crisis.

Led by Shoei Utsuda, president and chief executive officer, Mitsui & Co. issued in 2002 a corporate guideline for its employees called "Mitsui & Co. Aspirations." The aspirations comprise four concepts: serving customers' best interests; placing trust at the foundation of business; working in the spirit of "freedom and open-mindedness"; and being a truly global corporation. Mitsui's corporate mission is to "contribute to a future where the dreams of the inhabitants of our irreplaceable Earth can be fulfilled," and its vision is "to become a global business enabler that can meet the needs of our customers throughout the world."

See Also: Japan; Sumitomo Mitsui Financial Group.

Bibliography. Makoto Kasuya, "Continuity and Change in the Employment and Promotion of Japanese White-Collar Employees: The Case of the House of Mitsui," *Enterprise and Society* (v.6/2, 2005); Mitsui & Co., Ltd., "Results of Fiscal Year Ended March 2008 and Outlook for Fiscal Year Ending March 2009," May 9, 2008, www.mitsui.co.jp (cited March 2009); Seiichiro Yonekura, "Introduction," in *The General Trading Companies: A Comparative and Historical Study,* Seiichiro Yonekura, ed. (United Nations University Press, 1990).

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Mittal Steel

The world's largest steel enterprise, Mittal Steel was established in 1976 by Lakshmi Narayan Mittal (1950–) in Kolkata, India. The richest person in Europe and fourth-richest in the world with net worth of $32 billion, the London-based Indian steel magnate Mittal had brought Mittal Steel to the forefront by his sound judgment and takeovers. A commerce graduate, Mittal joined the family steel business and was put in charge of the international division.

In 1976 he established Ispat Indo in Indonesia. Mittal went on an acquisition spree of steel plants around the world—Iron and Steel Company of Trinidad and Tobago (1989); Sicartsa, Mexico (1992); Sibalsa, Mexico (1992); Sidbec-Dosco, Canada (1994); and Hamburger Stahlwerke, Germany (1995). His business skill was evident in turning losing steel factories into profitable ones. Mittal Steel never hesitated to take risks. The government-owned Iscott steel plant of Trinidad and Tobago, which was incurring a loss of $1 million, doubled its output after Mittal Steel's takeover. Within a year, the state-owned steel plant of Kazakhstan began to produce double in 1996.

Mittal Steel moved its headquarters from Indonesia to London in 1995, and Kensington Palace Gardens became Mittal's residence. The capacity of Mittal Steel group had reached 11.2 million tons by this time. Mittal's Ispat International Ltd. was listed on the Amsterdam and New York stock exchanges in 1997. Before the end of the 20th century, the juggernaut of Mittal Steel marched ahead to acquire Inland Steel Company and Unimetal.

In the 21st century, its international expansion included takeover of Sidex steel plant (2001), Nowa Huta (2003), Polski Huty Stali (2004), and BH Steel (2004). Mittal's relationship with British prime minister Tony Blair (1953–) and the Labour Party came under media scrutiny. It was reported that Blair had interceded on behalf of Mittal Steel for the Sidex steel plant in Romania. Mittal had donated heavily to the Labour Party. Mittal Steel came into being through a merger of Ispat International and LNM (Lakshmi N. Mittal) holdings in 2004. Next year, the International Steel Group, Inc. (ISG), Ohio, merged with Mittal Steel, which made the latter the world's number one steel producer with a net worth of about $22 billion. In 2005 there was the acquisition of Kryvorizhstal steel plant in Ukraine for $4.8 billion. In his home country India, Mittal Steel had invested $9 billion in 2005 for constructing a steel plant in Jharkhand Province and the next year announced a plan to build a 12-million-ton-capacity steel plant in Orissa. The most controversial merger was with the European steel giant Arcelor SA, which dominated newspaper headlines for some time.

In 2006 Mittal Steel purchased Arcelor for $33 billion, which made it the world's largest 100-million-ton steel company with 10 percent of the total world steel output. Mittal became the president and chief executive officer (CEO) with a 43.6 percent stake. Arcelor Mittal's assets were spread among countries in Asia, Africa, Europe, and the Americas. Apart from the mainstream steel industry, Mittal Steel had diversified into shipping, coal, and power. It had also spent $980 million for a 50 percent stake in Caspian Investment Resources, the oil firm of Kazakhstan.

Mittal Steel has become the world's largest steel company with 320,000 employees in more than 60 countries and revenue of about $30 billion. It possesses steelmaking facilities in 27 nations spread over four continents. Mittal and his son, the Wharton-trained

Aditya, have remained the guiding spirits behind Mittal Steel's success, and they have put the company on the world map.

Buying up unprofitable public-sector steel plants and making them profitable has contributed considerably to the growth of Mittal Steel. The successive acquisition of steel enterprises from many parts of the world has made it a highly profitable enterprise. The steel production technique of Mittal Steel has put it far ahead of other steel companies. It has introduced direct reduced iron (DRI) as a source of raw material. The company has not used costly scrap materials for obtaining iron. With emphasis on research and development, Mittal Steel has not remained complacent in spite of its growing success. The future of Mittal Steel seems bright.

See Also: Acquisitions, Takeovers, and Mergers; India.

Bibliography. Tim Bouquet and Byron Ousey, *Cold Steel: The Multi-Billion-Dollar Battle for a Global Empire* (Key Porter Books, 2009); *Economist*, "Face Value: Lakshmi Mittal, Global Man of Steel," *Economist* (v.386/8567, 2008); *Economist*, "Mittalic Magic," *Economist* (v.386/8567, 2008); "Mittal Steel Set to Become World's Largest Steel Company," *Welding Journal* (v.83/2, 2004); Mittal Steel, www.mittalsteel.com (cited March 2009); Bommakanti Rajaiah, *Returns to Investment and Efficiency in Public Enterprises in India* (Mittal Publications, 1989); Nelson D. Schwartz and Doris Burke, "Emperor of Steel—After a Brutal Takeover, Billionaire Lakshmi Mittal Stands Atop the Steel Industry. So Why Is He Still an Outsider?" *Fortune* (v.154/2, 2006); Richard Tomlinson, "Man of Steel: Lakshmi Mittal, the London-Based Steel Tycoon, Is Turning Former Communist Rustbuckets Into Pots of Gold," *Fortune* (v.148/4, 2003).

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Mizuho Financial Group

The Mizuho Financial Group, Inc. (MHFG), established in 2003 with JPY 1.54 trillion in capital, is a bank holding company that engages in managing and operating banks, long-term credit banks, specialized securities companies, and other subsidiaries. As of March 31, 2008, (consolidated) it reported gross profits of JPY 1.661 trillion, net income of JPY 311.2 billion, and a net profit of JPY 511.1. billion. With headquarters in Tokyo, it counts 146 consolidated subsidiaries and 47,449 employees worldwide (2007). The word *mizuho* means a fresh harvest of rice, and when used in the phrase *mizuho country*, it means fruitful country, alluding poetically to Japan.

MHFG is currently organized into three main business groups (corporate, retail, and asset management) as part of the group's strategic plan called "Channel to Discovery." The Global Corporate Group accounts for approximately 51 percent of group profits and is handled by Mizuho Corporate Bank, Ltd. (MHCB), with Mizuho Securities Co., Ltd. (MHSC). The Global Retail Group, handled by Mizuho Bank, Ltd. (MHBK), accounts for approximately 37 percent of profits. The Global Asset and Wealth Management Group, accounting for around 10 percent of profits, is managed by Mizuho Trust and Banking Co., Ltd. (MHTB), Mizuho Private Wealth Management Co., Ltd. (established in 2005), and three other subsidiaries. Additionally, three affiliated firms manage group strategy: Mizuho Financial Strategy Co., Ltd.; Mizuho Research Institute, Ltd.; and Mizuho Information and Research Institute, Inc. In 2007, MHSC and Shinko Securities Co., Ltd., entered into a merger agreement, which will dissolve MHSC, with Shinko being the surviving entity, taking effect on May 7, 2009. The merger has been delayed due to the impact of the subprime mortgage crisis.

MHFG has its origins in Mizuho Holdings, Inc. (established in 2000), which was a result of a merger of Dai-ichi Kangyo Bank (DKB), Fuji Bank, and the Industrial Bank of Japan (IBJ). The trust bank and securities subsidiaries of these three banks were merged to form MHTB and MHSC, and two years later the banking activities were reorganized into MHCB and MHBK, when they became the principal subsidiaries of Mizuho Holdings. A year later, through a stock exchange, Mizuho Holdings became MHFG.

MHFG offers a wide range of financial services such as banking, securities, trust and asset management, credit card services, private banking services, and venture capital. MHBK boasts over 11,000 ATM machines and 515 branches throughout Japan, and offers retail services and support through asset management consulting and personal loans to individual customers. MHBK also offers services such as savings accounts, cash cards, international money transfers, credit cards, and internet banking. In 2004 the Mizuho Mileage Club was created to allow customers to accumulate points via banking transactions and credit card usage. Another new service is a "wallet phone" service with NTT DoCoMo called "iD," in which customers can use their mobile phones as credit cards.

MHCB offers merger and acquisition advisory services, various forms of securitization, pensions, and loan services. MHSC, a wholesale securities company focusing mainly on debt-related and equity-related business, provides financial products and services supporting investment banking, domestic and overseas institutional investors, financial institutions, and corporations. MHTB offers various trust services and banking services of deposits and loans to corporate clients.

MHFG has over 770 offices worldwide operating in banking, derivatives, securities, trust banking, and asset management. MHCB provides products and services to major corporations, financial institutions, and public-sector entities in the Americas, including New York, Chicago, Los Angeles, Houston, Atlanta, Toronto, Mexico City, São Paulo, and the Cayman Islands. In 2006 as part of its new slogan "Channel to Discovery," the MHCB expanded into developing markets in Asia by opening branches in New Delhi, India; Wuxi, China; and Ho Chi Minh City, Vietnam. The Mizuho Corporate Bank (China) was created the following year. Other growth has been in Thailand, South Korea, and Singapore as well as in Milan, Dubai, and Moscow. Mizuho Bank (Switzerland) and Mizuho Trust & Banking (Luxembourg) support the key world financial centers of Tokyo, London, and New York.

Terunobu Maeda, named president and chief executive officer (CEO) of MHFG in 2002, was previously the vice president of Fuji Bank. Other MHFG companies are currently led by Hiroshi Saito, president and CEO of MHCB; Seiji Sugiyama, president and CEO of MHBK; Keisuke Yokoo, president and CEO of MHSC; and Teruhiko Ikeda, chairman of MHTB.

See Also: Japan; Nippon Telegraph and Telephone.

Bibliography. "History and Development of The Mizuho Group," www.mizuho-fg.co.jp (cited March 2009); MHFG Press Release, April 28, 2008, www.mizuho-fg.co.jp (cited March 2009); Mizuho Financial Group, Inc., www.mizuho-fg.co.jp (cited March 2009).

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Modernization Theory

Modernization theory refers to the development processes that developing countries—or traditional communities—employ in their adaptation processes to modern technologies, cultural and social change, and adjustment to regional or global economic disequilibrium. Recognizing the far-ranging implications of increasing social and regional inequalities in the wake of colonization and decolonization in the non-European world, developing countries and Western decolonization scholars pondered the practicalities of (1) emulating the European economic growth and modernization model in a bid to successfully improve local conditions, or (2) resisting Western-style modernization attempts in favor of implementing local non-Western-style development policies and practices that aimed to reduce colonial and economic dependencies.

Modernization theory as academic social scientific discourse was popular in the West from the late 1950s until the late 1960s with increasing industrialization describing progressive change in a postcolonial world. In the decades that followed, this approach experienced a backlash as local (or hybrid) approaches gained in popularity and a Western-style modernization model was questioned. However, hints of modernization theory can still be found in the approaches of many development theorists. The notion of modernization appears to have originated in Europe between the 13th and 18th centuries—a period often referred to as the Early Modern Period.

While Max Weber (1864–1920) understood modernization mainly as rationalization, modernization in the views of many also encompasses increasing numbers of participatory citizens, the transformation of societies from agriculture to industrialization, technological change, the relevance of science for progress, and the importance of progress per se. Modernization processes and areas of development also include education (alphabetization), urbanization, and diversity of media. The Modern Era—from the 18th century onward—was marked by industrialization (19th century) and globalization (20th century).

The seemingly desirable aim of the West to ensure societal progress toward modernity often legitimized Western "assistance" (from the "Word" spread by early proselytizing missionaries and the "developing efforts" of the colonizing power/s) and "aid" (financial and credit) programs designed to further the traditional societies' transition from agricultural to industrial nations. Such an approach at the same time implied a so-called backwardness or inferiority of these traditional societies—justifying the Western model as the only possible alternative. These processes of modernization are often understood as a universal development trajectory, starting with colonization and ending with decolonization. To this end, it was often the colonial power that introduced these "modern" or Western advancements.

Foreign aid such as that from the U.S. Agency for International Development has been a cornerstone of modernization efforts.

Due to the challenges these new technologies and knowledge have presented to the power and influence of local elites and the traditions of the local populations, the new ways have not always been enthusiastically welcomed. A further reason for this lack of enthusiasm was that on occasion the Western powers used force to change the traditional ways of the locals in order to (1) set the colonized country on a Western modernization course, and (2) direct (often exploit) the local resources according to the economic and strategic needs of the colonizers. Nonetheless, often in the face of unremitting local resistance, local elites and those interested in advancing in the colonized nations took advantage of these new learning, economic, and social opportunities, not only in the interests of personal development but also to minimize the perceived structural gap between the development level of their homeland and that of the colonizing nation.

One prominent proponent of embracing these new Western ideas and innovations as positive stimulation for his country's own culture and economy was Burma's (today's Myanmar) King Mindon (1808–78). In an attempt to modernize and reform his country, the king introduced and promoted Western technological innovations in this former colony of the British Empire. Similar developments could be observed in other colonized countries that had experienced or were experiencing the technological and military superiority of the foreign powers, the "modern" lifestyle, the enlightenment, the independence, and Western notions of democracy.

Some of the ideas introduced by colonizing powers were more welcome than others, given that they were not necessarily perceived as purely "Western." Prominent persons such as the first president of an independent India, Jawaharlal Nehru, for example, saw education as central to the successful development of a country. As such, these ideas and reforms were on the whole easier to implement in the social reforms of the developing countries. This represented a departure from a colonial mindset: Now there was recognition of the degree of empowerment that would enable the developing countries themselves to effect and control (social) change. Thus the colonizer's role often took the form of change agent in the independence movements of former colonized countries.

Failures and Alternatives

The failure of modernization theory in the late 20th century, palpable in the ongoing and persistent underdevelopment, poverty, and failure of many developing countries to catch up to—or participate in—the world economy, resulted in dependency theorists arguing that disequilibrium still existed. The genesis of the more contemporary disparities, so the argument goes, can be found in the ongoing exploration of developing nations by capitalist nations. Today, this is perpetuated not by military but by financial means, e.g., through credit and development aid. Apart from pernicious macrostructural problems, progress in the postcolonial world was also inhibited by diverse sociopolitical problems and erratic development stages: Africa faced huge economic challenges and debt with the introduction of democracy; in the Islamic world, Samuel Huntington's well-documented perceived "clash" between Eastern and Western values became apparent; east Asia experienced fluctuations of economic boom and financial decline; and Latin America saw the rise of new social movements, military regimes that had their own ideas about the direction and nature of modernization.

Concomitant with the trajectory of decolonization, the number of less developed countries (LDCs) grew. However, these newly independent nations were more heterogeneous than homogenous—economically, culturally, and politically. Some of these countries were resource-rich, others resource-poor. Any concept of presumed unity of these less developed countries, envisaged, for example, in the Bandung Conference (1955), remained utopian. In the decades following decolonization, some of these countries showed significant development, both economically and socially. Nonetheless, many LDCs continued to experience structural disadvantage, continued to be dependent upon their former colonizing power. Furthermore, often within the poorer countries the social and economic disparities continued to exist. In such cases, an economic divide between the rural and urban areas became evident.

Decolonization trends and development strategies are often linked with the term *modernization*, generally understood as a "world-historical transition toward progress." Modernization was first introduced mainly as a Western concept. However, soon the question of alternative models rose. The successful rise of many of Asia's emerging countries, and the role of Confucianism, for example, held great promise. It clearly demonstrated that the developing and developed countries do not necessarily experience the same sequence of modernization.

See Also: Dependency Theory; Development Assistance; Economic Development; Less Industrialized Countries; Neocolonialism.

Bibliography. Ian Buruma, *God's Dust: A Modern Asian Journey* (Farrar, Straus & Giroux, 1989); Irene Gendzier, *Managing Political Change: Social Scientists and the Third World* (Westview, 1985); Nils Gilman, *Mandarins of the Future: Modernization Theory in Cold War America* (Johns Hopkins University Press, 2003); Samuel Huntington, "The Clash of Civilizations," *Foreign Affairs* (v.72/3, 1993); Stephen D. Krasner, *Structural Conflict: The Third World Against Global Liberalism* (University of California Press, 1985); Daniel Lerner, *The Passing of Traditional Society: Modernizing the Middle East* (Macmillan, 1958); George Mavrotas and Mark McGillivray, *Development Aid: A Fresh Look* (Palgrave Macmillan, 2009); Dietmar Rothermund, *Companion Decolonization: The Routledge Companion to Decolonization* (Routledge, 2006); Brian C. Smith, *Understanding Third World Politics: Theories of Political Change and Development* (Indiana University Press, 2003); Alfred J. Watkins and Michael Ehst, *Science, Technology, and Innovation: Capacity Building for Sustainable Growth and Poverty Reduction* (World Bank, 2008).

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Monetary Intervention

Monetary intervention is the action of a government, especially outside the course of its ordinary activity, to influence the economy. Typically this involves changes to the interest rate and/or the money supply, in order to manipulate the economy's growth, the strength of the nation's currency, or inflation. Attitudes toward monetary intervention are key to a nation's monetary policy, and different forms of intervention are recommended (not always unanimously) for different economic malaises.

Expansionary intervention increases the money supply or lowers interest rates; contractionary intervention decreases the money supply or raises interest rates. When the goal is to reduce inflation, this is called tight monetary policy; if an interest rate is altered to stimulate economic growth, this is accomodative monetary policy.

Money Supply

Money supply refers to the total amount of money available in the national economy, and there are four different measures used. M0 is the amount of physical currency circulating in the economy—paper money and coins. M1 is M0 plus checking account deposits; M1 is the measure used most often when talking about the money supply with respect to monetary policy and intervention. M2 is M1 plus savings account deposits and time deposits (such as money market mutual funds) under $100,000.

M2 is generally useful as an inflation-forecasting economic indicator. M3 is M2 plus large time deposits (over $100,000), repurchase agreements, and liquid assets—the broadest category, the one that most meaningfully and inclusively measures "how much money there is." Though these definitions seem straightforward, deriving the values is no easy task, and there is often dispute among economists about exactly which methods to use and which money to count for M0–M2.

The money supply is contracted or expanded by manipulating the monetary base and the reserve requirements. Reserve requirements refer to the minimum amount that must be held in each bank's reserves—in the form of physical cash in the bank's vault and the bank's holdings in the central bank. Since banks vary in size, this requirement is expressed as a nonflat amount—for instance, 10 percent of transaction deposits, as in the United States.

In other countries, reserve requirements vary from 2 percent (in the Eurozone) to 80 percent (in Jordan). Reserve requirements affect the amount of money a bank can lend out; in a system with a 10 percent reserve requirement, an initial $10 deposit can be expanded to as much as $100. These days, reserve requirements are not changed frequently, and never without significant advance notice; even a moderate change would cause liquidity problems.

A more common way of impacting the money supply these days is through open market operations—the buying and selling of government-issued financial instruments, precious metals (almost exclusively gold), and foreign currency. There was a time when increasing the money supply required printing more money; these days, in the United States for example, only a twentieth of the money supply exists in the physical form of paper currency or coins. When the government sells bonds, currency, or gold to banks, the money the banks use to make the purchase can be removed from circulation, contracting the money supply; when they buy such instruments, the money supply is increased. These operations have been possible only since the abandonment of the gold standard. Open market operations were a prominent feature of monetary policy under Paul Volcker, the chairman of the Fed from 1979 to 1987, whose policies begun under the Carter administration and continued through the Reagan administration were instrumental in pulling the country out of the economic slump of the 1970s' stagflation.

Since the 1990s, the Fed has become more likely to target interest rates rather than the money supply. Economists like Robert Mundell argue that you cannot target both interest rates and foreign currency exchange rates at the same time, and policy has generally followed this belief, at least in the United States.

See Also: Central Banks; Interest Rates; Monetary Policy: Rules Versus Discretion; Money Supply; Public Finance Reform.

Bibliography. Bruce Champ and Scott Freeman, *Modeling Monetary Economies* (Cambridge University Press, 2001); Kathryn Mary Dominguez and Jeffrey A. Frankel, *Does Foreign Exchange Intervention Work?* (Institute for International Economics, 1993); Barry Eichengreen, *Globalizing Capital: A History of the International Money System* (Princeton, 2005); Felix Hufner, *Foreign Exchange Intervention as a Monetary Policy Instrument* (Physica-Verlag Heidelberg, 2004); Richard H. Timberlake, *Monetary Policy in the United States: An Intellectual and Institutional History* (University of Chicago, 1993).

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Monetary Policy: Rules Versus Discretion

Under a classical gold standard, there is little need for a central bank other than to provide coordination to the payments system. The value of money is determined by the supply of and the demand for gold. Thus the classical gold standard is the ultimate form of a policy rule. By contrast, in a system of fiat money, the value of money in the long run is determined by the rate at which the central bank allows the supply of money to grow. The debate over rules versus discretion is concerned with the question of what constraints should be placed on the central bank when determining monetary policy. Those in favor of policy rules seek to limit the scope of central bank actions and pursue long-run price stability alone. Advocates of discretion argue that central banks must be flexible and respond to short-run fluctuations in both prices and output.

Advocacy for monetary policy rules is rooted in the classical liberal thought of the "Chicago School." Just two decades after the founding of the Federal Reserve System, and just three years after the United States left the gold standard, University of Chicago economist Henry Simons voiced reservations about handing over control of the money supply to a discretionary central bank. Less than three decades later, the advocacy of rules found its strongest proponent, Milton Friedman. Friedman frequently argued for a fixed growth rate for the money supply, contending that policy makers do not have enough knowledge about the way the economy works to be able to fine-tune it effectively. Faced with long and variable lags between the implementation of policy and its final effect, Friedman called for a focus on long-run price stability, which is achieved through stable money growth.

Economic Theory

Theoretical justification for the rules-based approach came from advances in economics in the 1970s when Finn Kydland and Edward Prescott published their seminal work on the "time consistency problem." Kydland and Prescott showed that if the central bank does not have the ability to commit to the optimal long-run policy (low inflation), they will sacrifice price stability for a short-run increase in output. Policy rules give the central bank the ability to commit to a course of action ahead of time and then follow it, even if future policy makers may want to deviate from it. Without rules, future policy makers will deviate from any previously announced path when it suits their short-run objectives. The resulting discretionary outcome is suboptimal. Kydland and Prescott's theoretical work has spawned a vast literature on the time consistency problem as applied to monetary policy and central bank independence. The hypothesis being that central banks that are more independent from the political process are more able to commit to long-run objectives and are more likely to foster low-inflation environments.

In the years that followed, John Taylor developed the notion of "feedback rules." Feedback rules allow for a more activist monetary policy than Friedman's constant money growth rule. The "Taylor Rule," as it is known, allows the policy maker's choice of interest rate to be influenced by the departure of inflation from its target and the departure of output from its natural rate. Though named a rule, it incorporates discretion in the form of the choice of inflation target and sensitivity to output deviations.

Recent Developments

Most central banks recognize the importance of long-run policy objectives, especially under normal circumstances. Yet resistance to explicit policy rules remains, in part due to the perceived need for flexibility in times of crisis. As the international financial markets experienced a large number of institutional failures in 2007 and 2008, the Federal Reserve took a proactive discretionary approach to managing the crisis. This approach was seen by many, though not all, policy makers as necessary to prevent systemic failure and reduce the likelihood of a severe recession. Many academic economists would have favored a less discretionary approach, citing the uncertainty over the short-run effectiveness of the intervention and its long-run cost. The debate over rules versus discretion remains an active topic in both academic and policy discussions.

See Also: Central Banks; Chicago School/Chicago Boys; Dollarization; Fiat Money; Gold Standard; Macroeconomics; Monetary Intervention; Money Supply.

Bibliography. Alberto Alesina and Lawrence H. Summers, "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence," *Journal of Money, Credit and Banking* (v.25/2, 1993); Robert J. Barro and David B. Gordon, "Rules, Discretion and Reputation in a Model of Monetary Policy," *Journal of Monetary Economics* (v.12/1, 1983); Alan S. Blinder, *Central Banking in Theory and Practice* (MIT Press, 1998); Guillermo Calvo, "On the Time Consistency of Optimal Policy in a Monetary Economy," *Econometrica* (v.46/6, 1978); Milton Friedman, "The Case for a Monetary Rule," *Newsweek* (February 7, 1972); Finn E. Kydland and Edward C. Prescott, "Rules Rather Than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy* (v.85/3, 1977); Edward Nelson, "Friedman and Taylor on Monetary Policy Rules: A Comparison," *Federal Reserve Bank of St. Louis Review* (v.90/2, 2008); Torsten Persson and Guido Tabellini, *Monetary and Fiscal Policy* (MIT Press, 1994); Henry C. Simons, "Rules Versus Authorities in Monetary Policy," *Journal of Political Economy* (v.44/1, 1936); John B. Taylor, "Discretion Versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy* (v.39, 1993); Carl E. Walsh, "Optimal Contracts for Central Bankers," *American Economic Review* (v.85/1, 1995).

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Monetary Union

A monetary union is defined in general as two or more otherwise independent states joining together to share a common currency. Traditionally, sovereign states have issued their own currencies for both domestic and international exchange. Nevertheless, in the past, countries have elected to join together in some sort of monetary union. There were repeated attempts to establish monetary unions in Europe during the 19th century.

There are two broad classifications of monetary unions. In a "shared" type of union, the members are part of a de facto equal partnership in that each relinquish their own currencies for a single joint currency and they share authority in decisions affecting the union's monetary affairs. In the case of a "surrendered" union, the partnership is fundamentally unequal, with the subordinate partner(s) agreeing to convert their own currencies for that of the dominant member. In this case, the latter country tends to dominate in decisions affecting monetary matters for the group.

It is generally true that realization of a monetary union is a major step in the evolution toward, although it in no way implies the preexistence of, a full political union. Typically, however, states that come into a monetary union have already achieved the status of a common market, although there is no requirement that this be the case.

The most significant advantages of a monetary union include (1) elimination of currency exchange transaction costs, thus reducing the costs of doing business internationally; (2) removal of currency volatility and thus currency exchange risks for companies operating in the member countries because there is a single currency in which to conduct business; (3) greater competition because of the greater transparency in comparing prices of different products and services across the union, and thus greater efficiencies and lower prices; and (4) financial economies of scale due to the creation of a single currency capital pool for members to use in common, thus allowing all members expanded opportunities to access a greater volume of cheaper capital as well as a wider range of investment options.

An important disadvantage of a monetary union is that national governments sacrifice control over monetary policy and thus the leverage to act unilaterally to deal with their particular country's financial crises. This is a particularly critical problem if the members making up the union do not constitute an optimal currency area, i.e., the underlying structure of economic and financial activity within each country is unique and significantly different from one another. In this case, monetary policy conducted by the union's central bank may help one member while damaging the economies of others. Lowering interest rates may help boost a stagnating economy but, at the same time, is just as likely to overheat an already growing country.

See Also: Central Banks; Currency; Euro; European Monetary Union; Exchange Rate Volatility.

Bibliography. Torben M. Andersen and Martin Seneca, *Labour Market Asymmetries in a Monetary Union* (Centre for Economic Policy Research, 2008); Michael Carlberg, *Inflation and Unemployment in a Monetary Union* (Springer, 2008); Benjamin J. Cohen, "Beyond EMU: The Problem of Sustainability," *Economics and Politics* (v.5/2, 1993); Benjamin J. Cohen, *The Geography of Money* (Cornell University Press, 1998); Charles W. L. Hill, *International Business: Competing in the Global Marketplace* (McGraw-Hill Irwin, 2009); M. Perlman, "In Search of Monetary Union," *Journal of European Economic History* (v.22/2, 1993); Federico Ravenna and Fabio Natalucci, "Monetary Policy Choices in Emerging Market Economies: The Case of High Productivity Growth," *Journal of Money Credit and Banking* (v.40/2–3, 2008); Emilie Rutledge, *Monetary Union in the Gulf: Prospects for a Single Currency in the Arabian Peninsula* (Routledge, 2009); Francisco Torres and Frances Giavazzi, *Adjustment and Growth in the European Monetary Union* (Cambridge University Press, 2009).

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Money Laundering

Money laundering is a process whereby one or more financial transactions are carried out in order to disguise or conceal the identity behind, the source of, and/or the destination of money. Usually this is undertaken to obscure connections with crime, and also to prevent payment of taxation, although the latter is generally a lesser objective; much laundering does take place through legitimate companies, and as a result, launderers incur tax bills.

There are many examples of money laundering in history, especially in the Early Modern Period when gold and silver ingots were being replaced in most large transactions by coins. When Elizabeth I was asked for money to pay for the "Northern Lords" who were fighting Mary, Queen of Scots, she ordered Lord Burghley to pay them in coins excepting those that had her head on them to obscure her involvement in an attempt to overthrow her cousin. During the American Civil War, the Confederates often had to disguise the payments being made to agents overseas, especially with payment for the manufacture of the CSS *Alabama*. The decrease in the use of cash and the increase in the amount of banking transactions made money laundering harder to some extent, but it rapidly took the form of "shell companies," many of which were located in tax havens or countries with strict laws against disclosure, such as Switzerland.

During Prohibition in the United States in the 1920s, with vast profits being made from the illegal sale of alcohol, it was necessary to disguise the source of income. Accountants established companies that transferred funds back and forth, working through a number of private shell companies, a number of holding companies, and making heavy use of "offshore" bank accounts. Although Switzerland, Liechtenstein, and Luxembourg became places for money to be stored and/or laundered, a number of legal jurisdictions also encouraged this, with British companies and individuals using the Channel Islands (Jersey and Guernsey) and the emergence of extensive banking industries in a number of Caribbean island groups such as the Bahamas, the British Virgin Islands, and the Cayman Islands.

Gangsters Al Capone and Meyer Lansky became associated with money laundering in the press, but the word was first coined by the British newspaper *The Guardian* when, in the run-up to the 1972 election campaign, U.S. President Richard Nixon's Committee to Re-elect the President (CREEP) was involved in transferring illegal campaign contributions to Mexico and then bringing them back to the United States through a company operating in Miami. The money that is to be laundered became known as "dirty money," and the final money, after it has been laundered, is known as "clean money."

To try to restrict money laundering in the United States, any "significant cash transaction" has to be reported by banks to the Financial Crimes Enforcement Network, along with any suspicious activities. This is done primarily to prevent the evasion of income taxes and other forms of taxation. This involves the authorities then checking on the payment of large amounts of cash into any bank account. To prevent unnecessary investigations into businesses that generate large amounts of coins each week, such as shops, some businesses can obtain a license to allow them to deposit cash. As a result some money laundering involves bringing money from illegal sources and paying it into an account of a legitimate cash business. This, obviously, means that income tax will have to be paid. In fact, one of the main means of money laundering is through using an existing legitimate business.

Other methods of money laundering are using cash obtained from illegal sources to buy gold coins, diamonds, gold, real estate, works of art, expensive postage stamps, and the like that are, at a later stage, sold to realize the money. This can work for a small number of transactions, but is not convenient for regular laundering. Another common method of money laundering involves using a casino—somebody uses the money to be laundered to buy casino chips and then cashes them in for a check from the casino, claiming that the money represents winnings.

More sophisticated forms of money laundering involve establishing companies specifically to launder money and then using them to transfer money back and forth between countries. If a government or tax authority is trying to investigate, the money launderer relies on the fact that one of the links in the chain will remain secret. Gradually, more and more countries have had to provide better regulation for their banking sector, and this has forced people to "park" what is known as "dirty money" or "hot money." With the new homeland security programs introduced after September 11, 2001, the United States and other allied governments have massively increased the requirements for reporting international transactions to allow them to keep track of suspicious transactions.

See Also: Corruption; Tax Havens; Terrorism.

Bibliography. Margaret E. Beare and Stephen Schneider, *Money Laundering in Canada: Chasing Dirty and Dangerous Dollars* (University of Toronto Press, 2007); Thomas J. Biersteker and Sue E. Eckert, eds., *Countering the Financing of Terrorism* (Routledge, 2008); Charles Doyle, *Money Laundering: Federal Criminal Law* (Nova Science Publishers, 2008); Financial Action Task Force, *Third Mutual Evaluation Report Anti-Money Laundering and Combating the Financing of Terrorism: Singapore* (Financial Action Task Force, 2008); Doug Hopton, *Money Laundering: A Concise Guide for All Business* (Gower, 2006); Paul Hynes, Nathaniel Rudolf, and Richard Furlong, *International Money Laundering* (Sweet & Maxwell, 2008); Nick Kochan, *The Washing Machine* (Thomson, 2005); Peter Lilley, *Dirty Dealing: The Untold Truth About Global Money Laundering* (Kogan Page, 2003); Guy Stessens, *Money Laundering: A New International Law Enforcement Model* (Cambridge University Press, 2009); Ann Woolner, *Washed in Gold: The Story Behind the Biggest Money-Laundering Investigation in U.S. History* (Simon & Schuster, 1994).

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Money Supply

Money supply is the amount of money available for use in transactions. Money is an asset that is accepted by others as a medium of exchange for goods and services. Today, money in most countries is "fiat" money—money that has no commodity value and is legal tender by government decree. Goods and services are priced in terms of money, and money can be earned and used as a store of purchasing power and wealth. Globally the money supply is measured in a variety of ways, but most central banks consider the liquidity of assets—how easily an asset can be converted and used as money—when defining the money supply for the purpose of conducting policy.

Most central banks define the money supply using aggregates that vary from very narrow measures of the money supply to broad measures. These measures often have a name beginning with "M" and are usually defined based on the liquidity of the assets included. For example, the Bank of England uses M0 as their narrow definition of (most liquid) money. M0 includes notes and coin in circulation plus bank deposits with the Bank of England. In the United States, this narrow definition of money, currency plus bank reserves on deposit at the Federal Reserve Bank, is called the monetary base, or "high-powered money." The next most liquid definition of money in the United States is M1, or currency held by the public plus checkable deposits at banks and travelers' checks. Intermediate measures of money include assets that are less liquid, yet are easily converted to cash, such as various forms of savings and time deposits.

Central banks differ in their assessments of liquidity, based on who issues the asset, who holds the asset, how large the asset is, and how long the asset is held. This makes comparisons of monetary aggregates across countries difficult. For example, M2 in the United States includes all of M1 plus savings deposits, small-denomination time deposits, individually held money market mutual funds, overnight Eurodollars, and repurchase agreements. However, M2 in the European Economic and Monetary Union (EMU) is calculated by including M1 plus short-term savings and time deposits.

The Federal Reserve Bank in the United States no longer tracks M3, an even broader aggregate of the money supply focusing primarily on money held for its store of value; however, forms of M3 are measured in other countries such as the EMU, Canada, Japan, Mexico, and Korea. The Bank of England uses M4, one of the broadest measures of money, as one of its major monetary aggregates on which it bases monetary policy.

Measuring the money supply is important for central banks in the conduct of monetary policy. The money supply and its growth rate are key factors in determining an economy's rate of inflation and short-term economic growth. A central bank influences the money supply when it prints money or increases bank reserves—most commonly through either the purchase of government securities or through low-interest loans to banks, which, in turn, create money by extending loans to consumers. Too much money creation leads to higher levels of inflation; too little can lead to economic recession. This is summarized in the oft-cited equation of exchange:

$$\%\ \textit{change in } M + \%\ \textit{change in } V = \%\ \textit{change in } P + \%\ \textit{change in } Y$$

where the *% change in M* is the growth of the money supply, *% change in V* is the rate of change in the money supply's velocity (number of times a unit of currency is used to conduct transactions), *% change in P* is inflation, and *% change in Y* is economic growth. Many theories of money assume that velocity is relatively stable, such that *% change in V* = 0. If we also assume that economic growth tends toward a specific and stable growth rate, then variations in the growth rate of the money supply above or below that growth rate show up predominantly through changes in inflation. Nobel Prize–winning economist Milton Friedman is often quoted for his assertion that "inflation is always and everywhere a monetary phenomenon."

As reported in *The Economist* (August 11, 2007), it is usually common belief that central banks in the most developed countries control most of the world's money supply growth. However, recent data show that three-fifths of the growth in the world's money supply has come from emerging economies such as China, India, and Russia. Emerging economies have increased the growth rates of their money supplies by an average of 21 percent—almost three times the growth rates in developed economies. While the impact on developed economies of this growth (along with increasing global financial market integration) may not yet be fully understood, it is forcing central banks in developed countries to rethink the conduct of monetary policy.

See Also: Central Banks; Fiat Money; International Monetary System; Monetary Intervention.

Bibliography. Ben Bernanke, "Globalization and Monetary Policy," Fourth Economic Summit, Stanford Institute for Economic Policy Research (March 2, 2007); Ibrahim Chowdry and Andreas Schabert, "Federal Reserve Policy Viewed Through a Money Supply Lens," *Journal of Monetary Economics* (v.55/4, 2008); Economist, "The Mandarins of Money," *The Economist* (v.384/8541, 2007); Milton Friedman and Anna Jacobson Schwartz, *Monetary History of the United States 1867–1960* (Princeton University Press, 1980); Jagdish Handa, *Monetary Economics* (Routledge, 2009); Yueh-Yun C. O'Brien, *Measurement of Monetary Aggregates Across Countries* (Federal Reserve Board Finance and Economics Discussion Series, February 2007).

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Monochronic/Polychronic

Monochronic and *polychronic* are terms coined by American anthropologist Edward T. Hall to describe how cultures and societies differ in their perceptions of time.

In polychronic societies, people perform several activities simultaneously and take a fluid approach to scheduling time. To polychrons (or people from polychronic cultures), time is continuous and has no particular structure. It resembles a never-ending river, flowing from the infinite past, through the present, and into the infinite future. According to Raymond Cohen, polychronic cultures have all the time in the world; the clock face has very little importance in societies where perceptions of time are determined by the cycle of the seasons, the unchanging patterns of rural life, and the calendar of religious festivities.

Arabic, African, Latin American, and southeast Asian countries are commonly described as polychronic cultures. The Indonesians, for example, have the expression *jam karet* (or "rubber time"), meaning that deadlines, schedules, and agendas are flexible and stretchable. Many traditional Arabs believe it is impious and irreligious to attempt to see into the future. God, not man, is in charge of what will happen. The Arabic term *Insh'allah* (or "God willing") conveys this belief.

By contrast, monochrons prefer to do one thing at a time. The ideal is to focus their attention solely on one activity, complete that activity, and then move on to the next. In a monochronic culture, time is considered to be discrete rather than continuous. It can be divided up into fixed segments—seconds, minutes, hours, days, weeks, years, and so on—and scheduled, organized, and managed. Monochrons see time as something that is almost tangible: They talk about time as if it were money, as something that can be "spent," "saved," "wasted," or "lost."

The countries of North America and northern Europe are generally considered to have a predominantly monochronic sense of time. In the United Kingdom, monochronic perceptions of time have been described as a legacy of the Industrial Revolution: factory life required the labor force to be on hand and in place at an appointed hour. In the monochronic United States, a great majority of people have grown up in a time system that uses whistles or bells to count off the hours of the day. It is perhaps no surprise that techniques for "time management" were developed in the United States.

Business Implications

The workplace provides a fruitful environment for observing differences in polychronic and monochronic senses of time. Polychrons will typically never arrive at work at the same time every day, preferring instead the flexibility of keeping their daily routines unstructured. Similarly, they do not like to have detailed work schedules or project plans imposed on them, nor do they like to draw up their own schedules. Polychrons shun deadlines in favor of completing projects in their way, and in their own time. They also find dividing their time between a number of ongoing projects to be both stimulating and productive, and thus the most desirable way to work. Since they are capable of easily switching their attention from one activity to another, the polychrons are typically the colleagues seen simultaneously e-mailing, phoning, and eating in important business meetings.

In contrast to polychrons, monochrons prefer to plan and structure their workloads in detail. They tend to start work at the same time each day, and make lists to monitor the tasks that they need to complete on a daily basis in order to meet fixed targets and deadlines. Whenever projects consist of several individual tasks, they prefer to focus on one at a time. Only when one task is complete will they move on to the next. For a monochron, dividing attention back and forth from one activity to another is wasteful use of scarce resources, distracting, and above all else uncomfortable: in the workplace, monochrons are therefore more likely than polychrons to turn down any additional, unanticipated work and may appear uncooperative in crisis situations.

These differences between monochronic and polychronic perceptions of time can and do lead to cultural misunderstandings and conflicts in international business. The scheduling of meetings provides a case in point. If, for example, two American and Brazilian business partners agree to start a meeting at 2 P.M., the American would most likely arrive at the designated meeting place in advance of the agreed meeting time: after all, his time is money. The Brazilian, however, would think nothing of arriving late: he may have to finish off an unplanned business lunch with a colleague, or drop by his office to check his e-mail, before starting the meeting. The American would most likely be extremely frustrated by the Brazilian's late arrival; for his part, the Brazilian would be offended by the American's insistence on punctuality or on getting right down to business.

Similarly, time-management systems do not transfer well between one culture and another. Traditional time-management programs are monochronic insofar as they emphasize to-do lists and careful scheduling. Research shows, however, that businesses in a polychronic society either reject or do not adjust well to such systems. Multinational companies that impose these monochronic systems on their subsidiaries in polychronic societies are often accused of being ethnocentric, which means that they impose their own ethnic or cultural values on others.

Critiques

As much as Hall's concepts of monochronic versus polychronic perceptions of time are relatively easy to understand, they have nonetheless been challenged by some critics. Some detractors claim that, although Hall's concepts are very useful for understanding different attitudes toward time, they are not backed up by empirical data. Others argue that the distinction between monochronic and polychronic perceptions of time is overly generalized. They counter that, within any one cultural group, or within any single country, it is possible to identify people who think differently about time. In China, for example, the inhabitants of the industrialized, southern provinces are said to have a monochronic perception of time while those living in the less industrially developed interior are considered to be more polychronic. Consequently, claim these critics, it is more useful to think of time differences among individuals, not just between cultural groups or countries.

Other critics argue that research based on Hall's dichotomy is value laden, concealing the assumption that there is only one correct way of understanding time. For example, researchers from monochronic cultures have criticized polychronic time systems for "forcing" people to tolerate interruptions and combine tasks that could be performed more effectively if done separately. Conversely, researchers from polychronic cultures have criticized monochronic time systems for their inefficiency, inflexibility, and sluggishness. In reality, argue the critics, there is neither a right nor a wrong way to think about time; there are just different ways of doing so, and each one has its own distinct strengths and weaknesses.

See Also: Context; Culture-Specific Values; Ethnocentrism; Scheduling; Silent Language of Hall (Nonverbal Communication); Space; Time Orientation.

Bibliography. Aaron Arndt, Todd J. Arnold, and Timothy D. Landry, "The Effects of Polychronic-Orientation Upon Retail Employee Satisfaction and Turnover," *Journal of Retailing* (v.82/4, 2006); Raymond Cohen, *Negotiating Across Cultures: International Communication in an Interdependent World* (United States Institute of Peace Press, 1997); June Cotte, S. Ratneshwar, and David Glen Mick, "The Times of Their Lives: Phenomenological and Metaphorical Characteristics of Consumer Timestyles," *Journal of Consumer Research* (v.31/2, 2004); Richard Gesteland, *Cross-Cultural Business Behaviour: Marketing, Negotiating, Sourcing and Managing Across Cultures* (Copenhagen Business School Press, 2002); Edward Hall, *The Silent Language* (Anchor Books, 1990); Gregory M. Rose, Roberto Evaristo, and Detmar Straub, "Culture and Consumer Responses to Web Download Time: A Four-Continent Study of Mono and Polychronism," *IEEE Transactions of Engineering Management* (v.50/1, 2003); Susan Schneider and Jean-Louis Barsoux, *Managing Across Cultures*, 2nd ed. (Prentice Hall Financial Times, 2003).

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Monopolistic Advantage Theory

Monopolistic advantage theory, first proposed by S. H. Hymer in his doctoral thesis and later expanded by C. P. Kindleberger, explains the reasons multinational corporations (MNCs) are able to compete successfully against local firms. It is a microeconomic theory that makes the firm the center, as well as the cause, of the international movement of capital and goods.

The monopolistic advantage theory elucidates why firms choose to internationalize their operations. Typically, MNCs are at a disadvantage compared to local firms because they have to cope with liabilities of foreignness, lack of local know-how, high cost of acquiring this knowledge in other countries, etc. However, these costs are offset by the existence of certain "monopolistic" advantages possessed by the MNC. Deploying these advantages abroad allows the MNC to glean profits that are not easily accessible to local firms and helps them attain success in international arenas.

Foreign direct investment (FDI) is an equity-based mode of international entry wherein physical investments are made by one company to build a factory in a different country, and also includes the acquisition of lasting interest in firms across national borders. FDI confers ownership rights and control over the foreign affiliate to the multinational firm. Specifically, they choose to enter international markets via FDI in order to capitalize on one or more unique monopolistic advantages that they possess. These advantages may arise from superiority in technological innovation, manufacturing processes, brand names, knowledge, patents, scale economies, or marketing skills in comparison to local firms. The advantages do not arise from location of production, but are specific to the firm. Further, they are owned by the firm and cannot be purchased by local competitors in the open market.

Under conditions of perfect competition, local firms would stand to benefit in two ways. First, they would be able to leverage inherent locational advantages such as physical proximity, favorable consumers, government protection, familiarity with rules, etc. Second, due to the efficient resource allocation situation, they would be able to buy technology or other advantages from the MNC. As a result, possessing these advantages would confer no special benefits or profits to competing multinational firms.

It is important to note that monopolistic advantage theory breaks away from the assumptions of perfect competition that existed in classical economic capital flow theory. Instead, it acknowledges the existence of market imperfections for the factors of production (land, labor, capital, management, proprietary knowledge, etc.) that tend to create barriers to competition from local firms. Due to the existence of these market imperfections, the advantages possessed by multinational firms cannot easily be purchased by local firms, creating quasi-monopolies. Under such conditions, foreign direct investment by MNCs is extremely lucrative, as it provides control over resources in foreign locations and a level of monopoly power vis-à-vis local competitors. Consequently, MNCs are able to acquire monopolistic rents and profits that exceed the costs and disadvantages of competing internationally.

The advantages possessed by foreign firms must satisfy the condition of relatively easy international transferability with minimal incremental cost to the firm. Hence they should be able to be deployed abroad without much adaptation or significant additional expense to the multinational firm. Common examples are the advantages that arise from technological patents, which can be leveraged across borders to recover sunk costs of investment in research and development and to gain profits from such firm-specific knowledge. By exploiting their monopolistic advantages through FDI, multinational firms are able to achieve far superior rents than if they remained in their domestic nation.

Criticisms

Some of the major criticisms of the theory are that it fails to address how the monopolistic advantages occur, that it is static in nature, and that it assumes a large firm going international for the first time. Also, the use of the term *monopolistic* to describe firm advantages may be inaccurate. The advantages can occur from greater efficiencies and hence may be "Ricardian" in nature, as they represent returns that are in excess of the opportunity costs involved.

The theory may not be well suited to explain the activities of entrepreneurial firms or firms in emerging markets as they may not initially possess the monopolistic advantages that allow them to succeed in international markets. New ventures often develop monopolistic advantages after going abroad. The theory also does not explain why FDI will always be the preferred choice of market entry for multinational firms, or why several firms with the same monopolistic advantage may not choose to internationalize identically.

Regardless, the basic logic of monopolistic advantage theory and firm-specific advantages resonates well with later theories such as the resource-based view, and Michael Porter's theory of competitive advantage, and provides explanations for the existence of FDI by multinational corporations.

See Also: Comparative Advantage; Competitive Advantages of Nations; Foreign Direct Investment, Horizontal and Vertical; Market Imperfections Theory.

Bibliography. Jay B. Barney, "Firm Resources and Sustained Competitive Advantage," *Journal of Management* (v.17/1, 1991); Jagdish Handa, *Monetary Economics* (Routledge, 2009); Stephen H. Hymer, *The International Operations of National Firms: A Study of Direct Foreign Investment,* Ph.D. diss., Massachusetts Institute of Technology, 1960 (MIT Press, 1976); Charles P. Kindleberger, *American*

Business Abroad: Six Lectures on Direct Investment (Yale University Press, 1969); Charles P. Kindleberger, ed., *The International Corporation: A Symposium* (MIT Press, 1970); Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (Free Press, 1985); Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (Free Press, 1980); John Romalis, "Factor Proportions and the Structure of Commodity Trade," *American Economic Review* (v.94/1, 2004); Birger Wernerfelt, "A Resource-Based View of the Firm," *Strategic Management Journal* (v.5/2, 1984).

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Morgan Stanley

Morgan Stanley is a U.S. investment banking and global financial services provider. Its clients and customers include corporations, governments, financial institutions, and individuals. The corporation's headquarters is in New York City. Morgan Stanley has about 600 offices in 33 countries and approximately 45,000 employees around the world (2008). The company manages assets worth about US$749 billion (2008).

Morgan Stanley has three main business. First, the institutional securities segment provides services such as capital raising; financial advisory services on mergers and acquisitions, leveraged buyouts, real estate and project finance; corporate lending; sales, trading, financing on securities, and futures exchanges; equity and proprietary trading; benchmark indices and risk management; research; and investment. Second, the global wealth management group provides brokerage and investment advisory services such as financial and wealth planning services; banking and cash management services; retirement services; and trust and fiduciary services. This segment targets high–net worth individuals and hedge funds. Third, the asset management segment provides products and services in equity, fixed income, and alternative investments, such as hedge funds, real estate, private equity, and infrastructure to institutional and retail clients. This segment targets institutional investors.

Morgan Stanley originated from J. P. Morgan & Co. In 1933, according to the Glass-Steagall Act, J. P. Morgan & Co. could not have investment banking and retail banking businesses under a single holding entity. J. P. Morgan & Co. decided to continue its retail banking business. Two former J. P. Morgan & Co. employees—Henry S. Morgan and Harold Stanley—and some others from the Drexel partners founded Morgan Stanley. The firm began its business on September 16, 1935, on Wall Street in New York City. In 1936, Morgan Stanley managed public offerings and private placement with US$1.1 billion—equal to 24 percent market share at that time. In 1942 Morgan Stanley joined the New York Stock Exchange.

During 1951–61, the last founder, Parry Hall, led Morgan Stanley in steady growth. The firm also led the General Motors US$300-million debt issue, US$231-million IBM stock offering, and the US$250-million AT&T debt offering in the 1950s.

In 1962 Morgan Stanley created the first viable computer model for financial analysis. In 1967 it set up Morgan & Cie, International in Paris to enter the European securities market. It acquired Brooks, Harvey & Co., Inc., in 1967 and established a presence in the real estate business.

In 1971, Bob Baldwin helped Morgan Stanley to establish the sales and trading business. In 1970 Morgan Stanley set up its first representative office in Tokyo. Four years later Morgan Stanley International, Inc., was established in London. In 1977 Morgan Stanley added Morgan Stanley Realty, Inc., and the private wealth management department into its business. At the same time, Morgan Stanley merged with Shuman, Agnew & Co. to enter the retail stock brokerage business.

On December 12, 1980, Morgan Stanley led the US$110-million Apple common stock initial public offering (IPO), the largest IPO since 1964. In 1986, Morgan Stanley Group, Inc., became a publicly listed company on the New York Stock Exchange. By the end of 1989, Morgan Stanley not only had set up regional offices in Frankfurt, Hong Kong, Luxembourg, Melbourne, Milan, Sydney, and Zurich but also had regional headquarters in London and Tokyo.

On February 5, 1997, merging with Dean Witter Reynolds and Discover & Co., Morgan Stanley Group, Inc., became Morgan Stanley Dean Witter Discover & Co., which is a global market leader in securities, asset management, and credit services. During the 1990s, Morgan Stanley expanded internationally and had offices in Amsterdam, Beijing, Buenos Aires, Geneva, Glasgow, Johannesburg, Madrid, Mexico City, Moscow, Mumbai, Paris, São Paulo, Seoul, Shanghai, Singapore, Stockholm, and Taipei. In 2001 the firm dropped Dean Witter from its name and became Morgan Stanley again.

In 2004 Morgan Stanley comanaged the US$19-billion Google IPO—the largest internet IPO and largest auction-based IPO in the United States. In 2005 Morgan Stanley advised the largest Chinese IPO—China Construction Bank—with US$9.2 billion. In July 2006 Morgan Stanley helped the largest IPO in the firm's history—Russia's largest oil and gas company OJSC OC Rosneft with US$10.4 billion. To cope with the subprime mortgage crisis, Morgan Stanley announced on December 19, 2007, that China Investment Corporation would infuse US$5 billion capital for exchanging those securities, convertible to 9.9 percent of its shares in 2010.

See Also: Investment Banks; JPMorgan Chase & Co.; Merrill Lynch.

Bibliography. Google, "Morgan Stanley Summary," finance.google.com (cited March 2009); Morgan Stanley, "Corporation History," www.morganstanley.com (cited March 2009).

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Morocco

Morocco is one of the fastest-growing emerging markets in Africa. It is rapidly expanding, developing, and opening up opportunities for businesses. Morocco is strategically located in northwest Africa and is less than 15 km. away from Spain. It boasts a range of climates and geographical features from Atlantic and Mediterranean coastal lands on the north and west through the Atlas Mountains and fertile valleys in the heartland and continuing on to the Sahara Desert in the south and east. Arabic is Morocco's official language, but French is widely spoken in business contexts.

Since its independence from France in 1956, political reforms have resulted in the establishment of a bicameral legislature in 1997: the Chamber of Counselors and the Chamber of Representatives. King Mohammad VI has been the king of Morocco since 1999 and has provided a strategic vision for the development of the country—socially and commercially. For example, Morocco is following the social trends of the West, such as equal rights for women. Commercially, government policies and business practices have joined forces to become competitive in the global marketplace.

Current Economic Development

In 2004 Morocco and the United States signed a free trade agreement to develop commercial links between the countries. As a result, an increasing number of businesspeople began to capitalize on the agreement. Soon, Morocco received the attention of tourists. Now the government plans—through the implementation of the strategic plan called Vision 2010—to create jobs and increase tourism to boost the economy. This strategic plan is designed to develop vacation property and to encourage the growth of Morocco's tourism industry, among others. Under the plan, the government hopes to create 600,000 new jobs and reach 10 million visitors in 2010. In fact, since the launch of the plan in 2001, more than 20,000 new hotel beds have already been created and thousands more are to be renovated. It is expected that by 2010, Morocco will have more than 250,000 hotel beds, including 180,000 located in and around the cities.

Similarly, the popularity of the Moroccan property market has increased significantly in the last few years due to its low price and high demand. Property investors, however, need to conduct thorough due diligence on all possible real estate purchases to ensure that they are legitimate before proceeding, because property developers may be so eager to cash in on Morocco's promising market that they may not follow all the necessary regulations or have the required government permissions.

The new favorable political environment has made the climate conducive to conducting businesses, resulting in massive foreign direct investment such as development of hotels, high-rise buildings, offices, and airports, among others. Furthermore, building a tunnel between Spain and Tangiers is also on the horizon. Morocco is poised to become the Dubai of north Africa in the next five years.

A swimming pool at a hotel development in Morocco, which is expected to have more than 250,000 hotel beds by 2010.

Future Economic Development

Morocco's proximity to Spain and relatively high proportion of university graduates who have knowledge of French as a second language gives Morocco the potential for becoming a powerful offshore center for French- and Spanish-speaking countries. Partnering with a leading provider of outsourcing services may help in this regard, as it reduces costs and improves business performance significantly. It is expected that from 2003 to 2018, business process off-shoring in Morocco could add 0.3 percent annually to its GDP growth, reduce its international trade deficit by around 35 percent, and create a total of some 100,000 new jobs. Morocco's unique educated workforce and its geographical position make it an ideal center for services, manufacturing, distribution, call centers, and an array of information technology (IT) services reaching the European Union; west, central, and north Africa; the Middle East; and eastern Europe. However, Morocco's need for industrial development is immediate. Without a proactive industrial-development policy, it is likely that Morocco's employment level will stagnate, its trade deficit will increase, and its economy will grow less than half the expected rate.

See Also: Africa; Algeria; Spain.

Bibliography. Jamil M. Abun-Nasr, *A History of the Maghrib in the Islamic Period* (Cambridge University Press, 1987); Commercial Site Development Services (CSDS), www.csdsltd.com (cited March 2009); Carl Dawson, *EU Integration With North Africa: Trade Negotiations and Democracy Deficits in Morocco* (Tauris Academic Studies, 2008); Mark Gottfredson, Rudy Puryear, and Stephen Phillips, "Strategic Sourcing From Peripheral to Core," *Harvard Business Review* (v.83/2, 2005); Dorothy Kavanaugh, *Morocco* (Mason Crest Publishers, 2008); Marina Ottaway and Julia Choucair-Vizoso, *Beyond the Facade: Political Reform in the Arab World* (Carnegie Endowment for International Peace, 2008); Khalid Sekkat, *Competition and Efficiency in the Arab World* (Palgrave Macmillan, 2008); Mourad Taoufiki, Amine Tazi-Riffi, and Jonathan Tétrault, "Morocco's Offshoring Advantage," *McKinsey Quarterly* (v.4/1–3, 2005); Cali Zimmerman, "Property in Morocco: An Emerging Market," *Nuwire Investor*, www.nuwireinvestor.com (cited March 2009).

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Mortgage Credit Crisis of 2008

The mortgage and credit crisis of 2008 is a financial crisis that originated in the United States but contributed to the global economic crisis of 2007–09, and has its most direct origins in the housing bubble and the disastrous consequences of irresponsible subprime lending. Though not solely complicit in the larger economic crisis—which also involves a fuel crisis, the bailout of the American automobile industry, and erratic commodity prices worldwide—the subprime mortgage panic is nearly synonymous with it in the minds and mouths of the public, due to its scope, the clear involvement of human error, and the consequent havoc wreaked on the American finance industry.

The Housing Bubble

The United States housing bubble affected much of the American housing market, especially California, Florida, and the northeast and southwest. Prices peaked in 2005, began to decline in the following year, and as of 2009 were continuing to decline in most markets. As with the dotcom bubble several years earlier, what seems a very obvious inflated peak and inevitable drop in hindsight was not at all clear at the time, and historical perspective has not yet detailed all of the factors or causative nooks and crannies of the event. Though some economists and industry publications had warned of the likelihood of the bubble and of overvaluation of property, former Fed chairman Alan Greenspan, for one, admitted to not recognizing the phenomenon until a year after the peak. In hindsight, what could have seemed like alarmism or overcautiousness at the time—like warnings within Freddie Mac as early as 2003, and at the Federal Reserve in 2001, that subprime mortgages were burdening institutions with too much high-risk debt—seems prophetic now.

It is not clear whether the bubble was fully a national phenomenon or a number of local bubbles, though in Greenspan's words, "all the froth bubbles add up to an aggregate bubble," making the distinction less than critical except perhaps in some discussions of causation. Some areas of the country—the southeast, for instance—certainly saw less growth in housing prices than areas like Tampa, Phoenix, and San Diego, where prices appreciated more than 80 percent from 2001 to 2006. The effects of the bubble's collapse, though, have been more uniform, and foreclosure rates in the low-growth areas have been nearer to those of the high-growth markets. Of the largest metropolitan areas in the United States, only Milwaukee has seen housing prices increase since 2007.

There are a number of contributing causes to the housing bubble, and again, their exact mixture is not yet a matter of historical consensus, but their presence is generally agreed upon. There is, for one, a characteristically American ambition toward home ownership, which is coupled with other accessories in the American Dream, and which tends no longer to involve the multigenerational residence in a family home. Each new generation needs a home of its own, in other words; sons no longer bring wives home, with two or three or even four generations sharing a living space, not even to the limited extent to which that once was true. Many of the subprime borrowers significantly worsened their financial hand with a home purchase, but their perception of their financial health was much the better, because of the cachet of owning one's home. Home ownership remained about the same in the United States from 1980 to 1994, at 64 percent, and then gained more than 5 percent in the next 10 years to peak at 69.2 percent in 2004, shortly before the housing price peak. Mortgage fraud increased by nearly 1,500 percent in that same period. Those two figures alone are sufficient to raise concern.

There is a longstanding belief in the United States that a home is a more stable, risk-free, and responsible investment than nearly any alternative—that housing prices not only won't fall, but will yield greater than average returns. Part of that is based only on the fact that stock prices are tracked in real time, making fluctuations obvious, while houses are valued annually. Part of it is due to the fact, widely spread by realtors, that American housing values as a whole have risen since the 1930s. There is a practical aspect as well. The interest on a mortgage provides a greater tax break than anything available to renters, and the principal paid provides equity in a form renters do not have. But local and regional housing prices have always experienced volatility, and while it is possible to own only a little stock, only a few bonds, or to put only a small portion of one's assets into a mutual fund, a home mortgage is a significant and burdensome long-term debt. Homeowners generally pay much more per month than renters do, even without accounting for possible maintenance and property taxes: the national median mortgage payment ($1,687) is nearly twice the median rent ($868), and the rapid rise of housing values hurt both mortgaged homeowners and landlords, as in many parts of the country, landlords found themselves paying a mortgage that their collected rents did not cover.

Over the long term, home ownership as an investment barely beats the rate of inflation, when you account for the expense of upkeep and property taxes. But the perception of its worth as an investment is so strong that it may have accounted for the difficulty in perceiving the existence of the housing bubble.

Further, the housing bubble and attendant mortgage and credit crisis is the first major economic crisis in which reality TV can be implicated. In 2005 and 2006—during the price peak—there were a number of television shows promoting "real estate flipping." Primarily an American activity, real estate flipping is the purchase and rapid resale of a property for profit, usually with some improvements done on the property before resale. Skillful flipping could involve an understanding of the psychology of buyers, and the ways to maximize the resulting profits of the money put into those improvements. The collapse of a flipping-driven housing bubble in Florida in the 1920s led to the depopulation of new cities and the abandonment of numerous housing developments, which when combined with the effect on the citrus industry of the introduction of the Mediterranean fruit fly devastated Florida's economy until the country's general upswing during World War II.

The TV shows both encouraged and reflected the flipping trend, embarked on as a hobby or part-time job for many of its participants. When a home is purchased with the intent of reselling it quickly, the terms of the mortgage become less important, because it will be paid off in full at the time of sale, long before the consequences of high interest rates have time to come to fruition; many of those advocating flipping as an investment activity promoted low- or no-money-down mortgages, which naturally cost much more in the long run. Flipping was a significant part of the housing bubble: Only 60 percent of homes purchased in 2005–06, that period when a flurry of flipping-centered shows entered the basic cable slate, were purchased as primary residences. While some of the remaining purchases were vacation homes, this is still a startlingly low figure, and flipping of that volume leads to an artificially inflated demand: Because so many houses sell, more houses are built, prices are raised, empty lots are purchased for new developments ... but the demand does not truly exist for that many residences. In 2005 twice as many new single-family homes were built as there had been 10 years earlier. As with the Dutch tulip bubble, such activity only pays off so long as everyone continues to play the game. As soon as the market returns its emphasis to only those tulip bulbs buyers actually mean to plant and grow, a correction must occur.

Such a correction did occur, as by late 2005 many economists were warning it would. Fed chair Benjamin Bernanke confirmed in October 2006 that the housing market was experiencing "a substantial correction," which would put a drag on economic growth. Many placed the blame on Greenspan, who as Fed chair had been responsible for the interest rate on 30-year fixed-rate mortgages reaching a historical low of 5.5 percent, encouraging more mortgagees. But subprime loans would do the most damage. Subprime lending extends loans to borrowers who do not qualify for the usual interest rates because of their risk factors, thus bestowing a greater amount of debt upon those with the least ability to repay it, a practice both ethically and practically questionable. Because the potential profit is high, lenders took many risks, including "ninja" (no income, no job, no assets) loans made to borrowers with no means of repayment except the sale of the house.

The Subprime Industry Collapse

The subprime mortgage industry collapsed in 2007, amid the steepest plunge in home sales since the 1980s. Subprime mortgages represented a disproportionate amount of foreclosures in 2006 as debts came due that the borrowers were unable to repay, and lenders began to face bankruptcy as they were unable to recoup the money they had lent out and were left only with seized assets with rapidly declining values. By the spring of 2008, 10 percent of homeowners had zero or negative equity: their homes had declined in value to such an extent that they were worth less than the mortgage on them, a situation that encourages strapped borrowers to neglect the debt, because that perception of home ownership as equity building and sound investing has been burst.

Subprime lenders began to go into bankruptcy at the start of 2007, including the largest, New Century Financial, which filed for Chapter 11 on April 2, 2007. Because of the practice of securitizing mortgages and other debts, turning them into mortgage-based securities (MBS) and collateralized debt obligations (CDO), far more institutions were put at risk than the lenders themselves. Financial institutions that had made significant investments in MBSs and CDOs began to falter and fail, the value of those securities dropping as housing prices dropped. Profits at FDIC-insured banks fell 31 percent in 2007, most of the damage coming in the fourth quarter. Investors panicked, withdrawing from such securities.

The extent of subprime-backed securities quickly became apparent, as they had insinuated themselves into portfolios worldwide, from American hedge funds to the Bank of China. The global credit crunch began around August 2007, causing the European Central Bank, the Bank of England, and the Federal Reserve to inject capital into the markets to deal with the sudden liquidity crisis. Investor panic, bank runs, and bank failures continued regardless, and even the mild relief offered by the remedy proved temporary. The first of several increasingly sizable bailouts began in the United States, with a limited bailout of mortgage debts announced on August 31. A planned superfund to buy up mortgage-based securities failed within a couple months of its announcement, due to still-falling values and the infeasibility of implementation. Investor panic and bank failures impacted stock markets worldwide, amid fund managers arrested for fraud for misreporting the health of their funds in order to give them time to withdraw their own investments, reported losses of hundreds of billions of dollars at American financial institutions, and the July 11, 2008, failure of Indymac, the fourth-largest bank failure in American history.

All of this transpired in an economic climate already affected by the worldwide commodities crisis. The price of crude oil had skyrocketed after a long period of reasonably cheap energy, reaching an all-time inflation-adjusted high in 2008. The cost of food goods soared worldwide, thanks to the crop diversion of biofuel and the increased demand for more profitable foods that led to shortages of basics like rice and grain. Wheat hit an all-time high, rice a 10-year high, and soy, dairy, meat, and corn all skyrocketed. Foods that had already risen in price due to climate-related shortages, like citrus and chocolate, remained high, and "Big Chocolate" companies like Hershey rejiggered their American-market products to use chocolate-flavored coatings in place of chocolate whenever possible, to avoid exceeding the $1 ceiling on impulse-rack products.

Fall 2008 Global Crisis

In September 2008 the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) were placed into conservatorship of the federal government, with the Treasury Department making $200 billion available through 2009 to try to keep the enterprises solvent. The collapse of the subprime mortgage industry infected investment banking, as AIG, Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley all found themselves in peril because of their MBS investments. Lehman Brothers and Washington Mutual (the country's largest savings and loan) collapsed in September, while Morgan Stanley and Goldman Sachs announced they were divesting themselves of investment banking, the dominant force on Wall Street since the New Deal. The Dow Jones Industrial Average fell repeatedly during that month, nearing 8,000 after a historic high of 14,000 less than a year earlier. No longer revving up or looming, the global economic crisis had entered its acute phase.

In the highly politicized environment of the 2008 presidential election, the Emergency Economic Stabilization Act of 2008 was defeated in the House of Representatives at the end of September, but a version was passed by the Senate on October 1, and President George W. Bush made the unpopular decision to sign it, creating a $700 billion bailout fund called the Troubled Assets Relief Program. The following week was the worst for the American stock market since the Great Depression, prompting the IRS to alter its rules on repatriated currency, encouraging corporations to return money home from overseas investments and foreign subsidiaries, in order to inject liquidity into the stiffening financial market.

The annual G20 meeting, held between 19 countries with the largest economies in the world and a representative of the European Union, was conducted by heads of state instead of ministers of finance, in November. Quickly dubbed "Bretton Woods II," the meeting took on a much broader scope and grander importance than most of its sort, and in essence became a planning session for the 2009 summit planned for April in London. At the core of the meeting was the need for a common approach to the global financial crisis, and a reconsideration of international financial institutions like the International Monetary Fund.

See Also: American International Group; Business Cycles; Citigroup; Collateralized Debt Obligations; Collateralized Loan Obligations; Deregulation; Freddie Mac; G20; HBOS; Iceland; International Monetary Fund; Investment Banks;

Merrill Lynch; Morgan Stanley; Securitization; Subprime Loans; Too Big to Fail; Wall Street.

Bibliography. Richard Bitner, *Confessions of a Subprime Lender: An Insider's Tale of Greed, Fraud, and Ignorance* (Wiley, 2008); Laurie S. Goodman et al., *Subprime Mortgage Credit Derivatives* (Wiley, 2008); Edward M. Gramlich, *Subprime Mortgages: America's Latest Boom and Bust* (Urban Institute Press, 2007); Alan Greenspan, *The Age of Turbulence: Adventures in a New World* (Penguin, 2008); Paul Muolo and Matthew Padilla, *Chain of Blame: How Wall Street Caused the Mortgage and Credit Crisis* (Wiley, 2008); Robert J. Shiller, *The Subprime Solution: How Today's Global Financial Crisis Happened, and What to Do About It* (Princeton University Press, 2008); Mark Zandi, *Financial Shock* (FT Press, 2008).

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Most Favored Nation Status

Most favored nation (MFN) status, or treatment, is a multilateral trading agreement between member countries. MFN status stipulates that each country extend tariff and regulatory treatment to other member countries that is no less preferential than their existing trade agreements. The agreement ensures that those from one country will not be treated worse that those from any other country. In effect, MNF status simplifies trade agreements since all member countries are extended the best trade conditions automatically without renegotiation. For example, if Mexico reduces tariffs on sugar from Mauritius, it must do so for all countries with whom it has MFN status, unilaterally. MNF status tends to reduce tariffs between all participating nations.

In the late 19th and early 20th centuries, MNF status was included in several bilateral trade agreements. MNF status gained popularity after World War II such that the General Agreement on Tariffs and Trade (GATT) included MFN status as its first article. MFN status is the second article in the General Agreement on Trade in Services (GATS) and article four in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The World Trade Organization (WTO) superseded these three agreements. All 152 members of the WTO adhere to the MFN status agreement. Although MFN status has its faults, it is seen as the cornerstone of fairness in trade relations.

Political and economic agreements are exceptions to MFN status. Customs unions and free trade zones (usually with strict conditions) can supersede MFN status for those outside the zone. For example, the European Union extends preferential trade conditions to member countries without similar treatment for others. In 1979 the GATT created the Enabling Clause that allows developed nations to extend preferential trade policy to developing nations without unilaterally extending the same treatment to MFN nations. To promote the growth of nascent industries and the standard of living in developing nations, WTO has also implemented escape clauses. These allow special concessions to be made for either case. Other challenges include human rights concerns and environmental policy.

In 1998 U.S. President Bill Clinton renamed the MFN status to Normal Trade Relations (NTR). This agreement allows producers in the country with whom the United States has NTR to benefit from lower tariffs on exports.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Customs Union; Free Trade Zone; General Agreement on Tariffs and Trade; Tariff; Trade Bloc; World Trade Organization.

Bibliography. Robert Betancourt, *Most Favored Nation* (Xlibris, 2001); Rodney D. Ludema and Anna Maria Mayda, *Do Countries Free Ride on MFN?* (Centre for Economic Policy Research, 2005); Jack M. Mintz, *Most Favored Nation: Building a Framework for Smart Economic Policy* (C.D. Howe Institute, 2001); Vladimir N. Pregelj, *Normal-Trade-Relations (Most-Favored-Nation) Policy of the United States* (Congressional Research Service, Library of Congress, 2005); Faruk Sengul, *Essays on the Most Favored Nation Clause and the World Trading System*, Ph.D. diss., Southern Methodist University, 2006; World Trade Organization, "Principles of the Trading System," www.wto.org (cited March 2009).

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Motivation

Motivation is generally defined as the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal. The three core concepts when explaining motivation—intensity, direction, and persistence—refer to how hard an individual tries, where the effort is channeled, and how long the effort is maintained. Motivation explains why an individual behaves in certain ways; management can use this concept to guide the practice of encouraging or discouraging certain behaviors of employees and thus improve performance.

What motivates an individual? In general, researchers and managers identified two kinds of motivators: intrinsic and extrinsic. Intrinsic motivators refer to an individual's internal desire to do something, due to such things as interest, challenge, and personal satisfaction. Extrinsic motivators are those that come from outside the person, such as pay, bonuses, and other tangible rewards. According to the Cognitive Evaluation theory, when management gives extrinsic rewards for behavior that had been previously intrinsically rewarded, this can result in a decrease in the overall level of motivation, because the individual experiences a loss of control over his/her own behavior when it is rewarded by external sources.

There are many theories explaining motivation. For example, D. McGregor proposed "Theory X and Theory Y." Theory X assumes that employees dislike work, will attempt to avoid it, and must be coerced, controlled, or threatened with punishment if they are to perform. Theory Y assumes that employees like work, are creative, seek responsibility, and can exercise self-direction and self-control. Managers who believe Theory X will design policies for tight control and coercion, which might cause employee resentment, withdrawal, indolence, lack of interest, or other negative behaviors. Employees' negative behaviors will reinforce belief in Theory X, thus forming a vicious cycle. Although McGregor's theory has been challenged by more recent studies, its basic argument remains valid and central to motivational research.

Motivation theories can be roughly classified into two categories: needs-based theories and process-based theories. Needs-based theories generally argue that individuals have needs that, when unsatisfied, will result in motivation. Maslow's hierarchy of needs, Alderfer's ERG theory, McClelland's theory of needs, and Herzberg's two-factor theory are representative of this type of theory. For example, McClelland argues that people vary in the types of needs they have. Their motivation and how well they perform in a work situation are related to whether they have a need for achievement, affiliation, or power. Needs-based theories are challenged by later researchers regarding the completeness of their categorization schemes (i.e., how many needs are there and which list of needs should we use) and the validity of their explanation (attributing a concrete behavior to a category).

Process-based theories of motivation are inherent in Lewinian intellectual tradition. Lewin believed that specific behaviors (regions of activity) are perceived as paths to a goal and the level of motivation corresponds with resultant psychological force toward the goal. For example, if a goal is important for an individual, the valence of the goal increases the total psychological forces toward the goal. Expectancy theory, Equity theory, and Goal Setting theory are examples of process-based theories of motivation. Specifically, Expectancy theory proposes that Effort (or motivation) = E x I x V. In this equation, E (Expectancy) is the belief that effort could lead to performance; I (Instrumentality) is the belief that performance could lead to reward/outcome; and V (Valence) is the subjective importance/value of reward.

Managers can manipulate employees' motivation by adjusting Expectancies (ability/skill level; training; build self-efficacy, clarify appropriate actions), Instrumentality (measurement of performance, variable rewards for variable performance), and Valences ("Cafeteria style" benefit plans, etc.).

Goal Setting theory proposes that achieving a goal is motivating, and goals clarify expected behavior/performance. When management defines performance goals for employees, they should follow the general principles: specific goals increase performance more than the generalized goal of "do your best"; difficult but attainable goals, when accepted, result in higher performance than do easy goals; and feedback on goal attainment leads to higher performance than does nonfeedback.

Each of the process-based theories has its own issues, but the general principles inherent in these theories have fundamental influences on current management practices. The concept of motivation provides a useful language for understanding what makes people become more productive at work. From the pioneer of management through to the work of contemporary researchers, motivation has and will continue to guide the way we manage people in an organization for productivity and self-actualization.

See Also: Absenteeism; Compensation; Empowerment; Job Enrichment; Maslow's Hierarchy of Needs.

Bibliography. C. Alderfer, "An Empirical Test of a New Theory of Human Needs," *Organizational Behavior and Human Performance* (v.4, 1996); Frederick Herzberg, *One More Time: How Do You Motivate Employees?* (Harvard Business Press, 2008); F. Herzberg, *Work and the Nature of Man* (World Publishing, 1966); Ruth Kanfer, Gilad Chen, and Robert D. Pritchard, *Work Motivation: Past, Present, and Future* (Routledge, 2008); Alfie Kohn, "By All Available Means: Cameron and Pierce's Defense of Extrinsic Motivators," *Review of Educational Research* (v.66/1, 1996); A. Maslow, *Motivation and Personality* (Harper & Row, 1954); D. C. McClelland, *Power: The Inner Experience* (Irvington, 1975); D. McGregor, *Proceedings of the Fifth Anniversary Convocation of the School of Industrial Management, The Human Side of Enterprise* (Massachusetts Institute of Technology, 1957); Nitin Nohria, Boris Groysberg, and Linda-Eling Lee, "Employee Motivation: A Powerful New Model," *Harvard Business Review* (v.86/7–8, 2008); L. Porter and E. Lawler, *Managerial Attitudes and Performance* (Dorsey Press, 1968); V. Vroom, *Work and Motivation* (John Wiley & Sons, 1966).

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Motorola

Motorola is an American multinational enterprise specializing in telecommunications and related technologies. The company is headquartered in the Chicago suburb of Schaumburg, Illinois, and has used the name Motorola as its trademark since the 1930s.

Motorola was founded in 1928 by Paul and Joseph Galvin under the name Galvin Manufacturing Corporation. The company started out as a manufacturer and seller of car radios—or motorolas. The name *Motorola* came about as a creative compilation of the words *motor* and *radiola*, and was meant to suggest sound in motion. It became so popular that the corporation changed its name to Motorola, Inc., just a few years after it was established. Currently, the company produces and markets a wide variety of products, including but not limited to mobile phones, laptop computers, computer processors, and radio communication devices. Motorola caters its products and services not only to individual consumers but also to corporations, government entities, developers, and service providers. One of its most recent consumer products, Motorola RAZR, sold over 110 million units by the middle of the first decade of this century, propelling the company to the number two mobile-phone producer slot, behind Finnish multinational giant Nokia.

In general, Motorola positions itself as a company that thrives on "engineering intelligence with style." The company especially emphasizes its customer orientation in the opening statement, which reflects both Motorola's vision and mission, posted on the company's Web site. It reads:

> We're artists. We're scientists. Most of all, we are a global communications leader, powered by, and driving, seamless mobility. Motorola is revolutionizing broadband, embedded systems and wireless networks—bringing cutting-edge technologies into your everyday life, with style.

Throughout its existence, Motorola has experienced numerous ups and downs, related mainly to rapid changes in both the telecommunication industry and the external business environment; in the past several years, the company has been going through rather tough times. For instance, some of Motorola's large projects—like Iridium, a company that was aiming at creating the first truly global communication network—have been derailed due to miscalculated demand. Further declines in the telecommunication industry worldwide in 2001–03 forced Motorola to spin off its U.S. government-related business and its semiconductor product division into separate legal and business entities. The sales of its flagship product, the RAZR, also decreased immensely by the last quarter of 2006. These developments forced the company to begin major cost-cutting and restructuring activities in 2007 that were mainly aimed at closures of various sites worldwide and sell-off of noncore business units. Overall, in 2007 Motorola reported a whopping 84 percent decrease in profits compared to a year before.

Motorola's current financial woes are continuing to worry company's investors. Despite solid sales of about $7.45 billion in the first quarter of 2008, the worldwide operations suffered a loss of $194 million. The company explains such an unfavorable figure by a 39 percent decrease in the sales of mobile devices. Motorola's other divisions, however, are once again showing strong financial results—both Home and Networks Mobility and Enterprise Mobility Solutions businesses continue to expand their solution portfolios and grow internationally. In another development in early spring 2008, Motorola's board of directors announced a split of the company into two separate publicly traded companies: Motorola Mobile Devices and Motorola Broadband & Mobility Solutions. The split is expected to be approved by regulators sometime in 2009.

In spite of financial tribulations, Motorola confirms its strong commitment to both corporate social responsibility and corporate citizenship. In the latest survey conducted by the Corporate Responsibility Officer—aimed to emphasize the corporate responsibility efforts of large, high-impact corporations in eight different categories that include Climate Change, Employee Relations, Environment, Financial, Governance, Human Rights, Lobbying, and Philanthropy—Motorola was named among the top 100 U.S.-based multinationals, a fact the company is taking much pride in. Motorola is also among very few companies in the world that earned a maximum rating of 100 percent in corporate equality, an index that rates employers on a scale from 0 to 100 percent on their treatment of gay, lesbian, bisexual, and transgender employees, consumers, and investors.

See Also: Company Profiles: North America; Corporate Social Responsibility; Nokia; Technology; United States.

Bibliography. Corporate Responsibility Officer, www.thecro.com (cited March 2009); CRO's 100 Best Corporate Citizens, www.thecro.com (cited March 2009); Human Rights Campaign, www.hrc.org (cited March 2009); Market Watch, www.marketwatch.com (cited March 2009); Motorola Corporate Web site, www.motorola.com (cited March 2009); Motorola—Financial Results, library.corporate-ir.net (cited March 2009).

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Multicultural Work Groups and Teams

Diversity is increasing within organizations at an astronomical rate. Organizations are increasingly operating in multicultural contexts, building strategic alliances, exporting work, and facilitating mergers and acquisitions inside and outside their primary domain of work. Concurrently, organizations are implementing work groups with greater frequency to integrate the knowledge of workers across broad geographic locations and cultural contexts. However, disagreement exists regarding whether a diverse cultural composition of groups leads to positive or negative group outcomes.

On one side, cultural diversity in groups and teams becomes most advantageous when the organization wants to expand its perspective, tactics, strategy, or approach. Diversity can become an advantage in attempting to reposition the organization, reposition a strategy, create a new idea, develop a new marketing plan, or assess emerging trends from a new perspective. If diversity is well managed, with the emphasis on management, it can increase creativity, flexibility, and problem-solving skills, especially for complex problems, improve effectiveness in working with culturally distinct clients, and improve understanding of the dynamics and communication patterns within the organization. The ability to operate more flexibly and to stay open to new ideas is a necessity for the management of the culturally diverse workplace. In fact, managers in this environment need to focus on the multiple perspectives and avoid groupthink.

On the other side of the debate, diversity frequently causes problems in convergent processes, at times when the organization needs employees to think or act in similar ways. Diversity renders communication and integration more difficult. People from different cultures fail to understand each other; they do not work in the same way or at the same pace. The

Multicultural teams can experience a form of culture shock as communication problems and conflicting work styles emerge.

potential for increased ambiguity, complexity, and confusion becomes highest when the organization requires direction and clarity, or in other words, convergence. Diversity causes problems when managers and employees overgeneralize organizational practices and process from one culture to different countries and cultures. It causes problems when a culturally diverse group must reach an agreement, whether this is formal or informal, and increases complexity and difficulty in developing companywide policies and procedures. Finally, cultural diversity might incite intergroup bias leading to negative group outcomes.

Joseph DiStefano and Martha Maznevski, looking at the performance of multinational teams, have noticed that these teams usually fall into one of three performance categories: the destroyers, the equalizers, and the creators. Destroyer teams were categorized as such because their members were observed to mistrust each other—they guarded information jealously and took every opportunity to attack other members of the team. Equalizer teams were observed as suppressing differences and, in turn, suppressing differences in ideas and perspectives. This category resembles what Alfred Adler calls ignoring cultural differences in teams.

Finally, creator teams were found to perform at high levels. In these teams, differences were explicitly recognized and accepted, even nurtured, and their implications were incorporated into every facet of the group's processes. These teams seemed to develop a constantly shifting dynamic that incorporates innovation and cooperation structures. These teams were observed creating value by bringing highly successful products to market in record time, achieving quantum leaps in cost savings in highly competitive industries, inventing new types of alliances with global suppliers and clients, and moving successfully into territory that others have been unable to conquer. The key to this high performance was not in the membership of the teams but in the interaction processes, i.e., how they understood, incorporated, and leveraged these differences. Creator teams interacted according to three principles of mapping, bridging, and integrating.

Models of effective multicultural teamwork have moved away from merely conceptualizing teamwork at the level of behaviors and processes in favor of understanding teamwork at a cognitive level. Indeed, Lynne Millward-Purvis suggests a model of team effectiveness based on shared mental models and meta-cognition. In this model, the authors suggest that for a team to self-regulate, it must have a sound knowledge of itself (its role, goals, strengths, and weaknesses) and be able to reflect upon, review its knowledge and practices, and subsequently refine or correct these. This is essential for the team to be adaptable and flexible in changing circumstances. This process not only requires a shared mental model of the team and its task, but cognitions at a meta-cognitive level in the self-regulatory sense as well as a sense of team motivation.

In this model, two important aspects of team motivation are identified: identity and potency. The identity of the individual is affected by whether the individual is proud to be part of the team such that self-concept and esteem will be related to team success. Potency on the other hand, the authors explain, refers to the collective beliefs that the team can succeed and be effective.

Other models for effectiveness in multicultural teams focus on leadership and social interaction. For a multinational team to be effective, a clear sense of direction must be established at the beginning of a conceptualization phase. After an initial period of euphoria over the internationalism of the project, there is a drop in team morale; communication problems and different styles of working and decision making, leading to culture shock. If the project leader does not succeed in building up trust in the early phases of the project, thereby holding the team together by a common goal, there is a risk that the project will never get off the ground. Especially at the beginning of international projects, it is important to give priority to trust-building measures and team development. For these purposes, social events may be organized and can be more effective than any other sort of social interaction.

See Also: Cross-Cultural Research; Cultural Norms and Scripts; Culture-Specific Values; Ethnocentric Human Resource Policy; Ethnocentrism; Geocentric Human Resource Policy; Hofstede's Five Dimensions of Culture; Regiocentric Human Resource Policy; Teams.

Bibliography. Taylor Cox, "The Multicultural Organizations," *Academy of Management Executive* (v.5/2, 1991); Patricia Nemetz and Sandra Christensen, "The Challenge of Cultural Diversity: Harnessing a Diversity of Views to Understand Multiculturalism," *Academy of Management Review* (1996); Sonja A. Sackmann, ed., *Cultural Complexity in Organizations* (Sage, 1997); Susan C. Schneider and Jean-Louis Barsoux, *Managing Across Cultures* (Prentice Hall, 1999); David C. Thomas and David C. Thomas, *Cross-Cultural Management: Essential Concepts* (Sage, 2008).

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Multidomestic Structure

Multidomestic structure is a multinational firm's organizational structure that reflects the philosophy that the world is comprised of many unique markets—usually defined at the national level. By this multidomestic philosophy, for example, many food companies acquire and/or establish business units in as many countries in which they do business, granting these units autonomy to choose products, suppliers, and marketing strategies to suit their local contexts.

To understand multidomestic structure, we first explore the multidomestic concept (or philosophy) and then see how it can be applied to industries, firms, and organizational structures. The core issue is whether one sees the world as one more-or-less monolithic market with similar tastes and preferences or whether one sees the world as made up of many more-or-less unique markets, each with its distinct tastes and preferences. The former may be called a "global" and the latter a "multidomestic" philosophy. Parenthetically, the position between these two extremes is called regionalism, whereby one sees the world as being made up of a small number of regions—for example, Asia, Europe, the Americas, and Africa/Middle-East.

Authors like George Yip (who prefers the term *multilocal*) and Michael Porter show how some industries, by their natures, lend themselves to more multidomestic (as opposed to global) strategies; for example, if competition is independent from country to country as is the case in retail banking, caustic chemicals, and retail groceries. Many competitors in these industries tend to be local, as the benefits of integrating into a global business are necessarily limited. According to Klaus Agthe, the multidomestic business organization may thus actually be a group of "national" subsidiary companies whose ultimate headquarters is structurally separate from each and equally supportive of all of them.

Multidomestic structures are thus the patterns of intraorganizational reporting relationships that enable the multinational firm to manage its operations so that subsidiary (or affiliate) organizations have suitable levels of autonomy to implement a multidomestic strategy. Implementation of this subsidiary autonomy is a key concept. Stuart Paterson and David Brock suggest that autonomy is necessary as a way to improve local responsiveness, and is a prerequisite and a desirable result of subsidiary development. Subsequently, they discern an increasing emphasis on autonomy in research related to multinationals and their subsidiaries.

Multidomestic structures fit well within global area or geographic structures. For example, the Nestlé Group has three global geographic zones (Europe, Americas, and Asia/Oceania/Africa) for most of its food business (with the exceptions of Nestlé Waters and Nestlé Nutrition, which are managed on a global basis). Then each of the geographic zones is divided into individual countries or country groups. For example, the Americas zone contains Latin America and the Caribbean (groups), and the United States and Canada. This structure allows each country (or homogeneous group of countries) to adapt to local tastes and regulations that are relevant to their food and beverage offerings.

Similarly, global product divisions are commonly structured into area and/or country divisions. For example, Nippon Steel Chemical Group has 15 companies structured into three global product divisions, namely Chemicals, Electronic Materials, and Coke & Coal Tar Chemicals. However the Chemicals division has branches in Osaka, Seoul, Taipei, and Shanghai in order to provide country-level customization and support for their products. Further, even the most global firm may have some multidomestic features to their structure. For example, Intel and Microsoft, both of whom are known for their globally integrated processes and standardized offerings, have hundreds of local offices around the world to take care of customer needs and to fine-tune their marketing efforts from location to location.

We thus see that the multidomestic concept is more relative than taxonomical. Just as there is no pure global strategy or structure, so, too, are multidomestic strategies and structures deployed by firms only to limited degrees. As implied by C. A. Bartlett and S. Ghoshal, effective firms in dynamic markets need to find the appropriate balance between the global and multidomestic aspects of their operations. This is how they define the challenge of effective transnational management.

See Also: Globalization; Global Product Divisions; Global Structure; Home Country; International Division Structure; Markets; Matrix Structure; Microsoft; Nestlé; Nippon Steel; Regional Divisions; Subsidiary.

Bibliography. Klaus E. Agthe, "Managing the Mixed Marriage—Multinational Corporations," *Business Horizons* (January–February 1990); C. A. Bartlett and S. Ghoshal, *Managing Across Borders: The Transnational Solution* (Harvard Business School Press, 1989); Julian Birkinshaw, *Entrepreneurship in the Global Firm* (Sage, 2000); David M. Brock, "Autonomy of Individuals and Organizations: Towards a Strategy Research Agenda," *International Journal of Business and Economics* (v.2/1, 2003); Stuart Paterson and David M. Brock, "The Development of Subsidiary Management Research: Review and Theoretical Analysis," *International Business Review* (v.11/2, 2002); Michael Porter, *Competition in Global Industries* (Harvard Business School Press, 1986); C. K. Prahalad and Gary Hamel, "The Core Competence of the Corporation," *Harvard Business Review* (May–June 1990); George Yip, *Total Global Strategy II* (Prentice Hall, 2003); Stephen Young and Ana Teresa Tavares, "Centralization and Autonomy: Back to the Future," *International Business Review* (v.13/2, 2004).

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Multi-Fiber Agreement

During the 1960s, the Kennedy administration implemented a quota system to protect domestic cotton producers. In 1962 the Long Term Agreement Regarding International Trade in Cotton Textiles (LTA), a set of bilateral quota agreements, was signed under the General Agreement on Tariffs and Trade (GATT). This agreement was renegotiated several times until finally in 1974 the Multi-Fiber Agreement (MFA) was signed. The MFA was adopted within GATT to essentially protect the industrial nations' textile and clothing industries from the growing competition of developing countries that were able to produce products more cheaply due to lower labor costs. The MFA covered products made of cotton, synthetic fibers, wool, silk, and ramie. Under their jurisdiction all exports were subjected "to quotas when total exports from exporting countries reach[ed] a certain share of total imports in the country of destination."

Initial signators of the textile-and-clothing-protected quotas in the 1950s and 1960s were Japan, Hong Kong, China, India, and Pakistan; however, there was a growth rate on the quotas imposed on the proceeding arrangements so the European Union (EU), Austria, Canada, Finland, Norway, and the United States applied the quota almost exclusively to developing-country exports. Japan and Switzerland were two other signatories that did not impose MFA quotas but instead viewed their act as merely a signal that, if they needed to, they would apply the quota.

The MFA was a complicated system of quotas that acted as an incentive "to large name brands to move their production units to multiple countries and to the developing countries to open their countries to investors." Under the MFA's quotas, and with encouragement of international financial institutions, dozens of poor countries developed apparel industries that created millions of jobs and guaranteed sharing of world clothing.

Significance and Impact

The MFA's original intention of the quotas was to offer protection to the declining textile industries of developing countries. However, with quotas effectively guaranteeing market access, textile manufacturing industries began showing up in countries like Jamaica and Sri Lanka, which before had no significant textile industries. The reason for these textile manufactures in unlikely countries was because the MFA guaranteed market access for them along with neoliberal policies imposed on them by international institutions such as the International Monetary Fund (IMF). In Keith Yearman's article he provides this example of how the MFA created textile access for other countries:

> The elimination of agricultural price-stabilization programs and the removal of tariffs and quotas on food imports in many countries over the past 20 years has forced countless farmers off their lands and into the urban economy, where a formal garment factory job, however low-paid and tedious, can look a lot better than eking out a living in the informal sector. Under the structural adjustment programs many nations adopted as a condition of refinancing their foreign loans, governments privatized public-sector enterprises, often resulting in mass layoffs and further softening labor markets.

In addition, the U.S. textile and apparel companies feared an increase in competition from abroad, but by implementing the quotas established by the MFA, it in fact turned out to benefit larger nations such as the United States with unskilled workforces and acted like an affirmative action program for poorer nations.

Phase-Out

From 1992 to 1994, GATT met at the Uruguay Round, and on January 1, 1995, MFA was replaced by the World Trade Organization's (WTO) Agreement on Textiles and Clothing (ATC). According to Junyuan Tan, it was originally meant for a

> transitory phase between the MFA and the full integration of the textile and clothing industry into the multilateral trading system; Canada, the EU, Norway and the US carried their MFA restrictions into the AFC.

This new agreement inaugurated a 10-year removal of MFA's quota, preference system, and full adoption of textile and clothing products into GATT rules. The transition of ATC is best seen through two processes incorporated in three phases: first, as Tan writes, the "integration of products into the GATT and out of the ATC," and second to "increase in the quota growth rates that remain under the ATC, allowing developing countries to export more goods under restrictions."

At the beginning of each phase, importing countries had to integrate a specific minimum portion of their textiles and apparel imports. The first phase began on January 1, 1995, with a 16 percent integration, followed in 1998 with a specified minimum rate of 17 percent and an increase of the quota growth rate to 25 percent higher than the previous stage rate. The final phase was in 2002 with targets of 18 percent and 27 percent quota growth rate. By January 1, 2005, the Multi-Fiber Agreement officially ended and trade in textiles and clothing was, according to the Interfaith U.S. Trade Justice Campaign, "completely liberalized leaving the future of the industry in less competitive countries in a free fall."

Post-MFA Period

Now, in the period known as the post-MFA period, only members of the WTO can benefit from the textile and apparel quotas that the WTO has implemented. Nonmember countries such as Vietnam and the former Soviet republics are limited by bilateral quotas or other arrangements with the United States and other countries. Ironically, the countries that pushed to end the quotas are now suffering the most. Countries such as Indonesia, Pakistan, Bangladesh, Colombia, and others that were economically heavy on textile exports are now receiving less access than anticipated to the U.S. and European markets for their exports.

The greatest danger, however, in the removal of the MFA's quota system has been with the shifting of textile manufacturing power to China. As MFA's initial purpose was to protect textile manufacturing in rich countries from growing Third World exports, many of these countries thought that with this they would gain even more market share once the MFA's quota was dropped. However, during 1994, China was not a member of the WTO or GATT, thus it was not allocated a quota. In 2001 China joined the WTO and has since dominated the world textile industry so much that instead of opportunity in the industry shifting from rich nations to poor ones, the elimination of the quota has shifted production out of the developing countries and into just a few: China and India. Now countries are inundated with clothing made in China and India, while up to 30 million garment workers worldwide are unemployed.

Also, during this post-MFA period, there has been speculation of lower prices for the consumer; however, this may also lead potentially to a long-term negative impact on the economy. As stated in a document about the MFA,

> The quota system in the past had restricted competition and had allowed less competitive exporters to export more than their competitive share. These less competitive exporters will lose their market share. Export countries previously limited by the MFA will gain from increased market access. However, exporting countries will face lower prices as a result of increased competition, although production and export will be rationalized, with a move to more efficient sectors.

In addition, according to trade observers:

> with a more economically interdependent world the impact is shortsighted to ignore the ill effects on developing nations when the spoils of an open market system go to the most powerful.

See Also: General Agreement on Tariffs and Trade; International Monetary Fund; Uruguay Round; Voluntary Export Restraints; World Trade Organization.

Bibliography. Marco Chi-Keung, Chester Kin-Man, and Zhiming Zhang, "MFA Fibers and Cotton Imported to the United States From China and Hong Kong: A Structural Change Analysis," *Journal of the Textile Institute* (v.99/1, 2008); Interfaith U.S. Trade Justice Campaign, "Textiles Trade After the Multi-Fiber Agreement," 2003, www.tradejusticeusa.org (cited March 2009); Jordanian National Competitiveness Team, "Impact Assessment of Lifting the Multi-fiber Agreement on the Qualified Industrial Zones," www.competitiveness.gov.jo (cited March 2009); Adam Nichols, "End of Textile Quotas May Leave Poorer Countries Hanging by a Thread," *The Washington Diplomat*, www.washdiplomat.com (cited March 2009); Junyuan Tan, "The Liberalization of Trade in Textiles and Clothing: China's Impact on the ASEAN Economies," 2005, www.econ.stanford.edu (cited March 2009); Keith Yearman and Amy Gluckman, "Falling Off a Cliff," *Dollars & Sense: The Magazine of Economic Justice*, www.dollarsandsense.org (cited March 2009).

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Multilateral Investment Guarantee Agency

The Multilateral Investment Guarantee Agency, established in 1988, provides political risk insurance to private companies investing in developing markets. As a member of the World Bank Group, its principal goal is to encourage foreign direct investment in developing markets by augmenting privately and publicly available political risk insurance coverage. Such insurance reduces the risk of investing in developing markets and makes them more attractive hosts for foreign direct investment.

In providing political risk insurance, the Multilateral Investment Guarantee Agency, more commonly known as MIGA, is guided by its principal mission of aiding in the economic development of member countries. This objective is reflected in its insurability criteria, which require insured projects be economically viable, environment-friendly, and contribute to the economic development of their host countries. Consistent with its goals of facilitating economic development, infrastructure projects are a stated priority area for MIGA. This priority reflects the essential nature of infrastructure such as power, telecommunications, transportation, water, and waste management in support of economic development and the inability of many developing country governments to finance its development. A second priority area for MIGA is postconflict countries. These countries, because of their war histories, are often viewed as politically risky. This perception makes it particularly difficult for these economies to attract foreign direct investment and restart the process of rebuilding their economies. This creates a particularly important role of MIGA, which, through the provision of political risk insurance, increases the likelihood of such investment.

The insured, companies that are nationals of MIGA member countries, invest outside their home markets in developing countries that are also members of MIGA. Member countries include both developed and developing countries. Developed country members include Canada, the EU-15, Japan, Switzerland, and the United States, which together account for the vast majority of outward foreign direct outflows. Most developing countries including those in Asia, Africa, the Middle East, and Latin America and the Caribbean are members of MIGA. This extensive membership implies that foreign investment in most developing countries may be eligible for MIGA coverage provided other insurability criteria are met.

MIGA provides four types of political risk insurance: expropriation, war and civil disturbance, breach of contract, and transfer restriction. Both expropriation and war and civil disturbance coverages provide insurance against asset loss. Expropriation coverage protects against actions by the host government that restrict or eliminate the policyholder's ownership rights without compensation. War and civil disturbance coverage, as its name suggests, protects the insured against the loss of physical assets due to acts of war and civil disturbance. Breach of contract coverage protects the investor against the possibility that the host country government fails to fulfill its contractual obligations. The final type of insurance offered, transfer restriction, protects the insured against actions such as the imposition of capital controls that limit their ability to convert local currency to foreign currency for transfer outside the country. Insurance may be purchased individually or in any combination desired by the insured. Insurable projects include equity investments and shareholder loans. Coverage is generally available for a period of no more than 15 years.

While MIGA's political risk coverage is similar to coverage that may be provided by private and individual home country governments, MIGA also coordinates coverage from multiple insurers, both private and public. This works to increase the available coverage for a given investment by having multiple insurers—private, public, and MIGA—that share the project risks. In the first 19 years of its existence, MIGA has facilitated in excess of $28 billion in investment guarantees for infrastructure projects. This is in contrast to the approximately $5.6 billion directly guaranteed by MIGA during this time period. This reflects the insurance expansion effect of MIGA's dual activities.

In addition to providing and facilitating coverage of political risk events, MIGA further manages political risk through its stature as an international institution funded by member country contributions. This stature provides access to member governments that is generally not available to private and public insurers. MIGA uses this access to reduce the likelihood of the political risk events it insures by leveraging its relationship with host country governments. This unique ability confers further advantages to potential investors due to the effective reduction in political risk exposure of their project.

See Also: Capital Controls; Country Screening; Economic Development; Foreign Direct Investment, Horizontal and Vertical; Risk; Risk Management.

Bibliography. Theodore H. Moran, Gerald T. West, and Geral-Keith Martin, *Needs of the Present, Challenges for the Future* (World Bank, 2008); Multilateral Investment Guarantee Agency, "Investment Guarantee Guide," www.miga.org (cited March 2009).

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Multinational Competitive Disadvantages

Multinational corporations (MNCs) have multiple sources of advantage that enable them to expand across countries. However, they also suffer from competitive disadvantages, i.e., the condition a firm faces when it creates lower value for its customers and lower profits for itself than its competitors. A competitive disadvantage is always in comparison to a particular competitor or set of competitors. Thus, there are two broad types of multinational competitive disadvantage based on two broad sets of comparisons. The first type is the competitive disadvantage that the subsidiary of an MNC has in comparison to local firms in a host country. The second type is the competitive disadvantage that the whole MNC has against other firms from the home country.

Types

The first type of competitive disadvantage has been analyzed under three related but not identical concepts: cost of doing business abroad, liability of foreignness, and difficulties in internationalization. Initially, building on economics, Stephen Hymer uses the term *cost of doing business abroad* to refer to the additional costs that a subsidiary of an MNC incurs to operate in a host country, which domestic companies do not have to incur. The sources of these additional costs are investments needed to operate at a distance, to deal with unfamiliarity with the economic, political, and social characteristics of the country, or to deal with discrimination by the host government.

Later, building on organization studies, Srilata Zaheer coins the term *liability of foreignness*. Although the liability of foreignness was initially equated with the cost of doing business abroad, later thinking moves away from costs and highlights institutional differences as the hallmark of the liability of foreignness. The sources of liability of foreignness are lack of adaptation to local institutional requirements, lack of legitimacy, and lack of membership of information networks.

Recently, building on strategic management thinking, Alvaro Cuervo-Cazurra and colleagues use the term *difficulties in internationalization* to refer to all sources of competitive disadvantage that subsidiaries of MNCs face. This concept, which includes the cost of doing business abroad and the liability of foreignness, is used to highlight how subsidiaries of MNCs can suffer from multiple competitive disadvantages, most of which are not exclusive to MNCs. The separation of difficulties by their source results in three sets of competitive disadvantage types. First, the subsidiary of an MNC suffers a disadvantage when it is unable to transfer the advantage provided by its existing resources and capabilities to the new host country. Local competitors have imitated or replicated the source of the advantage of the MNC, or customers do not need the firm's products, resulting in a foreign operation that is unable to achieve an advantage over local firms. Second, the subsidiary of an MNC will create a competitive disadvantage when some of the resources and capabilities transferred to the host country become disadvantageous there, because they collide with existing practices and norms.

Alternatively, it is not the specific resources and capabilities but the foreign nature of the subsidiary of the MNC that becomes a source of disadvantage, because the government and/or citizens dislike the country of origin. This latter source of competitive disadvantage, which is termed the *disadvantage of foreignness*, is exclusive to MNCs. Third, the subsidiary of an MNC will face a competitive disadvantage when it lacks complementary resources needed to operate in the new country. It may lack complementary resources to manage at a larger scale, to compete in the new industry, or to operate in a new institutional environment. Only the latter, identified as the liability of foreignness, is exclusive to MNCs.

The empirical literature finds that subsidiaries of MNCs tend to have lower performance, efficiency, and survival than domestic firms, especially at the beginning of operations in the host country. However, some studies caution that this depends on the comparison drawn, and on whether competitive advantages that may compensate for some of the competitive disadvantages are controlled for.

The second type of competitive disadvantage, the competitive disadvantage of an MNC in comparison to other firms from the home country, affects the whole MNC rather than one or some of its subsidiaries. Initial studies, such as those done by Donald Lessard and colleagues, argue that MNCs have an advantage over domestic companies. Later studies focus on comparing not MNCs to domestic firms, but on comparing MNCs with different degrees of international presence. These studies find that MNCs with a limited international presence appear to have a disadvantage in comparison to MNCs with a higher international presence. Lack of experience with international markets reduces performance until the firm develops such experience as it continues expanding abroad. However, at very high levels of international presence, MNCs also appear to suffer from a disadvantage in comparison to those with lower international presence. This reflects the challenge of managing a wide array of operations in multiple and distant places.

See Also: Competition; Internationalization; Micro-Multinational; Multinational Corporation.

Bibliography. Tamir Agmon and Donald R. Lessard, "Investor Recognition of Corporate International Diversification," *Journal of Finance* (v.32/4, 1977); Alvaro Cuervo-Cazurra, Mary Maloney, and Shalini Manrakhan, "Causes of the Difficulties in Internationalization," *Journal of International Business Studies* (v.38/5, 2007); Elhanan Helpman, Dalia Marin, and Thierry Verdier, *The Organization of Firms in a Global Economy* (Harvard University Press, 2008); Stephen H. Hymer, *The International Operations of National Firms: A Study of Foreign Direct Investment* (MIT Press, 1976); Srilata Zaheer, "Overcoming the Liability of Foreignness," *Academy of Management Journal* (v.38/2, 1995); Georgios I. Zekos, *Economics and Law on Competition in Globilisation* (Nova Science Publishers, 2008).

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Multinational Corporation

Multinational, international, global, or transnational corporations are those that operate in more than one country—not simply exporting goods from one country to another, but offering services in multiple countries or operating production facilities in more than one country. Because the demands of their businesses require them to operate under different conditions within different borders—abiding by local laws and serving different customer bases—their profits and productivity are affected by international matters to a greater degree than those of single-nation companies. Combined with their generally greater wealth, this has tended to involve them in international politics and to make them objects of suspicion. In popular speech, "the corporations" generally implies "the multinational corporations," and especially those that export cultural products from the United States or the West to the rest of the world, or those that control great amounts of natural resources, like the oil companies. These are the companies that have a greater than average impact on world affairs.

The British East India Company is widely considered the first multinational corporation, but it was the advances of the Industrial Revolution—particularly in manufacture and transportation—that paved the way for the modern multinational, just as the internet and the information revolution have led to new forms of multinational operation through online ordering, business process outsourcing, and off-shoring.

Postwar Multinational Corporations

Throughout the 20th century, Americans made great strides in foreign direct investment (FDI), and World War II had a good deal to do with so many of the prominent multinational corporations having American origins. Americans had already made significant progress in reaping overseas profits from domestic innovations, like the Hollywood movies that were shown all over the world. Foreign audiences happily tolerated subtitles or dubbed-in voices in exchange for the much better production values of big-budget Hollywood movies compared to most of the local fare, which is one reason the biggest successes exported from Hollywood were those that made those bigger budgets most obvious: the action movies, thrillers, science fiction movies, and so on. At the same time, the American movie industry specialized from a very early period in the creation and promotion of movie stars, figures whose fame soon outpaced the fame of any one movie.

Other American cultural icons were exported in great numbers as well; having pioneered national advertising in the United States, Coca-Cola began selling its product to the world. Depending on the arrangement (which varied and developed over time), syrup could be manufactured in the United States and shipped elsewhere to be diluted and bottled, or the formula for the syrup could be given to Coca-Cola-owned bottling companies around the world. After World War II, when most of Europe was occupied with recovery, FDI by Americans skyrocketed, accounting for 75 percent of new FDI from the end of the war until 1960. American FDI did not diminish at that point—far from it, it has continued to grow at great rates—but non-American corporations began to engage in it more and more often, such that by the 21st century it had become a worldwide phenomenon.

FDI is the establishing and funding of a commercial enterprise in one country by the citizen of another country, or a corporation from another country—such as an American shoe factory opened in Asia, a Japanese car factory opened in Mexico, or a

Swedish furniture store opened in Detroit. This is the mechanism by which all multinational corporations come into being; the transnational or global descriptor has come into use to imply a way of doing business that transcends national concerns, as opposed to taking an American or Japanese way of doing business and conducting it across the globe. In practice, though, companies are still headquartered in one country or another, and still originate from one culture or another. However, this is arguably analogous to the state-nation relationship in the United States: while a given bank may be chartered in Alabama, or a publisher may be headquartered in New York, its concerns and interests outside of that state clearly outweigh the concerns within that state, and there is likely nothing distinctively Alabaman about a bank with 1,200 branches sprinkled throughout 30 states.

Operating in multiple countries does not mean operating equally in those countries, or divided resources and profits equally among them. From the 1960s on—right after the peak of American dominance of FDI, as the rest of the world started to catch up—labor unions and concerned activists complained that American corporations were using overseas opportunities to move formerly American jobs into countries where wages and other labor costs (benefits, pensions, payroll taxes) were cheaper. In particular, companies were doing this while continuing to rely primarily on American customers, and customers from other wealthy nations, for their income—thus taking American money in, banking greater profits from it, and redistributing their labor costs to other countries. While this began as a labor concern—because companies were not just opening new factories overseas and retaining their existing American factories, they were closing American workplaces and replacing them with cheaper ones elsewhere—it quickly became a national concern, representing a potential drain on American capital and the prospect of the American consumer funding foreign labor with little domestic benefit.

Multinational Corporations Today

Those objections led to the Foreign Trade and Investment Act of 1972, the Burke-Hartke bill, brought before Congress by Representative Burke and Senator Hartke. Protectionist in design, the bill called for greater regulation of the international flow of capital, restricting FDI and creating a Foreign Trade and Investment Commission that would have enforced import quotas by country and category. The bill came right on the heels of the demise of the Bretton Woods monetary policy system, and the same administration that abandoned Bretton Woods—President Nixon's—opposed Burke-Hartke, which came very close to passing. The bill's defeat encouraged multinational activity, even as its near miss encouraged protectionist interests in both political parties. The subsequent 1974 Trade Act preserved some of the import-limiting goals of Burke-Hartke, but little of its sympathy with American workers. It loosened the criteria necessary to petition the International Trade Commission to restrict imports of a good by requiring that the industry in question show that imports are "a substantial cause" of financial troubles that industry faces in the United States. While this protected American companies from foreign ones, nothing was done to protect Americans from the foreign involvements of American multinationals.

Ironically, the automobile industry was at the forefront of both concerns—for every thousand autoworkers complaining that their jobs were in jeopardy because their employer could open a foreign plant with cheap labor, there was an auto executive complaining that Japanese automakers were destroying American industry. The 1980s were the first, and to date only, decade in which more capital was spent on foreigners' FDI on American shores than American companies spent on overseas FDI. Much of this was because of Japanese companies, finally thriving after rebuilding their approach to business and industry in the postwar years, buying out American businesses and opening American factories. For much of the decade, Americans were consumed as much by the economic threat of Japan as the communist-military threat of the Soviet Union. Once associated with cheap, poorly made goods, Japanese industry was now synonymous with efficiency. Images of Japanese workers and executives starting the day with calisthenics, figures comparing the performance of American schoolchildren unfavorably to that of their Japanese counterparts, and cryptoracist descriptions of Japanese rivals as sneaky and ninja-like filled the news, even as American automakers continued to close factories in Michigan in order to move operations to Mexico.

Off-Shoring and Outsourcing

While the original reason to operate in multiple countries was to do business in all of them, over the course of the 20th century the approach developed of exporting labor and other activities in order to maximize profits and efficiency. This quickly became a highly specialized and detailed process. Off-shoring refers specifically to shifting part of a company's operations from one country to another. While this originally was most likely to involve factory labor, where the differences in labor costs would vary considerably from country to country, it applies also to multinational corporations that shift their corporate headquarters (or center of operations for a particular division) from one country to another. While this is still in a sense a shift of labor, it is significantly different from the factory example: executives do not find themselves laid off with new executives hired in the new country, though support, secretarial, and custodial staff very likely will. But because of the high probability of a corporation owning the building in which it is headquartered, moving to a new headquarters likely means using the old building for a new corporate office, retaining the employment of those nonexecutives.

Production off-shoring is sometimes euphemistically called physical restructuring, and involves setting up manufacturing facilities in a country with cheap labor. Many developing countries are destinations for production off-shoring. The job of designing and marketing the product typically remains in the company's home country; once the process of building the product is perfected, it is off-shored, where labor can be had cheaply and needs minimal training. Services off-shoring requires more skilled labor, and is a more recent development. Because India and parts of southeast Asia have a large English-speaking population and low labor costs, they are the destination for most services off-shoring, in which information technology, engineering, customer service, and other tasks are performed by a foreign subsidiary.

Services off-shoring is often used synonymously with business process outsourcing, but outsourcing is different from off-shoring in that it involves hiring a foreign company to do a task, rather than purchasing or building a foreign company for that task. The difference to American labor is not a large one, but outsourcing is available to many more companies—even single-nation ones—than off-shoring is, because a single company can perform outsourced tasks for many client companies. Business process outsourcing (BPO), pioneered in India in the 1990s, involves contracting an outside company to perform customer-service or back office (finance and accounting, or human resources) business processes. This includes customer service and technical support call centers that redirect calls to representatives in India rather than to employees of the company, as well as a wide variety of tasks that do not involve contact with the public and that the public therefore remains largely unaware of. The internet has enabled much of this, allowing sensitive data to be safely communicated instantly to other parts of the world.

BPO has even led to legal process outsourcing and knowledge process outsourcing, BPO subfields in which BPO centers provide legal services or expert knowledge.

International Marketing Research

A number of marketing research companies cater to the special concerns of corporations operating multinationally. Zogby International and SIS International are two of the oldest, both founded in 1984 in New York. Zogby International was founded by political pollster John Zogby, an unsuccessful Democratic candidate for mayor of Utica. Zogby International is still best known for its political polls, and regularly makes headlines as a result of its polling coverage of American presidential campaigns. Zogby International operates in a number of other countries, often as the most reliable or prestigious polling firm, and correctly called major elections in Mexico and Israel, among other places. Like other marketing companies, Zogby is regularly engaged by corporations to manage focus groups and conduct polls to inform decision making such as price-setting, the demographic slant of advertising campaigns, gauging demand of potential products and services or existing products and services in new markets, and so forth. Zogby tends to rely heavily on phone and online polls, which suits some clients better than others.

SIS International was originally founded by Ruth Stanat to provide monthly market research reports to companies expanding into global markets. Beginning in 1990, the company began operating internationally, and has reorganized itself into three divisions: SIS

Intelligence Answering, offering on-demand intelligence services to corporations; SIS International Custom Research, the flagship division, specializing in market entry and market feasibility research to help prepare new enterprises; and SIS Global Research Media, which produces books and other research products, as well as offering custom tracking services. Like Zogby, SIS also offers political polling, but has never been as well-known for it, nor does it make up as significant a portion of its business.

Other major international marketing research firms include Visionagain, a London-based company with American and Indian branches, specializing in the telecommunications and pharmaceutical industries; and SKOPOS Market Insight, founded by psychologists in London, with offices throughout Europe.

Market research of some form is exceptionally important when a company is looking to do business in a new market, whether that means introducing a new line of products or offering their products in a new geographical area. Market research can help find the right angle to attract new customers and establish a brand identity, such as when South Korean auto manufacturer Daewoo expanded into Western countries. It can suggest areas of flexibility and adaptation, such as the plethora of options offered by American food companies throughout Asia: the teriyaki Whoppers, cucumber-flavored Pepsi, and mayonnaise-flavored Doritos in Japan; McDonalds' vegetarian burgers in India, where beef and pork are not served; and Coca-Cola's acquisition of local soft drink brands Limca and Thums-Up in India, in order to avoid direct competition with those well-established products.

International Impact

Multinational corporations often use their resources to attempt to influence change in the world. For instance, Asian countries do not always have—or are not able to enforce—intellectual property law to the same degree as in the West. There is a thriving business in pirated copies of movies and music, with little done about it. Western corporations over the last decade have been trying hard to encourage Asian governments and businesses to crack down on such piracy. Similarly, multinational corporations have pursued international agreements to respect patents and copyright, so that pharmaceutical companies that develop a medicine do not face competition from companies headquartered in countries where the developer's patent is not upheld, and where the medicine could thus be manufactured legally and cheaply by companies that, in the eyes of the developer, do not own it. Other product patents and intellectual property laws protect the interests of apparel companies, software and technology companies, and so on.

Multinational corporations regularly lobby, even in countries where they own no businesses, for favorable industry and environmental regulations and a favorable (or hostile-to-competitors) tariff structure, always seeking to shape the economic environment to their interests. Of course, to an extent lobbying is much like advertising: for every dollar Pepsi spends, Coke spends a dollar to cancel it out, and in the end both stay in the game just to keep the playing field level. In many cases, lobbying works the same way: with tariffs, the importing companies and exporting companies lobby to opposite ends; with regulations, there is quite often a lobbying group that wants the opposite of what the corporation seeks, whether because of labor interests, environmental protection, consumer protection, and so on. For every corporation that markets itself as a producer of enviromentally friendly products in order to attract green dollars, there is another corporation that spent years fighting environmental legislation because of the costs or other consequences—often the very same corporation. Even companies within the same industry can lobby for opposite ends: if Coca-Cola and Pepsi both use vanilla in their formulation but Coca-Cola uses three times as much, it is arguably in Pepsi's interest to see an increased tariff on vanilla beans. This becomes even more true if Pepsi's vanilla beans come from a plantation they own, or if they are pondering a move to vanillin, a vanilla substitute.

Lobbying is not an available tactic in all countries, and sometimes is not effective. In smaller or less developed countries, market withdrawal is sometimes used as a threat: if the country will not adjust its laws or regulations to suit the business, or if it insists on changing them to make them less conducive to the business, then the business will cease operating there. This is most effective when the loss of the corporation's business represents something more than just the loss of jobs—though movie studios have been able to use market withdrawal and tax competition to find the most amenable places to film (leading to Toronto and Vancouver serving as many television shows' New York, for example).

See Also: Antiglobalization Movement; Antitrust Laws; Bretton Woods Accord; British East India Company; City, The; Corporate Diplomacy; Corporate Governance; Corporate Social Responsibility; Dutch East India Company; Economies of Scale; Economies of Scope; Entry Mode; Foreign Direct Investment, Horizontal and Vertical; Globalization; Home Country; Host Country; Internationalization; Joint Venture; Micro-Multinational; Multinational Competitive Disadvantages; Wall Street.

Bibliography. Daniel Drezner, *All Politics is Global: Explaining International Regulatory Regimes* (Princeton University Press, 2008); Barry Eichengreen, *Globalizing Capital: A History of the International Monetary System* (Princeton University Press, 2008); Niall Ferguson, *The Ascent of Money: A Financial History of the World* (Penguin Press, 2008); Parissa Haghirian, *Multinationals and Cross-Cultural Management: The Transfer of Knowledge Within Multinational Corporations* (Routledge, 2008); Gerald L. Houseman, *Economics in a Changed Universe: Joseph E. Stiglitz, Globalization, and the Death of "Free Enterprise"* (Lexington Books, 2008); Nathan M. Jensen, *Nation-States and the Multinational Corporation: A Political Economy of Foreign Direct Investment* (Princeton University Press, 2008); Juan José Palacios Lara, *Multinational Corporations and the Emerging Network Economy in Asia and the Pacific* (Routledge, 2008); Alex Rubner, *In the Twilight of the Multis: The Rise and Fall of the Multinational Corporations* (Pen, 2008); Beth A. Simmons, Frank Dobbin, and Geoffrey Garrett, eds., *The Global Diffusion of Markets and Democracy* (Cambridge University Press, 2008); Paul J. Zak, ed., *Moral Markets: The Critical Role of Values in the Economy* (Princeton University Press, 2008); Fareed Zakaria, *The Post-American World* (W.W. Norton & Co., 2008).

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Mundell-Fleming Model

The Mundell-Fleming model is a theoretical model in international macroeconomics. The model demonstrates that the effectiveness of fiscal and monetary policies in the open economy depends on the exchange rate regime. The Mundell-Fleming model was developed in the early 1960s by Robert Mundell (b.1932, 1999 Nobel Laureate in Economics) and Marcus Fleming (1911–76) of the International Monetary Fund.

From 1946–71, the exchange rates of the industrialized nations were fixed to the U.S. dollar, while the dollar was pegged to gold at $35/oz. This was known as the "Bretton Woods system." During 1950–62, Canada experimented with a flexible exchange rate. During the early 1960s, both the United States and Canada had intense internal debates concerning the appropriate mix of fiscal and monetary policies. Working independently, Mundell (a Canadian) and Fleming sought to answer the following question: how effective are monetary and fiscal policies under fixed and flexible exchange rates?

According to Warren Young and William Darity, Jr., Mundell-Fleming is a special case of a more general open economy model. The name *Mundell-Fleming* was coined by Rudiger Dornbusch, who synthesized the work of Mundell and Fleming during 1976–80. Versions of the Mundell-Fleming model can be found in many textbooks.

Two important cases are: (a) flexible exchange rates under perfect capital mobility and (b) fixed exchange rates under perfect capital mobility. The Mundell-Fleming model is based on Keynesian assumptions: output is determined by aggregate demand, and prices are sticky (inflexible). Individuals hold domestic money, domestic bonds, and foreign bonds. The country under analysis is a small country, which means that it cannot influence the world interest rate. Under perfect capital mobility, there are no restrictions on movements of financial capital. If the domestic interest rate is above the world interest rate, a massive amount of financial capital flows into the country instantaneously, as foreign and domestic residents shift their financial holdings to domestic bonds. This causes a massive increase in the demand for domestic currency. Conversely, if the domestic interest rate is below the world interest rate, a massive amount of financial capital flows out of the country instantaneously, as foreign and domestic residents shift their financial holdings to foreign bonds. This causes a massive increase in the demand for foreign currency. For these examples, we assume that initially, the domestic and world interest rates are equal.

Exchange Rate Regimes

With a flexible exchange rate regime, the exchange rate is set by market forces. An exchange rate appreciation reduces exports and increases imports, and leads to a decrease in the interest rate. An exchange rate depreciation increases exports and reduces imports, and leads to an increase in the interest rate.

For fixed exchange rate regimes, the central bank keeps the exchange rate fixed. If there is excess demand for domestic currency (the domestic currency is undervalued), the central bank sells domestic currency and buys foreign currency. This action expands the money supply, since the public receives new domestic currency (money) in exchange for foreign currency (a nonmoney asset). If there is excess supply of domestic currency (the domestic currency is overvalued), the central bank buys domestic currency and sells foreign currency. The money supply contracts, since the public receives foreign currency (a nonmoney asset), and the central bank receives domestic currency (currency is defined as money only if held by the public). To successfully defend an overvalued currency, the central bank must have large foreign currency reserves; otherwise, it runs out of reserves and is forced to devalue or float the currency (adopt a flexible exchange rate).

Predictions

For case "a" above, under fixed exchange rates and perfect capital mobility, monetary policy is completely ineffective. An increase in the money supply lowers the interest rate below the world interest rate and induces a massive capital outflow. The central bank maintains the exchange rate by selling foreign currency, which leads to a contraction in the money supply. This reverses the original monetary expansion and increases the interest rate. The process continues until domestic and foreign interest rates return to equality, and output returns to its original level.

Under fixed exchange rates and perfect capital mobility, fiscal policy is very effective. Expansionary fiscal policy (lower taxes and/or higher government spending) leads to an increase in the interest rate above the world interest rate, and induces a massive capital inflow. The central bank maintains the exchange rate by buying foreign currency, which generates an expansion of the money supply and a decrease in the interest rate. The process continues until domestic and foreign interest rates return to equality. Thus, the original fiscal expansion leads to a subsequent monetary expansion, which reinforces the original positive effect on output.

For case "b" above, under flexible exchange rates and perfect capital mobility, monetary policy is very effective. An increase in the money supply lowers the interest rate below the world interest rate and induces an exchange rate depreciation. The depreciation leads to an increase in exports. The interest rate increases; this process continues until domestic and foreign interest rates return to equality. Output rises as a result of monetary expansion and the increase in exports.

Under flexible exchange rates and perfect capital mobility, fiscal policy is completely ineffective. Expansionary fiscal policy raises the interest rate above the world interest rate and induces an exchange rate appreciation. The appreciation leads to a reduction in exports, thus reversing the effects on output of the original fiscal expansion. The interest rate declines. This process continues until domestic and foreign interest rates return to equality, and output returns to its original level.

See Also: Bretton Woods Accord; Fixed Exchange Rate; Floating Exchange Rate; Macroeconomics; Open Economy Macroeconomics.

Bibliography. James M. Boughton, "On the Origins of the Fleming-Mundell Model," *IMF Staff Papers* (v.50/1, 2003); Royal Swedish Academy of Sciences, "Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel," Press Release, October 13, 1999, nobelprize.org (cited March 2009); Lance Taylor, "Exchange Rate Indeterminacy in Portfolio Balance, Mundell-Fleming and Uncovered Interest Rate Parity Models," *Cambridge Journal of Economics* (v.28/2, 2004); Warren Young and William Darity, Jr., "IS-LM-BP: An Inquest," *History of Political Economy* (Annual Supplement, 2004).

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Munich Re Group

Known in English as Munich Re, the Münchener Rückversicherung-Gesellschaft (Munich Reinsurance

Company) is the second-largest reinsurance company in the world. It has its headquarters in Munich, Germany, and currently has some 5,000 customers located in 160 countries.

The company was founded on April 19, 1880, by Carl Thieme, the businessman who was also responsible for the establishment of the Allianz insurance company. With the Cologne Re established in 1846 as the first reinsurance company in the world, and another started in Thuringia in 1853, under Carl's father Julius Thieme, Carl Thieme saw an opportunity to establish a business that comes from reinsurance—essentially an insurance company for insurance companies. This allows insurance companies to "spread the risk." The main guiding principle of the company from its foundation was that it had to be totally independent of any risks taken by insurers. This has meant that it only deals with insurance companies, not with the general public. It also refused to be connected with any insurance company. In 1886 Munich Re established an office in Paris, and later, offices in St. Petersburg, Copenhagen, and Stockholm, and eventually London in 1890, opening a branch in the United States in 1899.

Initially many insurance companies did not see it as necessary to be involved in reinsurance; they felt that this would erode some of their profits. However the claims that followed the San Francisco earthquake in 1906 changed this. With massive losses in the earthquake, spread over many companies, only six of them—four U.S. and two English—actually paid their liabilities in full; when they were asked to pay their obligations, four German insurance companies stopped trading in the United States to avoid meeting their obligations, and the Hamburg-Bremen Fire Insurance Company discounted all payments by 25 percent.

Many of the German companies had not recognized the risks from such large exposures, and this led many of them to become involved in reinsurance, with Munich Re picking up much business (as well as having to pay out 11 million marks). It soon began insuring luggage on travels, and in 1910 wrote reinsurance for aviation.

In 1914 Munich Re had annual premiums of some 204 million marks, making it the world leader in reinsurance, with Allianz contributing about a tenth of all its premiums and some 40 percent of its profits. The war, however, badly affected business, with many non-German companies not able to deal with them during the war and not wanting to deal with them afterward. By the early 1920s, the premium for Munich Re had fallen to 65 million marks, with Allianz having managed to take over rivals and double its size. It was not until 1930 that Munich Re was, once again, the leading reinsurance business in the world, with Allianz providing upward of 40 percent of its premiums and a substantial amount of its profits. During World War II, much of the foreign business of the company was transacted by Union Zurich.

After World War II, Munich Re once again faced a slump in business but steadily built it up again, and is now the second largest reinsurance company in the world. This involved work on reinsurance of installations of the petroleum industry, which led to their booklet *Oil at Sea: Hazards, Liability, Insurance* (1980). The company has 43,000 employees (2008) working in more than 50 locations, and has gross revenue of €37.4 billion (2006). It covers reinsurance for 5,000 insurance companies in 150 countries. Nikolaus von Bomhard is the chairman of the board of management. Munich Re was the largest reinsurer for the World Trade Center in New York City when it was destroyed on September 11, 2001. For this, it set aside $500 million to help pay for the loss. In 2005 Gerhard Berz, who had worked for 30 years on geo risks with Munich Re, wrote *Weather Catastrophes and Climate Change: Is There Still Hope for Us?*, published by the Munich Re Group to much acclaim.

See Also: Allianz SE; Company Profiles: Western Europe; Germany.

Bibliography. *Arson* (Münchener Rückversicherungs-Gesellschaft, 1982); Harold Kluge, "Der Einfluss des Geschäfts Der '*Allianz*' Auf Die Entwicklung Der 'Münchener Rückversicherungs-Gesellschaft' In Deren Ersten Fünfzig Jahren (1880–1930)" [The Influence of the Business of *Allianz* on the Development of the Munich Reinsurance Company in its First Fifty Years, 1880–1930], *Jahrbuch fur Wirtschaftsgeschichte* (n.2, 2006); *Loss Adjustment After Natural Disasters* (Münchener Rück, 1982); Munich Re, www.munichre.com (cited March 2009).

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National Accounts

Science advances through the interaction between theory and measurement. Without appropriate measurement, there is no way to assess the accuracy of theory quantitatively. Thus, it is no surprise that efforts to measure economic activity date back centuries. Among the early attempts to gauge national income were those of William Petty in the 17th century. By today's standards, Petty's statistics were extremely simplified, but the genesis of the idea was there. Nearly a century later, François Quesnay developed his Tableau Économique, which analyzed intersectoral flows. Quesnay's Tableau was a forerunner of modern day input-output analysis of the type pioneered by Wassily Leontief and is still practiced to this day.

The next major advances in national income accounting came in the early 20th century. Economists on both sides of the Atlantic began to break down systematically the income and expenditures of the national economy into categories such as consumption, saving, investment, government, and trade. Motivation for the development of the national accounts during this period was the desire among policy makers for accurate, timely information about the performance of the economy during the Great Depression and World War II.

A. L. Bowley and Colin Clark performed some of the early work in this area in the United Kingdom, but British efforts to create a system of national accounts took a giant step forward with the work of Richard Stone. Working with Clark and others in the British government during the World War II years, Stone helped create the major definitions used in national income accounting and set up the basic balance sheet concepts. The basic categories of spending and income were quickly incorporated into the growing body of macroeconomic theory research.

In the United States in 1913, the first director of research at the National Bureau of Economic Research, Wesley C. Mitchell, created one of the first definitive treatises on the business cycle. Though it was not actually national income accounting as we know it today, Mitchell's work aimed to quantify cyclical behavior in different sectors. Mitchell's student Simon Kuznets would carry the work further and complete a system of national accounts that resembles the system currently in use.

Both Kuznets and Stone received the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel (Kuznets in 1971 and Stone in 1984). Stone's Nobel citation specifically singles out his work on national accounts. Kuznets received the prize for his empirical research on economic growth—research that was informed and shaped by his work on national accounts.

Methodology

The crucial measure for any system of national accounts is gross domestic product (GDP), the value of final goods and services produced in a country in a year. GDP has replaced gross national product (GNP) as the primary indicator for countries in the United Nations (UN) National Accounts Main Aggregates Database. The difference between GDP and GNP is simply the net factor flows into or out of the country. Wages paid to foreign workers in the country, for example, are counted in GDP, not in GNP. Another way to look at it is that GNP measures the value of output produced, using domestic factors of production regardless of where they reside. With factor flows making up a significant component of economic activity, the difference between GDP and GNP is no longer trivial, and GDP is a better measure of the economic activity taking place within the country's borders.

In the systems of national accounts used by most nations as well as by the UN, GDP is calculated by three methods: the expenditure approach, the income approach, and the production (or value added) approach. All three methods must sum to the same amount. Each method has several categories of income, production, or expenditure. The precise headings of each of these categories vary among nations. The UN System of National Accounts, for example, lists government expenditures as a subcategory of final consumption expenditures. In the United States, the National Income and Product Accounts (NIPA) system lists government expenditures as a major category heading. When making international comparisons, one must take care to reconcile these minor differences. Sources of international data such as the UN and the Penn World Tables make those adjustments for consistency.

In the expenditure approach for the NIPA in the United States, total spending is broken down according to the type of spending. Consumption refers to spending by households to purchase goods and services for immediate consumption. Gross private domestic investment is the term given to spending by nongovernment entities (generally, businesses) to purchase capital goods. Real estate investment, both commercial and residential, is also included in this measure. The trade account—net exports—refers to the country's external trade balance, generally computed by using data from customs and from the country's balance-of-payments accounts. Government consumption and investment is a top-level category in the NIPA, including all transactions involving purchases of goods and services by any level of government but not including transfer payments such as Social Security payments.

The income approach adds compensation of employees, proprietors' income, rent, corporate profits, net interest, and other sources to arrive at national income. Adding depreciation of capital yields GNP; finally, adding net factor payments yields GDP. The production approach, less commonly cited in the literature, adds the value added by sector. All methods must yield the same result. Because the data come from different sources, some disagreement is inevitable. In the NIPA, a line item called statistical discrepancy, which usually is very small relative to GDP, is included to reconcile the difference between the expenditure and income approaches.

Along with the problem of classifying spending and income, the construction of price indexes often accompanies the task of national income accounting. Additionally, one must recognize that national income accounting and the calculation of GDP are imperfect measures of national welfare. GDP by definition does not count home production, illegal transactions, or the value of leisure time. National income accounting deals only in market transactions and values the goods and services at market prices without offering any normative judgment as to the social value of the activity.

See Also: Business Cycles; Consumption; Economic Indicators; Economic Statistics; Gross National Product; Macroeconomics.

Bibliography. Flavio Comim, "Richard Stone and Measurement Criteria for National Accounts," *History of Political Economy* (v.33, 2001); Solomon Fabricant, "Toward a Firmer Basis of Economic Policy: The Founding of the National Bureau of Economic Research," National Bureau of Economic Research, www.nber.org (cited March 2009); J. Steven Landefeld, Eugene P. Seskin, and Barbara M. Fraumeni, "Taking the Pulse of the Economy: Measuring GDP," *Journal of Economic Perspectives* (v.22/2, 2008); Edward F.

McKelvey, *Understanding US Economic Statistics* (Goldman Sachs Economic Research Group, 2008); New School for Social Research, History of Economic Thought, www.cepa.newschool.edu/het (cited March 2009); Office for National Statistics, *Great Britain, United Kingdom National Accounts 2008: The Blue Book* (Palgrave Macmillan, 2008); Organisation for Economic Co-operation and Development, *National Accounts of OECD Countries: Volume IIIb: Financial Balance Sheets—Stocks, 1995–2006, 2007* (OECD, 2008); Organisation for Economic Co-operation and Development, *OECD Factbook 2008: Economic, Environmental and Social Statistics* (OECD, 2008); Penn World Tables, www.pwt.econ.upenn.edu (cited March 2009); Richard Stone, "The Accounts of Society," *Nobel Lecture*, www.nobelprize.org (cited March 2009); United Nations, "National Accounts: A Practical Introduction," www.unstats.un.org (cited March 2009); World Bank, *2008 Little Data Book: People, Environment, Economy, States and Markets, Global Links* (World Bank, 2008).

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Nationalization

Government ownership of an industry or a formerly private company is known as nationalization. By far the more frequent of the two phenomena is government ownership of an industry. Although some authors, such as Lars Bengtsson, have argued that choice of industries is random, nationalized industries typically are those that government considers to be fundamental to national security (from oil to media) or national income (based on a natural resource that may also be a wasting resource), as well as those that are particularly attractive to foreign direct investment. According to Bengtsson, a nationalized industry can be viewed as a governmental hierarchy, whereas an industry with a strong governmental organization that buys, sells, and/or competes with private actors is called a governmental market system. The government can also govern a market with only private actors through regulations, via a regulated market system.

Amy Chua discussed a different class of nationalization in developing economies, wherein the purpose is discrimination against an economically dominant ethnic minority. Here, market processes of competition and rule of law are manipulated to benefit certain ethnic constituents and to disadvantage others; little or no attempt is made to justify this action in terms of socialist or communist ideology. She cited the ethnically targeted nationalizations and confiscations in postcolonial Burma, Indonesia, Kenya, Malaysia, Pakistan, the Philippines, Sri Lanka, Thailand, Uganda, South Africa, and Zimbabwe.

Although the primary focus of this entry is government nationalization of industry for issues of security, income, state building, or public policy, not nationalization to disadvantage an ethnic minority, the expropriation of private property is very often a consequence.

Precedents in International Law

In his study of nationalization in Latin America, David Schneiderman noted that constitutional rules once expressly enabled state intervention in the market to redistribute wealth through rules permitting the expropriation or nationalization of property, subject, for example, to the provision of "appropriate" compensation, which protected host country governments from the external pressures generated by foreign economic power. In the 1990s, this type of state capitalism fell into disfavor, and the countries of Latin America mostly abandoned the constitutional design mandating public control of the economy or enabling nationalization of key economic sectors.

Today, both expropriation of property and nationalization are prohibited unless they are for a public purpose, nondiscriminatory, and accompanied by the payment of "prompt, adequate, and effective compensation" that is fully realizable and transferable. This perspective is embodied in international law. In a famous case, the Iran–United States Claims Tribunal—created to resolve the crisis between the Islamic Republic of Iran and the United States arising out of the detention of 52 U.S. nationals at the U.S. Embassy in Tehran and the subsequent freeze of Iranian assets by the United States—it was found that property rights must be respected and that compensation must be paid when the alien owner of those rights is deprived of them by acts attributable to a state. Although a revolution does not by itself create liability, neither a revolution nor any other changed political, economic, or social circumstances can be invoked to avoid liability for deprivation of an alien's property that is attributable to the state.

Government's Role in Economic Growth

Despite the ubiquity of government, government as an actor in national economic growth and development has been largely ignored by international business theorists. Government's importance to economic growth was addressed by Bengtsson, who argued that even in many traditionally capitalist countries, the public sector (involving both national and local governments) accounts for one-third to one-half of GNP. Hence, government is an actor in the economy as a whole, having a substantial influence over the governance structures employed through its right of enacting laws. In fact, the government is a more powerful agent of economic activity than any other single agent in most countries, whether their economies are capitalist, mixed, or planned.

In *Storm over the Multinationals,* Raymond Vernon viewed the activities of companies expanding into multiple international jurisdictions as a source of new complications for national policies and programs affecting job creation, inequitable income distribution among classes and regions, the availability of scarce supplies, the functioning of local markets, tax revenue, consumer safety, environmental protection, and national security. Writing at the same time as Vernon and Maurice Bye, George Stigler saw the government regulator as an ineffective functionary, held hostage by the more-moneyed, far more strategic regulated firm. Although international business theorists have largely ignored the role of government, a few—such as Vernon, Bye, and Edith Penrose—have examined the public policy implications of government action, including the decision to nationalize.

Dynamics of Sharing Oil Revenue

In her article "In Profit Sharing Between Producing Countries and Oil Companies in the Middle East," Penrose explored the economic questions involved in the sharing of oil revenue between the oil companies and the producing countries—two interested parties that stand to gain from bargaining. One of the parties invests capital to start the industry and runs it; the other supplies the raw material, which is a wasting asset. Both parties are interested in promoting the most profitable long-run expansion of the industry, but the producing countries' governments are concerned with their own oil production, and the oil companies are concerned with investing in the countries from which they can expect the highest returns. Looking at Penrose's indices of profitability and dividend payout for the oil majors from 1954 to 1966, one can see an increasing loss of profits paid out to foreign investors through dividends. While profits continued to grow, benefiting the majors, the loss of income to the producing countries made the case for government action to ensure profit sharing.

Penrose argued that the proportion of its profit that a company is willing to give up depends on its estimate of the cost of meeting the government's final demands compared with the cost of resisting them, up to the point where the loss in either case makes the business unprofitable. Conversely, a government's demands depend on the loss that it believes it can inflict on the company by not giving or by canceling the concession under negotiation—that is, on its estimate of the value of the concession to the company—or on the amount that it thinks the company is prepared to give up to avert political disturbances and maintain political goodwill. The latter alternative applies in the case of negotiations with a company that is already established in a monopolistic position in the country and in circumstances in which the government cannot run the industry.

For an established oil company, the cost of acquiescing to the government's demands is the additional profit lost in one form or another and the future profits expected. But the cost of resistance is not necessarily the loss of the concession (as it might be in the case of new concession agreements), for the company is in a strong position to precipitate an economic crisis, which may drive the negotiating government out of office. In fact, the company itself need take no positive action, which would force the government to risk political action, arousing the populace against the oil companies, condoning or inciting political harassment, or threatening nationalization on terms unacceptable to the company—steps that, once taken, are not easy to retreat from.

Granting Concessions Versus Nationalizing

If the economy of a country has become heavily dependent on the continuance of oil revenue, and the government cannot run the industry, an existing oil company, if it has a virtual monopoly or acts in concert with other companies, is in an extremely strong position vis-à-vis any single government. The progressive economic deterioration following the cessation of oil revenue is likely to cause greater political difficulties for the government, its eventual repudiation, and the substitution of a government pledged to reestablish the flow of oil revenue.

If the oil companies compete for a concession, the share of profits offered to the government rises to the point where the company obtaining the concession retains only normal profit—the amount of anticipated profit that would just induce the company to enter or continue to invest in the oil industry of the country. In this circumstance, the government would be able to extract nearly the full value of the concession from each company.

If the government can run the industry and obtain revenue not significantly below the revenue it previously obtained from the companies, it is in a good position to nationalize. Forcing the foreign companies out completely would not be to the country's economic advantage, because the country would lose the indirect advantages of increased rate of innovation; freer flow of technical information, leading to the more rapid application of advanced technology; and a greater supply of technical and managerial personnel. In calculating the advantages of nationalization, the government should take into consideration the alternative product that could have been produced by its resources, had they not been directed into oil production, including lost productivity, foreign exchange, and tax revenue.

Impact of Nongovernment Forces

Bye, the French structural economist, investigated the impact on the world economy of the interplay of flows and forces depending neither entirely on government nor on firms. Like Penrose, he focused on wasting assets (oil and mines). Bye warned that given the differential planning horizons of foreign investing firms and national governments, the latter cannot delay public welfare for long-term growth gains that might materialize only after the resource is depleted; it must fund social programs in the short term via taxes, tariffs, and other actions directed at what he called the "large multi-territorial unit." Governments, therefore, have an incentive to drive up extraction revenue to the point where the company obtaining the concession retains only normal profit, which is the amount of anticipated profit just sufficient to induce the company to enter or continue to invest in the country's oil industry. In these circumstances, the government can extract nearly the full value of the concession from each company.

Alternatively, if the government can run the industry itself (nationalize it) and obtain revenue not significantly below the revenue it previously obtained from the companies, it is in an extremely strong position with respect to established oil companies.

It should be noted that nationalization could be done without inhibiting technological progress if the government-owned firm were able to do technology licensing deals or call in consultants. Indeed, given that rival firms stand to make money from technology licensing or consulting services, there is scope for playing them off against one another.

Subsidizing Small Firms

In her introduction to *The Large International Firm in Developing Countries* Penrose quoted Bye:

> The mutual relations of large firms within one and the same industry ... have an impact on the world economy which is at least as important as that which the theory of the market assigns to factor proportion

and observed that his remark "applies with full force to [the oil] this industry ... " The international petroleum industry is dominated by a few large sellers, but operating in the interstices of the oil market are a group of smaller independents, whose activities have a significant influence on the industry. These smaller firms exist largely because of government action. Exploration is expensive, and small firms naturally operate at a cost disadvantage in this area; government subsidies and regulations, however, can create artificial but effective barriers to monopoly by making it impossible for foreign firms to operate without a domestic partner.

Investment in Developing Countries

Thomas Andersson's study of multinational investment in developing countries suggested that the endeavors of many developing countries to obtain benefits such as direct investment, reduced tax rates, and free profit repatriation further reduce their foreign exchange earnings from direct investment, particularly because multinational enterprises tend to repatriate funds rather than reinvest in troubled economies. This situation increases the attractiveness of nationalization, the risk of which again hampers direct investment and other benefits. Since the 1970s, however, nationalization has been in decline.

Andersson's investigation cited access to inexpensive borrowing, a fall in commodity prices, and the increasingly negative impact on direct investment from continuing the practice of nationalization after most other countries had stopped. Nevertheless, the developing countries' need for foreign exchange remains critical, as those countries have accumulated multibillion-dollar debts, and exports to the industrialized economies have been squeezed by import quotas and other kinds of protectionism.

Direct investment is increasingly viewed as a favorable source of foreign capital, employment opportunities, and an increase in output and exports. Hence, host country policies have become more benevolent than ever, and the recent investment revival in developing countries is expected to continue over the next decade. Increasing wealth, privatization, and government openness to foreign direct investment (FDI) have led to increased private investment in previously nationalized businesses.

Economies in Transition

According to UNCTAD, FDI inflows to developing countries and economies in transition (the latter comprising southeastern Europe and CIS) rose by 16 percent and 41 percent, respectively, in 2007 to a new record of $98 billion. Whereas resource-rich countries such as Kazakhstan received more than in 2006, the privatization of formerly state-owned enterprises drove FDI toward southeastern Europe.

FDI inflows to Africa, an estimated $36 billion, were supported by a continuing boom in global commodity markets, but new inbound FDI took place in the banking industry. Egypt, Morocco, and South Africa were the main beneficiaries of FDI inflows.

In Nigeria, the government divested 51 percent of its stake in NITEL, the country's telecom operator in 2006, to Transcorp for $500 million in the hope that privatization would turn around its performance and improve services. Now the government is seeking a new investor to acquire 27 percent of Transcorp's share in NITEL and to buy another 24 percent of the state's remaining 41 percent share and take control of the company.

Women weaving silk cloth in a private enterprise that was once a state-owned workshop in Uzbekistan in 2002.

Since its establishment in 2002, the Kosovo Trust Agency (KTA) has sold a significant share of the country's state-owned enterprises through spin-off and liquidation methods. As of November 2007, KTA administered about 650 state-owned enterprises; about 320 companies were privatized and about 110 firms placed in liquidation.

See Also: Absolute Advantage; Communism; Dependency Theory; Expropriation; New Trade Theory; Privatization; Socialism; State-Owned Enterprises; Transition Economies.

Bibliography. George H. Aldrich, "What Constitutes a Compensable Taking of Property? The Decisions of the Iran–United States Claims Tribunal," *American Journal of International Law* (v.88, 1994); Thomas Andersson, *Multinational Investment in Developing Countries: A Study of Taxation and Nationalization* (Routledge, 1991); Lars Bengtsson, "Governmental Markets, Regulations, and Hierarchies: Building Trust in the Face of Nationalization," *International Studies of Management & Organization* (v.23, 1993); Maurice Bye, "Self Financed Multi-Territorial Units and Their Time Horizon," *International Economic Papers* (1958); Amy L. Chua, "Markets, Democracy, and Ethnicity: Toward a New Paradigm for Law and Development," *Yale Law Journal* (1998); Fath El Rahman Abdalla El Sheikh, *The Legal Regime of Foreign Private Investment in Sudan and Saudi Arabia* (Cambridge University Press, 2003); Edith T. Penrose, *The Growth of the Firm, Middle East Oil and Other Essays* (Frank Cass, 1971); Edith T. Penrose, *The Large International Firm in Developing Countries: The International Petroleum Industry* (Allen and Unwin, 1968); David Schneiderman, "Constitutional Approaches to Privatization: An Inquiry into the Magnitude of Neo-Liberal Constitutionalism," *Law and Contemporary Problems* (v.63, 2000); G. J. Stigler, "The Theory of Economic Regulation," *The Bell Journal of Economics and Management Science* (1971).

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National Regulatory Agencies

Anyone doing business in countries outside the United States can safely assume that they will encounter government agencies regulating every direct and indirect aspect of commerce. Just as is the case in the United States, these agencies enforce regulations governing establishing a business, taxes, costs, prices, financial transactions, pollution, wages, workplace safety, and import and export duties. What the business person cannot assume is that working with regulatory agencies overseas will be the same as it is in the United States. Nor can the person assume that regulations and regulatory agencies will be similar even when nations have a common membership in an organization such as the European Union (EU), Southern Common Market (Mercado Común del Sur [Mercosur/Mercosul]), or Association of Southeast Asian Nations (ASEAN). Each nation's regulations are a product of its history, culture, and politics as well as attitudes toward the conduct of business.

The nation's openness or hostility toward business, and foreigners, its current economic situation, and even the nature of its civil service all have a bearing. A European nation with a long history of equal trade will have regulatory agencies that operate differently from those with a colonial background. In the latter case, an assumption of exploitation by more highly developed nations may create a basic distrust of outside business interests. A nation that, until recently, possessed a state-run, centralized economy may also present challenges to Western business interests. In addition to these factors, one may find regulatory bodies that may require special handling in either intangible or concrete ways to ensure their cooperation. Another factor, one that will apply mostly to nations with a long history of commercial law and regulation, is deregulation. The decrease in regulations governing business can also affect the attitudes of regulatory agencies and their representatives in the interpretation of the remaining rules.

While businesspeople have always had to contend with the regulatory agencies of their own country as well as the nation with which they are doing business, it will not be unusual in the future to incorporate planning for how the business enterprise will contend with international regulatory agencies. Organizations such as the EU, International Monetary Fund (IMF), World Trade Organization (WTO), or the World Bank will increasingly affect international business in the future. One example of national regulation moving to an international basis has been the European Aviation Safety Agency, an EU agency that came into being in 2003 with the aim of replacing the national aviation safety agencies in Europe that have functioned similarly to the U.S. Federal Aviation Administration (FAA). In the gap between national rules and agencies and those international rules and agencies that supplant them, U.S. businesses will have to become familiar with the rules and workings of both levels of agency.

International treaties, the Kyoto Protocols governing emissions is but one example, while not binding on U.S. companies in the United States, can affect overseas subsidiaries. These agreements would be enforced by the regulating agencies in the country where the American concern will do business.

Globalization has accelerated this factor in some part because it creates new situations that were never covered by law and that were never dealt with by regulatory agencies. There can be a regulatory vacuum in these instances, an area where businesses must tread cautiously. The result of new legislation, especially where there appears to be a sacrifice of either national self-interest or an unfair or illegal advantage, can create a backlash. A possibility of that kind of reaction can arise in situations such as occurred in Germany in 2005. In that year, the *Wall Street Journal* reported that lobbying members of Germany's parliament by commercial interests was growing. Along with the growing awareness of this activity was the awareness that it was not adequately regulated. Legislation was subsequently introduced to begin to prevent potential abuse. In a different country with a different set of assumptions and tradition, the effect on regulation and the government agencies charged with carrying them out could have been different, introducing a new complexity for international businesses working in that country.

Regulation does more than impose restrictions and rules on foreign investors and businesses that enter a country to do business. It should also provide the guarantee that the foreign investments will be safeguarded, that investors will receive their returns in a fair way, and that the intellectual property, financial, and other rights will be protected. However, the regulating agencies themselves and the way they function are also important. While regulations may seem clear, how regulatory agencies enforce them may be less clear. The transparency of the process and what is required by the business, what the agency does and how long and complicated its process are critical. In addition to wide latitude given to regulatory agencies in some nations, other organizations that are independent of financial or commercial agencies will also come into play. For example, in Brazil, which is hardly a unique case, there is the law and the regulating agency, but there are also courts at several levels that may provide a third, and often binding, interpretation of the regulations.

Another factor that business people must be aware of is that agencies in various countries will have changing sets of responsibilities and reporting relationships. Unlike the U.S. government in which organizations are relatively stable, a minister's portfolio (that is, his or her set of responsibilities) can change with some frequency. An example of this has been recent changes in the responsibilities of the finance minister in Germany and France. In many instances, there will be a title change accompanied by a shifting of subordinate departments (e.g., workplace safety or ensuring a percentage of native employees). Thus, with a new organizational identity, new reporting relationships, and perhaps new agendas set by the new minister, the manner in which the regulating agency can change can be dramatic. Of course, certain areas such as environmental regulation would be outside the purview of finance ministers and must also be considered.

Prior to contacting and working with regulatory agencies, the businesspeople must have done their homework. Success depends on exhaustive research with legal and business experts, especially when both the regulations and the character of the agencies can change. Illustrative examples, however, can provide an idea of the complexity as well as an idea of the general attitude toward business, especially U.S. business.

France

As an example, many regulatory agencies in France report to the minister of the economy, industry, and employment, who answers directly to the prime minister. While not directing all agencies, this ministry governs most aspects of employment, business, consumer issues, and industry. The U.S. businessperson coming to France must remember that while a great deal of direction comes from agencies at the federal level (i.e., national-level agencies), there are other entities. There are regulatory agencies that function on the state, provincial, or geographical department level. Localized agencies will be encountered not only in France but everywhere. The differences in complexity will vary. The manner in which a company conducts business with all of the agencies in France differs greatly from Germany or, more especially, nations such as China or Russia.

In France, and once again this will be the case in several countries, regulatory agencies have a great deal of leeway in how they enforce the regulations. In France, whether the agency will administer regulations in the spirit or the letter of the law may depend on the ministry or agency policy. In other countries, this will be true as well. Further, in some countries such as Russia or China, an individual government employee can and may choose to exercise a very personal reading of a regulation.

Another consideration for those working with French agencies (as well as those conducting business in other countries) is the degree to which the business person can understand and see the processes the agency conducts. That means understanding process and having the ability to petition when there are differences of opinion. In France, the degree of transparency for international business operations has improved from where it was a few years ago. Further, the standards by which the French will allow U.S. products to enter the country has become more defined and clear. However, and this is common throughout the EU, EU-level standards are in force. In France, as is the case throughout the EU, where there are no EU standards, the national standards as enforced by the nation's appropriate regulatory agency will apply.

Germany

Regulation in Germany can also be quite complicated. As is the case in France, the minister of finance will manage several regulatory agencies. In this case, however, there are several German ministries, all of whom report to the federal chancellor, that contain regulatory agencies. These would include the federal ministries for environment, nature conservation, and nuclear safety; economics and technology; food, agriculture, and consumer protection; labor and social affairs; and economic cooperation and development.

The German business regulatory context is complex. The basis for Germany's economy for a long time has been the export of its products and so the nation has a highly developed sense of international business. Admittedly, this outlook and its history are more developed in what was West Germany than in the former German Democratic Republic, but the gap has decreased. In addition, especially since the arrival of Angela Merkel as chancellor, there has been a movement in Germany to reduce regulations, and as a consequence, the effects of regulatory agencies on international business.

Germany's economy and international commerce, however, are still highly regulated. The number of regulatory agencies is not small and dealing with the extensive bureaucracy that administers what many consider to be an excessive set of regulations can be a complex experience. In Germany, as in other countries, regulatory agencies exist at the federal, state, and local levels, so a U.S. business concern must interact with a wide variety of agencies. Non-German businesses do have opportunities to petition to have grievances resolved and German regulatory agencies have been effective in handling these procedures fairly. Foremost among these has been the Cartel Office, which oversees many aspects of international business.

Despite the heavy degree of regulation and existence of a large number of agencies in these and other Western countries, they are relatively minor compared to the complexity of regulation and its implementation that businesses encounter in Russia.

Russia

In 1991 the Union of the Soviet Socialist Republics (USSR) ceased to exist. Constituent republics such as Latvia, Lithuania, Estonia, Belarus, Ukraine, and others became independent nations. The center of the old USSR, Russia, became what was supposed to be a free-market state. Initially, it appeared to be an excellent place for international companies to establish businesses. What these companies have encountered, however, is a complex system of regulation and bureaucracy. A major contributing factor has been Russia's regulating agencies. There is an increasing body of laws and regulations that are coming into being that are increasingly consistent with international standards such as those required by the WTO. There is still a substantial gap between what the law says and how it is implemented and enforced by the agencies.

The Russian business regulatory bureaucracy can be characterized as having a high degree of capriciousness, obtuseness, and corruption. Any businessperson going to Russia could do worse than to read short stories of Gogol in the Tsarist times, stories of Bulgakov in Stalinist Russia, and some historical research to understand what could be best described as the care and feeding of apparatchiks (the operators within government agencies).

The U.S. government reports that incidences of these difficulties have decreased in recent years, but they still do exist. In 2002 Transparency International placed Russia 21st in a list of 21 nations in what it called its Bribe Payers Index. Placing the country last on the list indicated that it was where a business was most susceptible to paying bribes. The Transparency International 2007 corruption index placed Russia at 146 out of 180 nations. One year before, it had ranked 121 on the list, the recent survey indicating that corruption is becoming substantially worse.

There have been government initiatives to reduce corruption in these agencies. It was declared by President Vladimir Putin in 2006 to be a priority and it is assumed that his successor, Dmitry Medvedev, will continue the effort; the results have not yet shown any substantial improvement.

It ought to be noted that while Russian regulatory agencies have one of the worst reputations in this regard and are presented here as an example, they are not unique. The degree and effects of corruption within regulatory agencies is a factor that must be researched by any company wishing to engage in business in another country.

In the background of Russian regulatory agencies, however, is the body of regulations and laws and how they were introduced as well as the nation's experience with free commerce and its regulations. The Russian Federation in the few years of its existence has undergone dramatic changes. The change from an entirely state-directed central economy to one in which perhaps 75 percent has been privatized has been rapid and uneven. There have been no real precedents in Russian history that could be followed. Additionally, much that underlies Western assumptions of regulation and how it is applied do not exist. Combined with the high degree of politicization that exists in Russia on all levels, from the federal to the local, and a higher degree of local autonomy than one might expect, the application of regulations can vary widely. In addition, there can be what would be illegal or extralegal actions performed by the regulatory agencies themselves, such as expropriations of property or enterprises on the local level.

China

In many ways, the regulatory agency situation in China is similar. There is much confusion in the body of laws and regulations. China's evolutionary path has, like Russia's, been one of transition from a totally state-dominated economy to an international economy where transparent regulations are supposed to be applied uniformly.

Chinese regulatory agencies all ultimately report to the executive branch of the government of the Peoples' Republic of China. The main executive organization, under the premier, is the State Council. It comprises vice premiers and ministers who direct the nation's affairs. Within the State Council, there is the Ministry of Commerce, which contains several departments (both specialized and general) that regulate international trade. Its departments are responsible for areas such as foreign investment, importing and exporting, and WTO affairs. Specialized departments include those dedicated to working in the areas of West Asian and African affairs, international trade and economic affairs, and foreign trade. There is one department that handles only issues relating to Hong Kong, Macao, and Taiwan.

Additionally, the State Administration for Industry and Commerce governs many aspects of market regulation. According to the Chinese government, its current (2008) functions include developing and implementing the laws and regulations for industry and commerce, registration and licensing of businesses, quality of goods, intellectual property, contracts, and investigating illegal activities such as pirating goods.

While the degree of corruption existing in Chinese regulatory agencies may not be as great as is the case in Russia, there is a great deal of variation in how agencies can interpret laws and regulations. This last factor has become a serious matter to some companies looking to do business in China. In addition, the Chinese business environment is so large that the Chinese government cannot enforce all regulations to include those regarding intellectual property rights. The recall of Chinese toys in 2007 because of lead paint is another example of regulations not being enforced by China's regulatory agencies.

Finally, there is the complexity of dealing with many agencies that further complicates the process of working with regulatory agencies. In a situation that exists in some other nations as well, not only do these agencies govern companies coming into China but also domestic Chinese companies looking for international investors. As an example, in 2000, the Chinese government decreed that any Chinese Internet company that wished to sell its shares abroad had to receive approval from three different agencies: the China Securities Regulatory Commission, the Ministry of Information Industries, and direct approval from the State Council itself.

In addition to government regulatory agencies, there are trade associations that either have a voice in regulation and its enforcement or at least some degree of influence. Government regulatory agencies can be assumed to govern every aspect of commerce to include banking and securities as well as manufacturing, providing services, or export and import.

States may claim that they are governed by laws and not people, but the fact will remain for businesspeople that a body of laws and regulations can be interpreted quite differently at different levels and locations. Assuming that business and commercial laws and regulations are enforced uniformly within a country or that all agencies at the federal level will have the same amount of scope for interpretation will be a serious mistake. To understand the nature of these organizations requires extensive research, but there is assistance on a number of different fronts. Organizations such as Transparency International regularly report on the degree of corruption that exists in a nation's governmental agencies that regulate business. Both the U.S. State Department and Commercial Service provide information not only on a nation's commercial laws, but also its regulatory agencies. The World Bank provides an extensive collection of documentation from the perspective of ease of doing business in a country, an index that can provide background on the ease of dealing with a particular nation's regulatory agencies.

See Also: Bribery; Corruption; Deregulation; European Union; Globalization; International Law; International Monetary Fund; Legal Environments; Regulation; World Bank, The; World Trade Organization.

Bibliography. John Braithwaite, *Global Business Regulation* (Cambridge University Press, 2000); Alena V. Ledeneva, *How Russia Really Works: The Informal Practices That Shaped Post-Soviet Politics and Business* (Cornell University Press, 2006); Glenn Morgan and Lars Engwall, eds., *Regulation and Organizations: International Perspectives* (Routledge, 1999); Ito Takatoshi and Anne O. Krueger, eds., *Deregulation and Interdependence in the Asia-Pacific Region* (University of Chicago Press, 2000); Transparency International, www.transparency.org (cited March 2009); Gunnar Trumbull, *Contested Ideas of the Consumer: National Strategies of Product Market Regulation in France and Germany* (European University Institute, 2000); United States Congress, *Commission on Security and Cooperation in Europe. The Yukos Affair and Its Implications for Politics and Business in Russia* (U.S. Government Printing Office, 2007); United States Government International Trade Administration, www.ita.doc.gov (cited March 2009); World Bank, www.doingbusiness.org (cited March 2009).

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Near-Shoring

Near-shoring (also nearshoring) means moving jobs to a nearby foreign country. It is part of the "X-shoring" constellation of terms that include off-shoring (sending work to an overseas location), multishoring (sending outsourced work to several overseas locations based on the job to be done and the relevant skills available), and two-shoring (using both an offshore location and a domestic one).

Near-shoring should be part of a company's global strategic considerations because it can generate many direct material benefits, depending on market conditions:

- It allows a firm to upsize or downsize and to spread risk to other parts of the production chain.
- Wage and costs differentials in near-shore countries make the company more competitive in the home market.
- Nearby countries may have higher-quality workers with multilingual capability.
- Rather than extend operations to a country around the world, a company that employs near-shoring can reduce costs and time to market because of the closer proximity to the home market.
- Time-zone advantages mean easier synchronous communication.
- Nearby markets open new consumer markets.

The question facing owners and managers is how to select a near-shore location. This selection usually is usually made through a high-medium-low market selection matrix for making comparisons. Considerations include size and composition of the near-shore market; economic conditions such as growth rate, tariffs, and trading blocs that the country is part of; labor-market factors, such as skilled employees, wage costs, and employee protection regulation; infrastructure issues such as transportation, electricity, and telecommunications; risk factors such as susceptibility to natural disasters; political stability and corruption; and intellectual property protection.

Especially important for near-shoring decisions are wage costs in important labor sectors. Using the rankings of the top near-shoring destinations from *BusinessWeek* and comparative salaries from *Over-*

seas Digest, an owner/manager of an IT company may want to consider the following near-shoring options:

	Rank	Data Entry	Programmer	Help Desk
Argentina	5.5	$11,397	$26,966	$18,826
Brazil	5.9	$7,809	$18,246	$12,790
Bulgaria	5.8	$11,397	$42,524	$29,791
Chile	5.8	$24,105	$45,389	$31,971
China	6.6	$24,501	$58,007	$40,489
Czech Rep.	5.6	$12,104	$28,558	$19,957
Egypt	5.6	$24,559	$47,931	$33,632
Estonia	5.6	$9,034	$21,252	$14,863
Hungary	5.5	$6,011	$15,428	$11,363
India	6.9	$40,050	$45,208	$31,561
Indonesia	5.9	$25,463	$49,471	$34,703
Mexico	5.7	$12,555	$29,725	$20,748
Philippines	5.8	$12,038	$28,432	$19,863
Poland	5.6	$12,822	$30,341	$21,182
Slovakia	5.6	$35,965	$71,545	$50,257
Thailand	6	$18,843	$35,050	$25,179

Source: *Trade & Industry Development*

See Also: Maquiladora; Off-Shoring; Outsourcing.

Bibliography. Atlantic Canada Opportunities Agency, *Nearshoring Industry in Atlantic Canada* (Atlantic Canada Opportunities Agency, 2007); Stefan Bock, "Supporting Offshoring and Nearshoring Decisions for Mass Customization Manufacturing Processes," *European Journal of Operational Research* (v.184/2, 2008); "International Salary Report," Overseas Digest, www.overseasdigest.com (cited March 2009); "Nearshoring: A Competitive Advantage in a Global Economy," *Trade & Industry Development,* www.tradeandindustrydev.com (cited March 2009); "Top Countries for Outsourcing," *BusinessWeek*, bwnt.businessweek.com (cited March 2009).

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NEC

NEC, formally known in Japan as Nippon Denki Kabushiki Gaisha, is a multinational company, headquartered in Tokyo. Employing 152,922 people, it describes itself as "one of the world's leading providers of Internet, broadband network and enterprise business solutions dedicated to meeting the specialized needs of a diversified global base of customers." To achieve that goal it provides a variety of electronics products and services to include personal computers and peripherals, computer storage, networking equipment and services, and semiconductors. It also manufactures and sells consumer goods such as refrigerators, air conditioners, microwave ovens, and washers. In the year ending March 2008, it announced that its revenues totaled $46.172 billion and its profits totaled $227 million. According to iSuppli Applied Marketing Intelligence, NEC Semiconductors ranked number 13 in the world with 2.1 percent world market share.

The company is organized into three major sections: IT Solutions, Network Solutions, and Electronic Devices. IT Solutions provides both computer hardware and software as well as services. Network Solutions designs and implements network systems to include mobile and wireless systems. Electronic Devices provides semiconductors, displays, and other electronic equipment.

NEC (an abbreviation for Nippon Electric Company) is a very old company. It came into existence in 1898 and was initially a joint partnership with the American Western Electric Company. NEC was the first Japanese company formed with foreign capital; it made and maintained telephone equipment, first phones and switches, and then switchboards. While NEC provided equipment for domestic consumption, it also made equipment for export, starting in 1904, sending equipment to China and then to Korea. The company did not expand in a smooth fashion but rather in fits and starts in direct response to the Japanese government's timetable for providing telephone service to the islands. When the government decided upon expansion, NEC expanded as well. Whenever the government called a temporary halt to installing services, NEC had to pause as well. It was during these pauses that NEC began the practice of importing electric appliances for sale in Japan.

Starting in the mid-1920s, NEC began developing a radio communications business, first broadcasting with imported U.S. equipment in 1925. NEC expanded into developing radio transmitters that were sold in both Japan and China. NEC also developed a method for transmitting photographs by radio, first accomplishing this in 1928.

As was the case with many industries, NEC was taken over by the government during World War II and was run directly by the Army. The NEC factories were severely damaged during U.S. bombing raids and were not able to reopen until 1946. As the 1950s opened, NEC began developments in several areas commencing with research, development, and manufacture of transistors. The company also made radio broadcasting equipment for export, began developing computers (a transistorized model appeared in 1959), and underwater communications cable.

NEC appeared in the United States and Switzerland. In 1978 the first NEC factory in the United States opened. In the 1980s, NEC entered semiconductor chip production, personal computers (entering this market in 1982) while continuing to manufacture telephone systems, and also made consumer goods such as videocassette recorders, televisions, and printers. In this period, NEC was also heavily engaged in the design, development, and manufacture of supercomputers. It was this last area that not only brought a great deal of favorable attention, but also unfavorable notice, namely from the U.S. government.

In 1997 NEC was cited by the U.S. Commerce Department for attempting to dump supercomputers on the U.S. market. The dumping was to be accomplished by underbidding U.S. supercomputer manufacturer Cray on a contract for the American National Center for Atmospheric Research. NEC had bid to provide four 32-processor SX-4 supercomputers in May 1996 for $35 million. Finally, in February 2001, NEC announced a distributorship arrangement with Cray for NEC's SX-Series supercomputers, the same machines that had been at the center of the suit four years before. NEC granted Cray exclusive rights to distribute the SX supercomputers in North America. Further nonexclusive rights for sales in Europe were also granted to Cray. The entire agreement was predicated on the dumping fines levied on NEC to be dropped.

NEC supercomputer development has continued to make substantial gains. NEC created the Earth Simulator (ES), designed to perform global climate modeling. It was at the time (2002–04) the fastest computer in the world. In May 2008 NEC announced that it had been awarded a contract to build a new version for the Japan Agency for Marine-Earth Science and Technology (JAMSTEC). NEC is expanding into other business areas as well. Also in May 2008, it announced that it was going to work with Nissan to produce lithium ion batteries for electric and plug-in hybrid vehicles. The plan calls for an investment of $115 million with the stated goal of producing 65,000 batteries a year by 2011.

In common with its rival Fujitsu, as well as some other Japanese companies, NEC has been plagued with accounting difficulties and accused of fraud. In 2006 the company was forced to admit that as the result of an internal investigation it had discovered that one of its subsidiary companies (NEC Engineering) had recorded nonexistent business deals and had done so for four years.

See Also: Dumping; Fujitsu; Japan; Nissan Motor.

Bibliography. Martin Fransman, *Visions of Innovation: The Firm and Japan* (Oxford University Press, 1999); NEC, www.nec.com (cited March 2009); Yoshitaka Suzuki, *NEC Corporation, 1899–1999* (NEC Corporation, 2002).

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Negotiation and Negotiating Styles

Negotiation is a long-standing art that has developed into a major mode of decision making in all aspects of social, political, and business life. Negotiation may be defined as a process of potentially opportunistic interaction by which two or more parties, with some apparent conflict, seek to do better through jointly decided action than they could otherwise. Negotiation then becomes a structured set of interactions in which parties weigh alternative courses of action, each of which may have different consequences, both for the parties themselves and for others in their social, political, or commercial constituency.

Negotiations do not always lead to decisions or agreements. Other outcomes can include softening or hardening of position, personal understanding between negotiators, and symbolic messages sent to the rest of the stakeholder community.

Distributive and Integrative Negotiation

The two main types of negotiation are distributive and integrative. A distributive negotiation usually involves a single issue in which one person gains at the expense of the other operating under zero-sum conditions. Distributive negotiation involves traditional win-lose thinking. In distributive negotiation, each party has a target point that defines what it would like to achieve. Each also has a resistance point, which marks the lowest outcome that is acceptable. The arc between these two points makes up each one's aspiration range. As long as some overlap exists between each party's aspiration ranges, there exists a settlement range in which each one's aspirations can be met.

Examples of tactics used in distributive negotiation are persuading your opponent of the impossibility of getting to his or her target point and the advisability of accepting a settlement near yours; arguing that your target is fair, whereas your opponent's is not; and attempting to get your opponent to feel emotionally generous toward you and, thus, accept an outcome close to your target point.

In more conflicts, however, more than one issue is at stake, and each party values the issues differently. The outcomes available are no longer a fixed pie divided among all parties. An agreement can be found that is better for both parties than what they would have reached through distributive negotiation. This situation calls for integrative negotiation, which involves a progressive win-win strategy.

Added-Value Negotiation

One practical application of the integrative approach is added-value negotiation, during which the negotiating parties cooperatively develop multiple deal packages while building a productive long-term relationship. It consists of five steps:

1. Clarify interest, with each party identifying each tangible and intangible need. The two parties discuss their respective needs and find common ground for negotiation.
2. Identify options, which involves creating a marketplace of value when the parties discuss desired elements of value.
3. Design alternative deal packages. Each party mixes and matches elements of value from both parties in workable combinations.
4. Select a deal. The parties jointly discuss and select feasible deal packages with a spirit of creative agreement.
5. Perfect the deal. The parties discuss unresolved issues and build relationships for future negotiations.

Strategies for Dealing With Conflict

Individuals in organizations adopt various strategies to deal with conflict, such as:

- Avoidance—based on the assumption that conflict can be handled by avoiding it. Opposing views cannot be heard unless apparatus for their expression exists. There is always the danger, however, that a conflict will be harder to deal with when it does erupt.
- Smoothing—based on the effort to resolve conflict by putting the emphasis on the value of teamwork; the assurance that "we all agree, really"; and an overt, honest attempt to get past the divergence of opinion.
- Forcing—the opposite of smoothing. A party attacks expressions of dissent and deals with conflict by stamping it out.
- Compromise—in which divergence of views is acknowledged and confronted. One possibility is to split the difference. The major drawback of this strategy is that both parties fail to win.
- Confrontation—involves accepting the conflict of opinions or interests, exploring the scale and nature of the conflict, and then working toward an accommodation of the differences that will provide a greater degree of satisfaction of the objectives of both parties than can be achieved by simple compromise. This strategy may be the most productive one in many cases; it offers the opportunity for both parties to win.

Among other things, the benefits of having conflict out in the open appear to derive from (a) full exploration of the issues that the negotiation is intended to address; (b) identification of parties' real concerns (information that is needed if integrative solutions are to be developed later); (c) consideration of more options; (d) a lack of false optimism; and (e) enhanced feelings of empowerment and procedural justice.

The Five Steps of Negotiation

The process of negotiation can be viewed as being made up of five steps:

- Preparation and planning. Before the start of the negotiation, both parties need to do their homework. What are the nature of the conflict and the history leading up to this negotiation? Who is involved? What do the parties want from the negotiation, and what are their goals? Each party's assessment of the other party's goals is very useful, because each party can anticipate its opponent's position and therefore is better equipped to counter the opponent's arguments with the information that supports its own position. When this type of information is gathered, it should be used for the development of a strategy.

  As part of the strategy, each party needs to determine both parties' Best Alternative to a Negotiated Agreement (BATNA). The BATNA determines the lowest value acceptable by the party for a negotiated agreement. Any offer the party receives that is higher than its BATNA is better than an impasse. Conversely, each party should not expect success in the negotiation effort unless it is able to make the other party an offer it finds more attractive than its BATNA.
- Definition of ground rules. When the development of the strategy is complete, each party should define the ground rules and procedures with the other party over the negotiation itself. Who will do the negotiating? Where will it take place? When will it take place, and what time constraints, if any, will apply? To what issues will the negotiation be limited?
- Clarification and justification. When initial positions have been exchanged, both parties will explain, amplify, clarify, and justify their demands. This exchange provides each party an opportunity for educating and informing the other on the issues, why they are important, and how the party arrived at its initial demands.
- Bargaining and problem-solving. The essence of the negotiation process is the actual bargaining in trying to reach an agreement.
- Closure and implementation. The final step in the negotiation process is formalizing the agreement and developing any procedures that are necessary for implementation and monitoring.

Negotiating Styles

One obvious method for achieving an integrative solution is to suggest that this solution will be a product of the personalities or management style of the individuals involved in negotiation. Along these lines, a range of individual differences have been used as a basis for predicting which style a particular negotiator's behavior will fall into. Most notably, one scholar distinguished among four types of motivational orientation toward a particular conflict: individualistic, altruistic, competitive, and cooperative. These orientations differ in the degree to which individuals are assumed to show concern for their own and others' outcomes. Individualists are assumed to be concerned primarily with maximizing their own gain with no regard to others, altruists with maximizing others' gain with no regard to themselves, competitors with

Some cultures are more willing to make concessions than others, including Norwegian, North American, and Arab groups.

maximizing their own gain at the expense of others, and cooperators with maximizing their own gain as well as that of others. Accordingly, individuals with a cooperative orientation are viewed as holding the key to the discovery of integrative solutions, provided that their opponents also have the same orientation.

Along very similar lines, other scholars developed a dual-concern model that differentiates among individuals on the basis of their conflict style. This style is viewed as being the product of two independent personality variables: concern for self and concern for others. Concern for neither the self nor for others is associated with inaction, concern for others but not the self with concession making, concern for self but not others with contending, and concern for both the self and others with problemsolving.

Third-Party Negotiations

Occasionally, individuals or group representatives reach a statement and are unable to resolve their differences through direct negotiations. In such cases, they may turn to a third party to help them find a solution. Four basic third-party roles exist:

- A *mediator* is a neutral third party who facilitates a negotiated solution by using reasoning and persuasion, suggesting alternatives, and the like. Mediation is effective when the conflicting parties are motivated to bargain and resolve their conflict, when conflict intensity is not too high, and when the mediator is perceived as being neutral and noncoercive.
- An *arbitrator* is a third party with the authority to dictate an agreement. Arbitration can be voluntary or compulsory. The big advantage of arbitration is that it always results in a settlement.
- A *conciliator* is a trusted third party who provides an informal communication link between the negotiator and the opponent. In practice, conciliators typically act as more than mere communication conduits. They also engage in fact-finding, interpreting messages, and persuading disputants to develop agreements.
- A *consultant* is a skilled and impartial third party who attempts to facilitate problem solving through communication and analysis. The consultant's role is not to settle the issues but to improve relations between the conflicting parties so that they can reach a settlement themselves. This approach has a longer-term focus, as it tries to build new and positive perceptions and attitudes between the conflicting parties.

Cross-Cultural Issues in Negotiation

Researchers generally agree that significant cross-cultural differences occur in several negotiation behaviors. Some scholars categorize these differences as follows:

- Persuasion styles, such as rational argument (North Americans) or affective, based on feelings (Arabs)
- Confrontation versus avoidance, such as confrontation in France and the United States, and avoidance in Japan
- Initial positions, which are extreme for Russians, Arabs, Chinese, and Japanese, and moderate for North Americans
- Concession patterns, in which some cultures are reluctant to make concessions (Russians) compared with those that are likely to do so (Norwegians, North Americans, Arabs, and Malays)
- Nonverbal behavior, such as silence (used most by the Japanese and least by Brazilians) and touching (used most by Brazilians and least by the Japanese)

These extensive and significant differences in negotiation behavior create cultural barriers that can make cross-cultural negotiation very difficult. Thus, negotiators who are unfamiliar with these barriers are likely to leave the bargaining table confused and frustrated, and escalation of conflict may follow. Negotiators, therefore, must be trained in cross-cultural negotiation to reduce the impact of barriers, such as prejudice, stereotypes, misunderstanding, and communication breakdown.

See Also: Arbitration; Decision Making; Mediation.

Bibliography. Jacob Bercovitch and Scott Sigmund Gartner, *International Conflict Mediation: New Approaches and Findings* (Routledge, 2009); Barbara A. Budjac Corvette, *Conflict Management: A Practical Guide to Developing Negotiation Strategies* (Pearson Prentice Hall, 2007); Tricia S. Jones and Ross Brinkert, *Conflict Coaching: Conflict*

Management Strategies and Skills for the Individual (Sage, 2008); D. M. Kolb and J. Williams, *The Shadow Negotiation* (Simon & Schuster, 2000); D. A. Lax and J. K. Sebenius, *The Manager as Negotiator* (Free Press, 1986); R. Lewicki, *Decision-Making in Conflict Situations* (National Institute for Dispute Resolution, 1985); William Hernández Requejo and John L. Graham, *Global Negotiation: The New Rules* (Palgrave Macmillan, 2008); Christina J. Schneider, *Conflict, Negotiation and European Union Enlargement* (Cambridge University Press, 2008); Alice F. Stuhlmacher and Melissa G. Morrissett, "Men and Women as Mediators: Disputant Perceptions," *International Journal of Conflict* (v.19/3, 2008); Lynn M. Wagner, *Problem-Solving and Bargaining in International Negotiations* (Martinus Nijhoff Publishers, 2008).

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Neocolonialism

The study of neocolonialism involves the exploration of aspects of strategic and economic dominance of former colonial dependencies. Neocolonialism highlights the fact that colonialism and imperialism do not simply have a historical dimension. Rather, the political economy of power and economic relations in some cases takes the form of a continuation of colonial and imperialist interdependencies. Postcolonial dependencies could include activities such as the nomination of puppet governments, control of the development pace and direction of the developing nation, and exploration of exclusive trade relationships.

Neocolonialist discourses argue that dominance over legal, military, cultural, and political issues did not stop with the formal European abandonment of their colonies and/or the independence movements that found voice in many foreign-ruled countries. In some cases, the forms of dominance simply became more informal and indirect.

History of Neocolonialism

In 1955 an Asian-African conference was held in Bandung, Indonesia, at which representatives of formerly colonized nations collectively denounced their former Western imperialist/colonial domination. Predominant objectives were decolonization, national sovereignty, and independence; a voice in their respective nations' development; and a strategic role on the world stage.

By the 1960s many former colonies had become independent, both politically and legally. It was then that use of the term *neocolonialism* became widespread. A famous proponent was Kwame Nkrumah, the first prime minister and later president of Ghana, who, while leading his country to independence, recognized that in spite of a country's formal independence and sovereignty, its economic and political system frequently continued to be directed from the outside. Often it was no longer military but monetary power that determined the continued imperialist dominance of the former colonial states—economic power exercised by pressuring the formerly colonized state to purchase products from its former colonial power.

Within an almost exclusive trade relationship such as this, neoliberalism, free market mechanisms, and competition are invalidated at the expense of the local economy in the formerly colonized state. Moreover, developing countries may be unable to set prices for their natural resources that may be in high demand in the colonial nations, perhaps resulting in a divergence of local markets' needs, production, and low labor costs.

Third World Development

Following the Bretton Woods agreement, the introduction of an international monetary system, and the oil crisis of the 1970s, many Third World countries had to postpone their development strategies; the creation of a global capitalist market favored the hegemony of developed countries. Small developing countries were not yet able to compete with the bigger and richer countries, which determined the rules of this international system. World capital and world economies came under the control of the International Monetary Fund (IMF), the World Bank, and the General Agreement on Tariffs and Trade (GATT). The United Nations entered world politics. Through these multiple institutions, many developed nations, foremost of which was the United States, were able to exercise control of world capital.

As later studies would reveal, the import substitution strategy regularly prescribed for developing countries as a means of improving their underdeveloped economies resulted in (a) developing countries focusing on the production of finished goods, with accompanying high import duties to protect the local industries, and (b) multinational companies (MNCs) subsequently exporting lower-import-duty machinery and technologies. Increasing foreign direct investments (FDI) created new debt and technological and structural dependencies of neocolonized countries on foreign capital. It also resulted in the neocolonization of developing countries by international economic powers.

The Neocolonial State

When it comes to strategic dominance in the neocolonial state, proimperial civil servants can control state issues such as exchange rates, fiscal policy, allocation of resources, foreign investment, and a pluralism of legal environments in favor of the colonial powers. Regarding foreign-policy issues, a danger exists that the country will be incorporated into the imperial power's geopolitical and imperialist aims instead of addressing its own economic, political, and developmental needs. Development goals, including the improvement of living standards, increasing access to education, and the creation of more jobs might become secondary considerations if the neocolonial state is not left to establish its priorities.

Voices from outside the neocolonial states insist that the former colonies should focus first on their agricultural sectors and second on industrialization, to ensure that their people have enough to eat. Such a view is often rejected by the leaders of developing countries, who argue that it would take them forever to feed and to increase the living standards of all their citizens. Industrialization and foreign trade, however, cannot be postponed; otherwise, the gap between the developing and the developed countries will increase, with dependencies on manufactured products growing exponentially.

Outside Cultural Influences

Certain development aid or loan programs have been criticized for forcing former colonial territories to agree to financially or ideologically unfavorable conditions. The neocolonial dependencies of Africa, Asia, the Caribbean, and Latin America do not stop there. Cultural influences, such as access to news, information, and media, can promote imperialist popular cultures and zeitgeist, subsequently increasing the sale of said media and cultural products at the expense of the creation and promotion of local or regional cultures and tastes. This particular notion of cultural imperialism, which became popular in the 1970s, embodies domination by international media corporations and the introduction of specific cultural values by a dominating foreign force. Clearly, cultural imperialism has vital social and economic consequences for the local cultures.

Academic discussion and analysis of the continuation of colonial dependencies revolves around theories of development and dependency. The prevalence of rich developed countries' self-interests in international politics and the rise of free-trade imperialism are discussed in World Systems Theory. Modernization theorists argue that the development of developing nations will occur gradually, similar to the development processes that many of the developed countries experienced in the past.

Colonialism Defined

Understanding the political economy of neocolonialism requires understanding its antecedent. The term *colonialism* often refers to European colonialism, both classical and modern. In classical Greek, *colonialism* means "people settling down away from home and the administration and governing of such settlements." Greek colonization had a regional character, with new settlements spread around the Mediterranean and Black seas. In contrast to the more economic-oriented Greek colonization, the Roman Empire pursued foreign settlements more on the basis of strategic and political control of conquered territory and the expansion of its empire.

The Golden Age of the 15th and 16th centuries heralded a period of European overseas expeditions undertaken in search of spices, slaves, food, and territories. Asia and Latin America saw a rapid increase in the number of foreign settlers, tradesmen, adventurers, missionaries, and diplomats, each group employing economic or military power in its attempt to exploit and fleece the native population. In later years, some of these settlements were controlled and administered by new immigrants, who in some cases sought independence of their own. In the United States, for example, former colonizers Britain and France strongly opposed such a move but, as history shows, unsuccessfully.

In contrast, modern colonialism refers to colonial domination not mainly through economic or military power settlements, but through expansionist imperial control from the outside—from the colonizing country. The positions of many high-ranking civil servants and senior administrative roles of the colonized territory are filled by representatives or delegates of the colonizing nation. In Latin America and Asia, many of these colonies remained under colonial rule and administration until the 20th century.

Imperialism Defined

Colonialism is often associated with imperialism. Whereas the former addresses one specific form of foreign domination (i.e., colonial control), imperialism encompasses a wide range of commands by a foreign power, including military, economic, and political. The concept of imperialism, which appears to have originated during the times of Napoleon I (1769–1821) and Napoleon III (1808–73) of France, soon found its way into the vocabulary of the expansionary empire of Great Britain. Whereas imperialism originally was characterized as political control over a foreign territory, later it extended to include economic and technological control.

The economic causes of imperialism had their genesis in (a) the economic problems that beset Europe in the 19th century and the need to safeguard the import flows of agricultural products from overseas territories, and (b) the protection of the selling markets for Europe's own industrial products. The *dependentistas* (Latin American dependency theorists in the 1960s and 1970s) not only recognized the significant role that economic dependency was playing, but also highlighted the fact that Western capitalism actually increased underdevelopment in formerly colonized countries. Later research expanded the concept of imperialism to cultural imperialism and the ecological aspects of imperialism.

See Also: Dependency Theory; Development Assistance; Modernization Theory; Underdevelopment.

Bibliography. Ankie Hoogvelt, "Globalization and the Postcolonial World," in *The New Political Economy of Development*, 2nd ed. (Palgrave, 2001); Ilan Kapoor, *The Postcolonial Politics of Development* (Routledge, 2008); Albert Memmi, *Decolonization and the Decolonized* (University of Minnesota Press, 2006); Theodore H. Moran, "Multinational Corporations and Dependency: A Dialogue for Dependentistas and Non-Dependentistas," *International Organization* (v.32/1, 1978); Kwame Nkrumah, *Neocolonialism: The Last Stage of Imperialism* (Thomas Nelson and Sons, 1965); Thomas Sebastian, *Globalization and Uneven Development: Neocolonialism, Multinational Corporations, Space, and Society* (Rawat Publications, 2007); John Springhall, *Decolonization Since 1945: The Collapse of European Overseas Empires,* Studies in Contemporary History (Palgrave, 2001); Corrine M. Wickens and Jennifer A. Sandlin, "Literacy for What? Literacy for Whom? The Politics of Literacy Education and Neocolonialism in UNESCO and World Bank–Sponsored Literacy Programs," *Adult Education Quarterly* (v.57/4, 2007).

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Neomercantilism

Deriving its name from mercantilism, the political economic philosophy characterized by the desire of nations to enrich themselves through the control of trade, neomercantilism is a similar philosophy modified to fit the modern world. Whereas mercantilism generally refers to the 16th through 18th centuries, neomercantilism usually is considered to span the 19th century through the present, especially the post–World War II period. In that long span of time, the precise character of what might be called neomercantilism has changed. One common thread, however, is that neomercantilism deals with an industrial world as opposed to the pre–Industrial Revolution version of mercantilism.

Modern neomercantilism is diametrically opposed to the philosophy of neoliberalism. The neoliberal political economic philosophy is one of free markets, deregulation, and unfettered trade. The policies of the Washington Consensus, as outlined by John Williamson, are a fairly comprehensive statement of the basic neoliberal philosophy. Modern neomercantilism, like its intellectual predecessor, has at its core a belief that active direction of international economic relations yields superior outcomes relative to the more laissez-faire neoliberal approach.

Neomercantilism in American History

In his study of the American Revolution, John Crowley places the early United States in the context of global trade. His thesis is that the early United States valued its trade relations with Britain that had been forged in the colonial era. He describes the colonists as neomercantilists, not yet ready to face the harsh environment of free trade. It should be pointed out that Crowley's view is not without controversy, as it overturns the conventional view that the early United States was born out of resistance to the trade practices of the British (e.g., the Navigation Acts) and a commitment to the classical liberal ideas of Adam Smith. Nonetheless, the fledgling American republic had reason to be concerned about being cut loose from the relative protection of the British Empire and its important trade connections. Meanwhile, as the 19th century began and the Industrial Revolution got under way, the British enjoyed the benefits of their hegemony, which allowed them more freedom to trade.

By the late 19th and early 20th century, the United States was getting set to surpass Britain at the top of the economic ladder. In this rapidly changing economic environment, the United States was quite successful at consolidating its power and hegemony both as an economic and military power. It did not accomplish this success solely through unfettered markets and commitment to neoliberal ideals, however. The trade negotiations with and foreign investment in the Kingdom of Hawaii are examples of what could be considered neomercantilist policy that helped the United States obtain economic and military power and influence in the South Pacific.

U.S. Hegemony After World War II

After World War II, U.S. hegemony was assured, and the nation took the central role in the Bretton Woods system of fixed exchange rates. It was at this point that the U.S. dollar became the world's reserve currency. Bretton Woods tied the world currency system to the dollar, and the United States took on the responsibility of maintaining that reserve currency and therefore ensuring the stability of the system as a whole.

Being the provider of the world's reserve currency had certain advantages. Like Britain before it, however, the United States found itself limited by its role as the world economic leader. It could not run persistent trade or budget deficits without putting serious strain on the dollar, and it was coming under pressure from neomercantilist policies in Europe and Japan. Ultimately, this pressure proved to be too much, and the dollar peg had to give way. As Bretton Woods broke up, however, new economic powers were rising and were giving credit to neomercantilist policies for their success.

The Rise of Asian Economies

Japan, Korea, and Singapore were among the Asian countries with the most active industrial policy. In their period of fast growth in the 1960s through the 1980s, government and business worked together to increase national welfare. A heavy dose of central planning was involved, but it was informed by market prices and executed in the context of global markets and participation in bilateral and regional trade agreements. In a world in which international institutions limit a country's ability to use outright trade protection, the use of subsidies, industrial policy, and managed trade characterize modern neomercantilism.

More recently, China, with its evolving market economy and firmly controlled central government, has been cited as an example of a neomercantilist country. China is accumulating reserve currencies, attracting foreign capital, and experiencing fast growth in its export sector. Currency policy, rather than outright trade protection, becomes the dominant policy tool in this modern form of mercantilism.

Neomercantilism in Economic Literature

Although the term *neomercantilism* is often used in international relations, it is seldom used in economic literature, likely because of the negative connotation associated with the mercantilism of the 16th through 18th centuries. Opposition to neoliberalism and the Washington Consensus in economic literature shares some of the features of neomercantilism (e.g., advocating national industrial policies, capital controls, and managed trade) as described in the international relations literature without necessarily using the neomercantilist term. Advocacy of such policies in the economic literature tends to be more benign—that is, focused on bringing stability and poverty relief to the Third World—rather than focused on gaining international military might, as under traditional mercantilism.

See Also: Asian Tigers; Bretton Woods Accord; China; Dollar Hegemony; Industrialized Countries; Mercantilism; Reserve Currency; Trade Balance.

Bibliography. John Crowley, *The Privileges of Independence: Neomercantilism and the American Revolution* (Johns Hopkins University Press, 1993); Ceyhum Bora Durdu, Enrique G. Mendoza, and Marco Terrones, *Precautionary Demand for Foreign Assets in Sudden Stop Economies: An Assessment of the New Mercantilism* (National Bureau of Economic Research, 2007); Paolo Guerrieri and Pier Carlo Padoan, "Neomercantilism and International Economic Stability," *International Organization* (v.40/1, 1986); Gerard M. Koot, *English Historical Economics, 1870–1926: The Rise of Economic History and Neomercantilism* (Cambridge University Press, 2008); John McLaren, "Size, Sunk Costs, and Judge Bowker's Objection to Free Trade," *American Economic Review* (v.87/3, 1997); Patrick Karl O'Brien, "Intercontinental Trade and the Development of the Third World Since the Industrial Revolution," *Journal of World History* (v.8/1, 1997); Eul-Soo Pang, "AFTA and MERCOSUR at the Crossroads: Security, Managed Trade, and Globalization," *Contemporary Southeast Asia* (v.25/1, 2003); John Williamson, ed., *Latin American Adjustment: How Much Has Happened?* (Institute for International Economics, 1990).

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Nepotism

Nepotism is the favoring of an employer's relatives and friends in the workplace. The relative or friend is hired solely on the basis of kinship, regardless of any regard for the ability to do the job. The word *nepotism* is derived from the Latin word *nepos,* which means "nephew" or "grandchild." The term came into use in the late Middle Ages from a practice of popes and bishops. Since they had taken a vow of chastity they normally had no children of their own, but they often had nephews to whom preferment was given in ecclesiastical employment. Some nephews preferred became cardinals. At least one, Rodrigo Borgia (1431–1503) became a pope (Pope Alexander VI). The general practice was outlawed in canon law by the papal bull, *Romanun decet Pontificem* (1692), issued by Pope Innocent XII.

Hiring family members is an expected aspect of many cultures around the world. The ties of blood create responsibilities for the welfare of family members, and giving them a job becomes very important to the solidarity of kinship relations. In societies where extended families, which may be clans or tribal, are the primary social structure, the practice of nepotism is either common or an expected practice. The practice in the Third World by locals can have a negative effect because it creates a dead weight of incompetence among job holders who have demonstrated no merit. Globally it is a not unusual for smaller companies and many nonprofit organizations to hire family members. Children may learn the family business by doing paid jobs.

Managers from Western countries where nepotism is not the standard practice have at times had to yield to local practices and hire numerous family members. When commercial employers hire people who are related to each other, though not to the employer, it can have the benefit of making leading family members responsible for other family members. The steel industry in the United States long practiced hiring members of families recruited from eastern and southern Europe because these families had close ties and would discipline their relatives if their jobs were put in jeopardy by the misbehavior of junior family members.

The opposite of nepotism is the creation of a meritocracy, where those with the most abilities are hired because it can be demonstrated by examinations or by their performance records. It is often the case that talent in high-performing individuals is found in their offspring, so that the practice of hiring the children of high achievers is sometimes simply allowing merit to have an opportunity. Among Protestant ministers there have been families that have produced excellent ministers for generations.

Nepotism in Government

In the United States some states and some federal practices limit nepotism. It is commonly denounced for political reasons, as happened when President John F. Kennedy appointed his brother Robert Kennedy to be Attorney General. Elsewhere in the world there has always been a tendency toward dynastic succession. The succession in North Korea, Syria, Azerbaijan, and elsewhere has been that of father following son as his successor.

Wives have also followed husbands even in situations where they were elected by the people. In Trinidad and Tobago Patrick Manning simply appointed his wife Hazel Manning to the Cabinet for two terms. And nearby in Cuba Fidel Castro was succeeded by his brother Raul Castro. These and many other examples around the world create monarchial dynasties in what are nominally republics. Business hiring is often expected to follow the example of the political leadership. Nepotism often is accompanied by negative effects such as bribery, favors or delays in bureaucratic decision-making by those whose jobs depend upon kinship.

Business hiring is usually viewed as purely an economic decision, unlike some governmental hiring even in the United States. However, business hiring in the Third World may be unintentionally very political if it involves hiring members of different ethnic groups. The income and prestige of these jobs can change the balance of power between the groups involved and threaten to stimulate more ethnic conflict.

See Also: Corruption; Guanxi; Risk Management; Taxes.

Bibliography. Adam Bellow, *In Praise of Nepotism: A History of Family Enterprise from King David to George W. Bush* (Random House, 2004); Khai Sheang Lee, Guan Hua Lim, and Wei Shi Lim, "Family Business Succession: Appropriation Risk and Choice Successor," *Academy of Management Review* (v.28/4, 2003); Tatu Vanhanen, *Ethnic Conflicts Explained by Ethnic Nepotism* (Emerald Group Publishing Ltd. 1999); Tatu Vanhanen, *Politics of Ethnic Nepotism: India as an Example* (Apt Books, 1991).

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Nestlé

Nestlé, which specializes in sales of processed food, traces its origins to the Farine Lactée Henri Nestlé, founded in 1866. Heinrich Nestle (1814–90), the company's founder, was born in 1814 in Frankfurt-au-Main, Germany; he was apprenticed to a pharmacist, learning how to produce chemicals and make up prescriptions. He moved to Vevey, Switzerland, and there changed his name to Henri Nestlé, changing his Christian name to a French one and adding the acute accent to his surname. He became very interested in rapeseed oil, which he manufactured and used for oil lamps, and in the manufacture of liqueurs and absinthe.

During the 1840s, Nestlé established a business making and selling carbonated mineral water and lemonade. In 1847 he was forced to stop selling mineral water, and 10 years later, he was focusing on sales of fertilizers and gas lighting equipment. During this time, he became interested in the development of infant formula due to the high infant mortality rate at the time. Half of his own siblings had died when they were young.

When some mothers were unable to breastfeed children, they generally used a mixture of cow's milk, sugar, and wheat flour. Nestlé decided to manufacture his own milk formula, removing acid and starch to make it easier for babies to digest. To sell it, he made it in a powdered form as Farine Lactée Henri Nestlé (Henri Nestlé's Milk Flour), which became the name of the company. By the mid-1870s, the product was being sold throughout the United States as Nestlé's Infant Food. Soon afterward, Henri Nestlé-Ehmant, as he was then called, retired to Montreux and then to Glion, where he lived in what became known as Villa Nestlé until his death in 1890.

Processed Foods

In 1905 Farine Lactée Henri Nestlé merged with a rival, the Anglo-Swiss Milk Co., which was established in 1866 by Charles A. Page and George Page, brothers from the United States, at Cham, Switzerland. Together, the two companies had competed in the manufacture of milk formula; together, they formed Nestlé, which built on the strengths of both businesses to manufacture milk products, confectionary items, bottled water, ice cream, coffee, food seasonings, and pet foods. The companies also had the rights to manufacture chocolates as Peter, Kohler, Nestlé, and Cailler. In 1927 the firms bought from Gerber & Company AG the right to make cheese. Then they moved into the making of instant coffee, which was sold under the name Nescafé

Through acquisitions, Nestlé has grown to offer a vast number of brands and products tailored to markets around the world.

and is now one of the most profitable and best-known lines in the company.

The company later grew larger with the purchase of Fabrique de Produits Maggi SA in 1947. In 1960 it took over Crosse & Blackwell (established 1830) and its affiliated companies, which operated in Great Britain, Australia, South Africa, the United States, and many other parts of the world. Gradually, Nestlé started buying up other European brands, including Vittel in 1990 and Perrier in 1992. In 1998 it bought Sanpellegrino, Rowntree Mackintosh, and Spillers Petfoods. In addition, it bought several U.S. companies, including Carnation Co. After the purchase of Ralston Purina in 2002, a new division of Nestlé was established, called Nestlé Purina PetCare. Then Nestlé expanded into frozen food with Chef America, Inc.

Nestlé, which maintains its headquarters in Vevey, currently employs 276,000 people (2007) and has assets of $129 billion, with operating income of nearly $17 billion and profit of $12 billion.

See Also: Switzerland; Western Europe.

Bibliography. Mark Casson, ed., *The Oxford Handbook of Entrepreneurship* (Oxford University Press, 2006); Jean-Louis Flandrin and Massimo Montanari, *Food: A Culinary History From Antiquity to the Present* (Columbia University Press, 1999); Otto F. Hunziker, *Condensed Milk and Milk Powder, Prepared for the Use of Milk Condenseries* (Read Books, 2007); Albert Pfiffner and Hansjörg Renk, *Wandel als Herausforderung: Nestlé 1990–2005* [Change as a Challenge] (Verlag Neue Zürcher Zeitung, 2007); Oliver F. Williams, *Peace Through Commerce: Responsible Corporate Citizenship and the Ideals of the United Nations Global Compact,* The John W. Houck Notre Dame Series in Business Ethics (University of Notre Dame Press, 2008).

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Net Capital Outflow

Net capital outflow is a situation wherein the amount of money country A invests in other countries exceeds the amount these countries invest in country A. When this happens, the net capital outflow is positive. If the opposite is the case—when the investment by other countries in country A exceeds A's investment in other countries—the net capital outflow is negative. These investments include foreign direct investment (when, for example, Ford Motor Group acquires a plant in Britain) and portfolio investment (for example, the purchase of British company shares by American residents).

Positive net capital outflows mean that the funds owned by a country exceed its domestic investment requirements and this surplus is invested abroad. Net capital outflows are determined by net exports (the surplus of exports over imports). If a country's net exports are positive, its trading partners have a corresponding trade deficit; they are demanding more goods than they produce. To finance this deficit, they borrow money from a country with a positive trade surplus. Consequently, the country with the surplus acquires assets in the countries with the deficit.

The relationship between capital outflows and net exports is important for the balance of payments on capital account. The capital account records transactions involving international movements of ownership of financial assets and includes, for example, ownership of company shares, bank loans, and government securities. When a country has a deficit on its capital account, its investment in foreign assets exceeds foreign investment in its own assets; the opposite applies when a country has a surplus on its capital account. Consequently, a country that has a positive net capital outflow (deficit on its capital account) will have a surplus on its trade account; conversely, a country with a negative net capital outflow (surplus on its capital account) will have a deficit on its trade account.

In addition to these capital flows, significant and unpredictable flows of funds often occur between countries that may not be directly related to net exports. These are sometimes referred to as "hot money." Hot money is money that moves at very short notice from one financial center to another to take advantage of higher short-term interest rates for the purposes of arbitrage or because its owners are concerned about future political intervention in the money market. As a result of greater integration of world capital markets and greater access to, and dissemination of, financial information, significant and destabilizing flows of hot money can occur. For example, George Soros, the global financier, is reputed to have made a $1-billion profit by speculating that the Great Britain pound (GBP) would be devalued in 1992.

The key determinant of the speed and volume with which capital flows between financial centers depends on the degree of capital mobility. Perfect capital mobility occurs when domestic and foreign assets are perfect substitutes and when adjustment to interest rate differentials is instantaneous. In other words, a slight difference in interest rates between two centers is eliminated immediately. This process works because the inflow of money reduces interest rates, whereas the outflow of money from other centers increases interest rates. Imperfect capital mobility means that interest rate differentials between centers may persist for longer periods of time. This can occur when assets are not perceived to be perfect substitutes, for example, when there are differences in risk associated with each asset. Imperfect capital mobility can also occur when governments impose restrictions on capital inflows and outflows, for example, via exchange controls.

Net capital flows do not occur for the same reasons as "capital flight." Capital flight is frequently associated with developing countries and occurs when domestic capital is exported in response to largely political risks, for example, fears that a government will be overthrown or that civil war is likely. When capital is exported for these reasons, the outflow has no relation to the trade balance but occurs because the owners wish to avoid sequestration of their assets.

See Also: Capital Account Balance; Foreign Portfolio Investment; National Accounts.

Bibliography. Itay Goldstein, Assaf Razin, and Hui Tong, *Liquidity, Institutional Quality and the Composition of International Equity Outflows* (National Bureau of Economic Research, 2008); Paul J. J. Welfens, *Innovations in Macroeconomics* (Springer, 2008).

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Netherlands

The Kingdom of the Netherlands is a commonwealth of three countries, formed by charter between the Netherlands, the Netherlands Antilles, and Aruba, the latter two of which originated as part of the Netherlands' colonial empire. The Netherlands Antilles (309 sq. mi., population 225,000, gross domestic product [GDP] $2.4 billion in 2004) is also known as the Dutch Antilles (sometimes still referred to in texts as the Dutch West Indies, the Colonial-era term) and includes the islands of Bonaire, Curacao, Saba, Saint Eustatius, and Saint Maarten. The political union of these five islands was scheduled to be dissolved in December 2008, with each island becoming a sovereign nation within the federacy of the Kingdom of the Netherlands, but the dissolution has been postponed (though no date is set, plans for dissolution proceed). Aruba (74 sq. mi., population 104,000, GDP $2.4 billion in 2008) was once part of the Netherlands Antilles but seceded in 1986 after years of struggle and debate.

The Kingdom of the Netherlands is often referred to as "the Kingdom," both to disambiguate because foreigners so often use "the Netherlands" to refer to both the country and the commonwealth, and in order to avoid the appearance that the European nation is superior to the New World entities in the commonwealth's estimation. The current form of the Kingdom was formed in 1954, though an entity of the same name persisted from 1830 (when Belgium declared independence) to 1954. The Kingdom came about as a result of a radio address by the Dutch Queen Wilhelmina on New Year's Day, 1942, when the Dutch royals were in London, in exile from the Nazi-occupied Netherlands. In this speech, Wilhelmina declared that the government wished to reexamine its relationship with its colonial holdings, and that after the Nazis were expelled from the Netherlands, the government would raise the colonies up to a position of equal participation in the kingdom. Although the primary purpose of the speech was to drum up support for the Dutch in democracies like the United States, where many Americans had a natural distrust of monarchies and colonial powers, the government made good on its promise, negotiating the practicalities over the nine years between the end of World War II and the institution of the Kingdom in 1954.

The administration of the Kingdom falls to the monarch—currently Queen Beatrix (b. January 31, 1938), who took power in 1980 when her mother Queen Juliana (daughter of Wilhelmina) abdicated because of her failing health—working in conjuction with the Council of Ministers of the Kingdom. The Council in turn is made up of the Council of Ministers of the Netherlands—the country's executive cabinet—along with a plenipotentiary minister from both Aruba and the Netherlands Antilles. The prime minister of the Netherlands acts as chair of the Council. Because the Kingdom does not have an economy or laws separate from its member nations, administration is a periodic rather than ongoing task. Upon dissolution of the Netherlands Antilles as a political union, the constituent islands will have plenipotentiary ministers of their own.

Government and Economy

The Netherlands (16,033 sq. mi., population 16,440,000) includes most of the Kingdom by any measure. The densely populated country, though associated in the Western imagination with windmills, wooden shoes, and Sinterklaas, is also the oldest capitalist country in the world, with the first stock exchange. Amsterdam, famous now as the laboratory where the country's experiments with progressive legal reforms play out, was the wealthiest trading center of the early modern world, and the country's early success with free market economics—a century before Adam Smith—paved the way for the Colonial era, funding fleets of trading ships to plot spice routes and slave routes. Much of the shape of the modern economy was first traced in Amsterdam, from boom and bust cycles to the phenomenon of speculator-investor mania to the insurance industry and retirement funds—with much of that in place years before the free market Patriots expelled the British from the American colonies in the interest of capitalist democracy.

The modern day Netherlands is an industrialized and cosmopolitan country. With Belgium and Luxembourg, the country is part of the Benelux economic union (the name coming from the first letters of each of the three countries) and was instrumental in the European communities that led to the formation of the European Union. In the late Middle Ages and early modern eras, the Benelux countries were called the Low Countries, known for their wars, their music, and their art. The unofficial "capital city" of Western law is The Hague, the Netherlands' third-largest city, home to the International Court of Justice, the International Criminal Court, Europol (the EU's criminal intelligence agency), the International Criminal Tribunal for the Former Yugoslavia, and the Special Tribunal for Lebanon. Though the capital of the Netherlands is Amsterdam, the government operates principally from The Hague, where the Supreme Court is located, along with the Queen's offices and domicile, and all foreign embassies.

The Netherlands is a parliamentary constitutional monarchy, and rated as the fourth most democratic country in the world by *The Economist*, as of the end of 2008. The general tendency in Dutch politics is to move toward consensus and synergy. The monarch arbitrates between political parties during the formation of the Council of Ministers, which consists of 13 to 16 members. The prime minister has no official power greater than that of other ministers, and is almost always the leader of the political party with the greatest representation in government. The States-General, a bicameral parliament, consists of the 150 members of the Lower House (or Second Chamber) elected in direct elections every four years or upon the dissolution of a cabinet, and the 75 members of the Upper House (First Chamber) who are elected by the provincial assemblies (themselves elected by direct election every four years). Legislators of the Upper House have the power to reject legislation, but not to amend or originate it.

The Social-Economic Council, a body of regional regulatory agencies, consults with the government on all major decisions, and in turn meets with trade and economic unions as part of the Dutch tendency toward consensus-seeking. The Social-Economic Council is charged with providing advice to form an economic policy that is fair to labor, fair in its distribution of income, and promotes healthy sustainable economic growth in the nation.

A prosperous country, the Netherlands has the 16th largest economy in the world, with economic growth considerably above the European average. Inflation is low, and unemployment is the lowest in the European Union. Industry centers around chemicals, petroleum, and food processing, and Dutch investors are among the five largest groups of foreign investors in American companies. Amsterdam continues to be a hub of stock trading activity, while Rotterdam is the continent's largest port, and the busiest port outside Asia. The recently built Betuweroute railway is a high-speed freight railway bringing goods from Rotterdam to Germany.

See Also: Belgium; European Monetary Union; European Union; Luxembourg.

Bibliography. Paul Arblaster, *A History of the Low Countries* (Palgrave Macmillan, 2005); J. C. H. Blom and Emiel Lamberts, eds., James C. Kennedy, trans., *History of the Low Countries* (Oxford, 1999); Bernard A. Cook, *Belgium: A History* (Peter Lang, 2005).

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Neuroeconomics

In 2008, students at 31 New York City high schools were offered up to $1,000 for scoring well on Advanced Placement (AP) exams. The good news is that the number of AP exams taken rose from 4,275 in 2007 to 4,620, an increase of 345. In addition, a greater number of 5s (the highest score) were posted. On the other hand, the overall number of students who passed the AP exams declined slightly, from 1,481 to 1,476.

By contrast, in Tucson, Arizona, School Superintendent Vicki Balentine announced results of the first year of a three-year plan to give 75 sophomores $100 per month for maintaining perfect attendance and at least a C minus average. Those offered the money seemed to show up more for classes and school activities than a control group that received no cash reward.

Why, despite a significant economic reward, did students perform slightly worse on the AP tests in New York? Why does the Tucson experiment appear to be yielding better results? Those are questions that the new field of neuroeconomics seeks to answer.

Neuroeconomics is the study of what happens when people make decisions about money, such as why people save, buy stocks, steal, and overspend. As Colin Camerer, George Lowenstein and Drazen Prelec note, in spite of years of a significant volume of research data, economists lack a reliable theory that explains "why stock prices fluctuate, why people trade, and why there are so many actively managed mutual funds despite poor fund performance." These and other authors argue that one fruitful area for discovering the reasons for people's economic decision making is neuroscience. It is possible that the brain mechanisms that underlie the psychological processes of attention and perception have direct application to economics.

Neuroeconomics is a branch of the field of "behavioral economics." Behavioral economics uses research from such social sciences as anthropology, psychology, sociology, and biology to demonstrate how factors in these fields influence economic behavior. Neuroeconomics expands behavioral economics by using facts about brain activity.

Neuroeconomics examines specific elements of choice in decision making. These elements include risk, wishful thinking, ambiguity, expectation, time preference, and learning. In addition to exploring these elements of choice, neuroeconomics seeks to discover the neural correlates of those elements of choice. By examining those relationships between brain functioning and decision making, neuroeconomists can better understand sound financial judgments as well as what processes might impair those judgments.

Neuroeconomists are challenging standard economic assumptions that decision making is a simple matter of integrated and coherent utility maximization. Peter Politser argues, however, that despite the promise of neuroeconomics for understanding economics decision making, the field currently suffers from inconsistent and contradictory findings across studies. Part of the reason for the lack of clarity in these findings is that because neuroeconomics is a new field, it lacks clear methodological guidelines for studying and interpreting neuroeconomic phenomena.

Recent developments bode well for seeing those guidelines develop. For example, George Mason University hosts the Center for the Study of Neuroeconomics (CSN). CSN is a research center and laboratory dedicated to "the experimental study of how emergent mental computations in the brain interact with the emergent computations of institutions to produce legal, political, and economic order." The Camerer Lab at the California Institute of Technology is also doing significant research in neuroeconomics. In addition, the first handbook of the field, *Neuroeconomics: Decision Making and the Brain,* was recently published in association with the Society for Neuroeconomics.

In the meantime, Whitney Tilson, who helped create the New York City incentive program, expects improvement in 2009, and hoped more students would sign up as word spread about the financial incentive to take AP tests. Program organizers noted the cash incentive program would be tweaked for next year; the rewards for 4s and 3s would most likely be lowered to $500 and $250 (scores of 5 will still net $1,000), a move that most neuroeconomists would likely approve.

See Also: Behavioral Economics; Behavioral Finance.

Bibliography. C. Camerer, G. Lowenstein, and D. Prelec, "Neuroeconomics: How Neuroscience Can Inform Economics," *Journal of Economic Literature* (v.XLIII, 2005); P. Glimcher, C. Camerer, E. Fehr, and R. Poldrack, *Neuroeconomics: Decision Making and the Brain* (Elsevier Academic Press, 2008); E. Gootman, "Mixed Results on Paying City Students to Pass Tests," *New York Times* (August 19, 2008); G. Loewenstein, S. Rick, and J. D. Cohen, "Neuroeconomics," *Annual Review of Psychology* (v.59, 2008); Lynn Nadel, ed., *Encyclopedia of Cognitive Science* (Macmillan, 2003); P. Politser, *Neuroeconomics: A Guide to the New Science of Making Choices* (Oxford University Press, 2008).

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Neutral/Affective

There are several different frameworks by which to study the phenomenon of culture. One such framework is that developed by the research of Fons Trompenaars and Charles Hampden-Turner, who developed a model examining cultures along seven different dimensions. One dimension that the two authors identified was the neutral/affective dimension. In neutral cultures, people tend not to show their emotions in public or in business dealings. In affective cultures, open expression of natural emotions are both accepted and encouraged. This neutral/affective dimension is explored in more detail below, with specific attention given to managerial implications of the concept.

The neutral versus affective dimension concerns the acceptance of expressing emotions in a culture. In cultures with a more neutral orientation, people expect that interactions are objective and detached. People act stoically and maintain their composure. As such, the focus is placed more on the task and less on the emotional nature of the interaction. Such cultures see it as important not to let emotion influence objectivity and reason in decision making.

Conversely, cultures with a more affective orientation consider expressions of emotions, such as anger and laughter, to be normal. People are encouraged to express their emotions because it is considered to be a more natural way of being. They smile a great deal, talk loudly when they are excited, and are enthusiastic when greeting other people.

Thus, in organizations from cultures that are more neutral, members are reluctant to reveal their thoughts or feelings. In addition, controlling one's emotions is considered to be an admirable managerial quality. Physical contact and expressive gestures are generally avoided. Thus, a good manager in a neutral culture will keep emotions in control as an act of power and status, and also will keep communication directed to the task at hand. The reluctance to reveal emotions is apparent in different cultural expressions, such as the Japanese notion that "Only a dead fish has an open mouth" or the English maxim "Empty vessels make the most noise."

By contrast, feelings and thoughts are revealed in both verbal and nonverbal ways in an organization from an affective culture. Managers often express emotion and touching is much more common than in neutral cultures. Organizational members are free to express strong commitment to positions, and emotional outbursts are tolerated. Controlling one's emotions is not seen as an example of power and status, but rather a suggestion of distance from other organizational members.

Businesspeople from neutral cultures do not always express precisely and directly what they are really thinking. This playing of "the cards close to the vest" orientation can lead to misunderstandings, especially when dealing with businesspeople from affective cultures. Members of neutral cultures often feel discomfort with physical contact in public and communicate in a more subtle way. This method of communication makes it difficult for members of other cultures to read between the lines and get the message.

Trompenaars and Hampden-Turner have a number of suggestions about how to best overcome differences along the neutral/affective dimension when conducting international business. For businesspeople from neutral cultures doing business in affective cultures, they should (1) not be put off by emotions that are expressed by their cultural counterparts; (2) ask for "time-outs" in meetings and negotiations to regroup; (3) when the affective counterparts are expressing goodwill, respond in an open and warm manner; (4) not misinterpret either expressions of enthusiasm or strong disagreement as an indication that the affective counterparts have made a final decision; and (5) realize that the negotiation involves the people as much as the proposal being discussed.

For businesspeople from affective cultures doing business in neutral cultures, they should also (1) ask for "time-outs" in meetings and negotiations to regroup; (2) put as much down on paper beforehand so as not to get off track in an emotionally charged atmosphere; (3) not mistake lack of emotion as disinterest but merely a tactic of not revealing their position; and (4) realize that neutrals will focus on the proposal, not on the people involved.

Countries that rank high on being a neutral culture include Austria, Hong Kong, Indonesia, Japan, and the United Kingdom. Affective cultures include Argentina, China, Cuba, Italy, Mexico, the Philippines, Russia, and Spain. However, there are some interesting nuances concerning the neutral/affective dimension. Chinese culture is generally affective, so organizational members will be more likely to express their emotions naturally. However, if they feel that expressing their emotions will cause them to "lose face," they will refrain from showing their true feelings or intentions. In addition, people from affective cultures usually do not avoid physical contact, but many Chinese often do not like to be touched by strangers.

In addition, Trompenaars and Hampden-Turner note that emotional display in intercultural business communication involves two questions. First, "Should the emotion be exhibited in business relations?" The second question is, "Should it be separated from reasoning processes lest it corrupt them?" In the United States, for example, emotions are exhibited, but treated separately from rational decision making. By contrast, Italians exhibit and do not separate emotions from the decision-making process. Finally, the Dutch will not exhibit emotions and separate them from the decision-making process.

See Also: Achieved Status/Ascribed Status; Cultural Norms and Scripts; Culture-Specific Values; Hofstede's Five Dimensions of Culture.

Bibliography. Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations* (Sage, 2001); Larry Samovar, Richard Porter, and Edwin McDaniel, *Intercultural Communication: A Reader* (Thomson Wadsworth, 2009); Harry Triandis, *Individualism & Collectivism* (Westview, 1995); Fons Trompenaars, *Riding the Waves of Culture* (Irwin, 1994); Fons Trompenaars and Charles Hampden-Turner, *Riding the Waves of Culture: Understanding Diversity in Global Business* (McGraw-Hill, 1997).

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Newly Industrialized Countries

The term *newly industrialized countries* (NICs) refers to a group of once-developing economies that industrialized—or are still industrializing—with an emphasis on the production and export of manufactured goods; *newly industrializing economies* is often taken as a synonym. The term generally applies to those countries that industrialized after World War II. Comparability between different studies of these countries is not always straightforward, not least because there is no precise definition of an NIC. Moreover, each study regards a different range of countries as NICs depending on their level of industrialization at the moment of analysis. Through the 1980s and 1990s, the NIC category gained prominence in economic and policy analysis, especially in regard to the economies of east Asia, but popular use of the term has waned since then in favor of the broader concept of "emerging economies." As a unique category, however, the term *NIC* retains some distinction in classifying some of the economies achieving industrialization during the latter part of the 20th century.

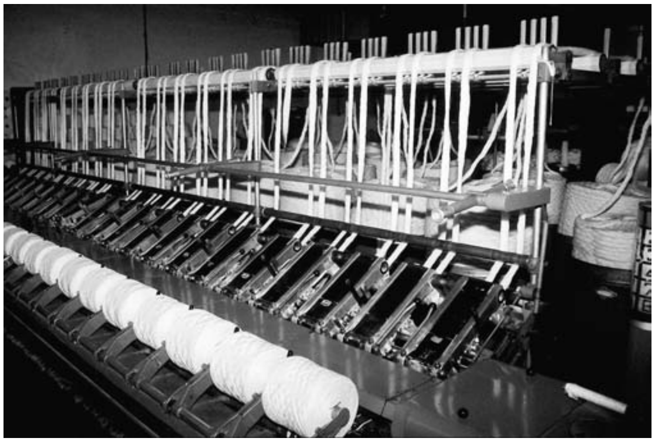
In 1979 the Organisation for Economic Co-operation and Development (OECD) published a report called *The Impact of the Newly-Industrialising Countries*, which along with a conference on NICs hosted by the OECD, brought the term to prominence. This initial usage was quickly reinforced by the adoption of the term by researchers at the World Bank, the Royal Institute of International Affairs, and by academia in general. Yet from the start, there was no common definition of an NIC or a universal method of quantifying NIC status.

For the OECD, an NIC exhibited the following characteristics: (1) fast growth in both the absolute level of industrial employment and its share of total employment; (2) a rising share of the world exports of manufactured products; (3) fast growth in real per capita gross national product (GNP) such that the country was successful in narrowing the gap with the advanced industrial countries. Using these criteria, 10 countries were generally considered to exhibit NIC characteristics from the early 1960s: Hong Kong, Singapore, South Korea, Taiwan, Brazil, Mexico, and from Europe, Spain, Greece, Portugal, and Yugoslavia. With a slightly wider interpretation, a range of other countries were also mooted as NICs, which would have doubled the original list.

While the OECD criteria were somewhat vague, other definitions were more specific. Working for the World Bank, Bela Balassa thought that to qualify for NIC status countries needed per capita income greater than $1,100 and for manufacturing to account for at least 20 percent of gross domestic product (GDP). Inevitably, this resulted in a variation on the OECD listing, indicating the somewhat arbitrary nature of specifying a quantitative economic threshold in determining what constitutes an NIC.

A further limitation of this economic approach was identified by Anis Chowdhury and Iyanatul Islam. They argued that identifying NICs purely in terms of manufacturing and trade was too limiting because it failed to consider the sustainability of the industrialization or the improvement in the standard of living or quality of life. Hence, in reaching a definition of an NIC, they broadly accepted the OECD/Balassa approach and added that a savings ratio of 15 percent was required, along with a Human Development Index of 0.75 (above average performance in purchasing power, life expectancy, and literacy). In their analysis, 22 countries could be classified as NICs in 1988, with a further 10 on the cusp of reaching the thresholds, including India and China.

The underlying problems of definition and measurement serve to underline the dynamic nature of the NIC concept, and that one needs to recognize that by any quantitative measures the set of NICs is going to change over time. Equally, the underlying concept of an NIC is very much focused on industrialization through manufacturing and especially the export of manufactured products, and hence may be regarded as fixed to a period of economic development witnessed in a number of countries from the 1960s through to the 1990s. Since then, much attention in studies of economic, and specifically business, development has shifted to focus on rapid economic growth coupled with the opening of domestic markets, financial transfers, and reform of governance and market mechanisms, all embodied in the concept of the "emerging market." Hence, the age of the NIC may have passed, or it may yet endure both as a contemporary economic reality and as a historical lens of analysis for economic development.



A textile mill in Portugal, which was stifled by a dictatorship 1926–74. Just 9 percent of its 2005 exports were high-tech.

Irrespective of the precise definition employed, the four east Asian NICs of Hong Kong, Singapore, South Korea, and Taiwan have undoubtedly achieved remarkable economic gains since the 1960s, their performance earning them the name of Asian Tigers. By the mid-1990s, their GDP per capita was approaching that of developed economies, and they were all considered by the World Bank to be comfortably high-income countries. But it is in trade that the success of the four, along with later NICs Indonesia, Malaysia, Philippines, and Thailand, has been most stark. Absolute levels of manufacturing and especially their share of world exports of manufactured goods have soared. Taken together, these eight Asian NICs accounted for just over 1.5 percent of manufactured goods exported worldwide in 1963, and reached 14.6 percent in 2000, although their share dipped to 12.1 percent in 2006. The inclusion of China in this group would elevate the 2006 figure to 22.8 percent.

The success of the first and second waves of NICs from east Asia tends to eclipse the performance of some of the other originally identified NICs. The experience of Brazil and Mexico has been mixed, with economic growth hit by financial crises and policy turmoil. In 2006 they remained in the World Bank's estimation to be upper-middle-income countries, but their growth rates do not appear to indicate an imminent change in this position. As trading nations, Brazil and Mexico have made significant progress since the 1960s. In the case of Mexico, its share of manufactured goods exported has changed from 0.4 percent in 1980 to 2.3 percent in 2006, making it one of the world's major exporting nations, with much of its now £189 billion trade stemming from export processing zones. Of the European NICs identified, the industrialization of Greece, Portugal, and Spain is often overlooked. Today, they are all high-income countries, albeit with Spain's income per capita noticeably higher than that of the others.

The goods most commonly associated with the early phase of NIC trading expansion were low-cost manufactures produced by unskilled or low-skilled labor. NIC exports to developed economies became particularly significant in textiles and garments, leather and footwear, children's toys, and in a range of other smaller sectors. Some of the NICs, such as South Korea, did become noted for the production of more intermediate technology goods that were often considered an essential element of earlier industrialization, such as iron and steel production and shipbuilding. Overall, through the 1960s and 1970s, the exports of the first NICs moved steadily away from the lower technology levels, and the makeup of exported goods further shifted as they sought and attracted investments from multinational firms seeking low-cost manufacturing sites from which to export.

For some of the initial NICs, higher technology goods eventually became a mainstay of their manufactured exports. According to the World Bank, in 2005 approximately 34 percent of Hong Kong's and 32 percent of South Korea's exports of manufactures were categorized as high technology, this being where there is a high research and development intensity in the product, such as in computers, pharmaceuticals, or electrical machinery. Further generations of NICs have grown their exports on the basis of a comparative advantage in low-cost labor, although there is nothing to suggest that their exported goods will also move away from low-technology products; in 2005, the share of high-technology goods in the manufactures exports of Greece reached only 10 percent, in Portugal 9 percent, and in Spain 7 percent.

Explanations of the rise of many NICs often revolve around industrialization strategies. The popular approach until the 1950s was of import-substituting industrialization (ISI) in which industrialization was promoted using tariff barriers and other protectionist measures to enable domestic enterprise to prosper. By the 1960s, this method was increasingly recognized as too limiting, and there was a move by some developing countries to adopt a more outward-looking industrialization policy in which exports were encouraged. In parallel to this move, a set of external changes made export-based industrialization more viable: the liberalization of the world trading regime, new transport and communication technologies, and the increasing presence of multinational enterprises establishing low-cost manufacturing bases through foreign direct investment.

The experiences of the individual NICs indicate that there is no single pathway of later industrialization, but rather each country has applied different policy mixes that have involved ISI and export-led aspects. Ultimately, for many of the first wave of NICs, the gap between them and the advanced industrial economies has been reduced, and they are clearly now industrialized economies themselves, although there remains a gap in terms of per capita income between these and the advanced industrial economies such as the United States, Japan, Germany, and the United Kingdom.

See Also: Asian Tigers; BRICs; Emerging Economies; Emerging Markets; Export-Oriented Development; Import Substitution; Industrialized Countries; Less Industrialized Countries; Underdevelopment.

Bibliography. Oleg Badunenko, Daniel J. Henderson, and Valentin Zelenyuk, "Technological Change and Transition: Relative Contributions to Worldwide Growth During the 1990s," *Oxford Bulletin of Economics and Statistics* (v.70/4, 2008); Bela Balassa, *The Newly-Industrializing Developing Countries After the Oil Crisis*, World Bank Staff Working Papers, No. 437 (World Bank, 1980); Anis Chowdhury and Iyanatul Islam, *The Newly Industrialising Economies of East Asia* (Routledge, 1993); S. M. M. Husseini and C. O'Brien, "Strategic Implications of Manufacturing Performance Comparisons for Newly Industrialising Countries," *International Journal of Operations and Production Management* (v.24/11–12, 2004); Subhash C. Jain, *Emerging Economies and the Transformation of International Business: Brazil, Russia, India and China (BRICs)* (Edward Elgar, 2006); Organisation for Economic Co-operation and Development, *The Newly-Industrialising Countries: Challenges and Opportunity for OECD Countries* (OECD, 1988); Ravi Ramamurti and Jitendra V. Singh, *Emerging Multinationals in Emerging Markets* (Cambridge University Press, 2009); Anjum Siddiqui, *India and South Asia: Economic Developments in the Age of Globalization* (M. E. Sharpe, 2007); Louis Turner and Neil McMullen, *The Newly Industrializing Countries: Trade and Adjustment* (Allen & Unwin, 1982); World Bank, *World Development Report 2008* (World Bank, 2007); World Trade Organization, *International Trade Statistics 2007* (WTO, 2007).

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New Trade Theory

Associated with economists Paul Krugman and Elhanan Helpman, new trade theory makes two major points: (1) through economies of scale, trade can increase the variety of goods available to consumers and decrease the average costs of those goods, and (2) in those industries in which the output required to attain economies of scale represents a significant proportion of world demand, the global market may be able to support only a small number of enterprises.

New trade theory predicts that when nations trade with one another, individual national markets are combined into a far larger world market in which better economies of scale are available to individual firms. Further, each nation may be able to specialize in producing a narrower range of products than it would in the absence of trade, thus affecting both absolute advantage and comparative advantage. By buying goods from other countries, each nation can simultaneously increase the variety of goods available to consumers and lower the costs of those goods, offering an opportunity for mutual gain even when countries do not differ in their resource endowments or technology, irrespective of absolute or comparative advantage.

Developed in the late 1970s and 1980s, new trade theory was motivated by the failure of more traditional theories to explain why, since World War II, the ratio of trade to gross domestic product (GDP) has increased, why trade has become more concentrated among industrialized countries, and why trade among industrialized countries is largely intraindustry trade.

In the early post–World War II period, the United States accounted for much of the world's income and consumption. As the distribution of national income becomes more equal, new trade theory predicts that trade volumes should rise. The ability to capture scale economies ahead of later entrants, and thus benefit from a lower cost structure, may explain the pattern of trade observed since World War II. Countries may dominate in the export of certain goods because economies of scale are important in their production and because firms located in those countries were the first to capture scale economies, giving them a first-mover advantage. Hence, new trade theory identifies first-mover advantage as an important source of comparative advantage.

Variances With Other Theories

By extension, new trade theory suggests that the economies of scale produced by trade can change comparative advantages for trading nations. New trade theory, however, is at variance with the Heckscher-Ohlin theory, which suggests that a country will predominate in the export of a product when it is particularly well endowed with those factors used extensively in its manufacture.

By stressing the influence of first-mover advantage, rather than labor/price advantage or location advantage, on comparative advantage, new trade theory has triggered a reaction from proponents of both neoclassical trade theory and the ownership-location-internalization (OLI) paradigm of international business growth associated with John Dunning.

Geography and Economic Activity

In Krugman's model, the location of economic activity is not an issue. Trade costs are zero, so firms are indifferent about the location of their production sites. Initial conditions play a pivotal role in determining the allocation of production.

In new trade theory, as in neoclassical trade theory, this role for geography is determined outside the model. Where geography does matter is in the incursion of transport costs in trade among nations and in consumer demand, which influences market size. The combination of transportation costs and market size causes countries to produce those goods and services for which local demand is relatively high.

Government Intervention in Trade

New trade theory has also stimulated renewed interest in the merits of government intervention in international trade. Most neoclassical economists regard the optimum tariff argument as the only theoretically sound argument for limited government intervention, subject to a large number of constraints. If a country is large enough in the world markets, for example, a tariff will improve the country's terms of trade to the extent that favorable terms outweigh loss of volume and higher production costs. This argument is the so-called optimum tariff argument.

New trade theorists argue that government intervention in trade may be more beneficial than previously thought, because the normal assumptions of perfect competition do not apply and because the market is dominated by a comparatively small number of large firms. Here, increasing national welfare by improving the terms of trade is a justifiable motive for export subsidies or tariff protection, among other instruments that effectively shift monopoly profits from the foreign to the domestic producer.

Problems in Government Intervention

The problem for government is how to persuade the foreign firm to cut its output while the home producer increases its output without provoking a price war. As Nigel Grimwade argued, if the foreign producer does reduce his output, he loses at the expense of the home producer; if he leaves output unchanged and cuts price, he can hope that the home producer will change his mind when he sees that the decision to increase output has served merely to disadvantage himself.

If the government of the home country intervenes by granting an export subsidy to the home producer, reduced marginal cost will prompt the home producer to raise output, even if the foreign producer takes no immediate action. To ensure that the price is not forced down, the foreign producer will reduce his output. As a result of the government subsidy, the profits of the home producer have increased at the expense of the foreign producer, allowing the home-country producer to enjoy a welfare advantage that is passed on to its trading partners and consumers.

See Also: Absolute Advantage; Comparative Advantage; Economies of Scale; Globalization; Heckscher-Ohlin Model.

Bibliography. Salvador Barrios, Holger Görg, and Eric Strobl, "Multinational Enterprises and New Trade Theory:

Evidence for the Convergence Hypothesis," *Open Economies Review* (v.14/4, 2003); Steven Brakman, Harry Garretsen, and Charles Van Marrewijk, *An Introduction to Geographical Economies: Trade, Location and Growth* (Cambridge University Press, 2001); Arnaud Costinot and Ivana Komunjer, *What Goods to Countries Trade? New Ricardian Predictions* (National Bureau of Economic Research, 2007); Sonali Deraniyagala and Ben Fine, "New Trade Theory Versus Old Trade Policy: A Continuing Enigma," *Cambridge Journal of Economics* (v.25/6, 2001); John H. Dunning, *Regions, Globalization and the Knowledge Based Economy* (Oxford University Press, 2002); Nigel Grimwade, *International Trade: New Patterns of Trade, Production and Investment* (Routledge, 2000); P. J. Lloyd and Hyun-H. Oon Lee, *Frontiers of Research in Intra-Industry Trade* (Palgrave Macmillan, 2002); Thomas I. Palley, "Institutionalism and New Trade Theory: Rethinking Comparative Advantage and Trade Policy," *Journal of Economic Issues* (v.42/1, 2008); Anway Shaikh, *Globalization and the Myths of Free Trade: History, Theory, and Empirical Evidence* (Routledge, 2007).

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New York Convention

The New York Convention, or to give its full title, the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, was a series of measures adopted on June 10, 1958, during a diplomatic conference organized by the United Nations (UN). They required that the courts in the countries that sign the convention agree to recognize arbitration agreements in each of these countries. This, therefore, set the standard for international arbitration and cross-border enforcement of arbitration awards. The name *New York Convention* came from the fact that it was drawn up and signed in New York, at the headquarters of the UN.

The idea of the New York Convention came from the International Chamber of Commerce when they were meeting in 1952. They produced what became the first draft of the Convention on the Recognition and Enforcement of International Arbitral Awards to the UN Economic and Social Council. This had support from many countries, and Kohei Teraoka, the secretary of the Japanese Ministry of Foreign Affairs, signed this on February 4—it was the first official act performed by the Japanese in the UN headquarters. The 1952 meeting led to the International Conference in 1958, which was chaired by Willem Schurmann, the permanent representative of the Netherlands to the UN, and Oscar Schachter, who worked at the UN and later became president of the American Society of International Law, after many years of teaching at Columbia Law School.

The system of international arbitration through the New York Convention has made it much easier for alternative dispute resolutions for cross-border commercial transactions. This is because of the reduced costs—the arbitrations are final and not ordinarily subject to appeal. They can also be done confidentially. And last, the arbitration is immediately enforceable in another jurisdiction provided that that country has signed the convention. It is also possible, for some complicated political disputes, to have the arbitration take place in a neutral country.

As with UN conventions, representatives of countries signed the agreement, but it did not come into force until it was ratified by that country's legislature or cabinet, or whatever process chosen by the country. At that point, the country is then bound to the convention. The first country to accede to the New York Convention was Israel on January 5, 1959, followed by Morocco on February 12; Egypt and Syria (as constituent members of the United Arab Republic) on March 9; France on June 26; and Thailand on December 21. In 1960 Cambodia, India, and the Soviet Union joined, with Norway, Austria, Japan, West Germany, Romania, Poland, and Bulgaria in the following year; and Ecuador, Finland, Hungary, Sri Lanka, Greece, Madagascar, and the Central African Republic in 1962.

After the initial impetus, a few more countries joined each year—the United States on September 30, 1970; the United Kingdom on September 24, 1975; Canada on May 12, 1986; and the People's Republic of China on January 22, 1987. The reason for the delay in the United States acceding to the convention was that the enforcement of arbitral awards was under the jurisdiction of the various states, not the federal government—although there were many business interests who wanted the U.S. government to accede to the convention. The most recent country to join was the United Arab Emirates on August 21, 2006. There are 51 member states of the UN and the Republic of China that have not signed the convention. The only European countries that have not signed are Andorra and Vatican City.

Altogether, the convention consists of 16 articles. Because of the problems over enforcing decisions made in arbitration, there are seven defenses that can be used against contesting enforcement. These are that a party in the arbitration dispute was under some incapacity; that the arbitration agreement was invalid; that a party to the arbitration was not notified with enough time to defend himself/herself; that there was a dispute over the members of the arbitral tribunal; that the award is not binding; that the matter cannot be resolved by arbitration; and that enforcement would be against what a country's government deeded to its "public policy."

See Also: Arbitration; International Law; Legal Environments; Mediation.

Bibliography. Emmanuel Gaillard and Domenico Di Pietro, *Enforcement of Arbitration Agreements and International Arbitral Awards: The New York Convention in Practice* (Cameron May, 2008); "Parley Finishes Pact on Awards," *New York Times* (June 11, 1958); Neil J. Saltzman, "The Enforcement of Foreign Awards in New York State," lawfirminternational.com (cited March 2009); Oscar Schachter, *International Law in Theory and Practice* (Martinus Nijhoff, 1991); Brette L. Steele, "Enforcing International Commercial Mediation Agreements as Arbitral Awards Under the New York Convention," *UCLA Law Review* (v.54/5, 2007); United Nations Commission on International Trade Law, *Convention on the Recognition and Enforcement of Foreign Arbitral Awards,* New York, 1958 (United Nations, 2008).

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New Zealand

New Zealand is a country situated in the southwestern Pacific Ocean, about 2,000 km southeast of its largest neighbor, Australia, separated by the Tasman Sea. Recognized for its geographic isolation, the country's two major islands—North and South—and numerous smaller islands, most notably Stewart Island and the Chatham Islands, are home to a population of about 4.2 million people. New Zealand's territorial domain also includes the Cook Islands, Niue, Tokelau, and the Ross Dependency in Antarctica.

To the north, the country's neighboring island nations include Tonga, Samoa, Fiji, and New Caledonia. *Aotearoa* (translated as "the Land of the Long White Cloud") was originally used by the indigenous Maori to describe the North Island. The term is used in a modern sense to refer to the entire North Island—Auckland, Hamilton, and Wellington (capital city)—and the South Island's largest city, Christchurch. Other large cities include Dunedin and Tauranga. Like other countries with Western economies, New Zealand is a relatively urbanized country, with about 72.2 percent of residents living in 16 main urban areas. More than half of the population lives in the three largest cities.

Reflecting the country's colonial history, New Zealand's people are predominantly of British and Irish ancestry. An estimated 78 percent of New Zealanders identify themselves as being of European descent. According to the 2006 census, indigenous Maori (14.6 percent) are the largest minority in New Zealand, followed by Asian (9.2 percent) and non-Maori Polynesians (6.9 percent).

New Zealand is a constitutional country, a monarchy with a parliamentary democracy. As the symbolic head of state, Queen Elizabeth II is represented by the governor-general of New Zealand, appointed on advice by the political leader, the prime minister, as the nation's head of government. The House of Representatives is the single chamber of the New Zealand parliament. General elections are held every three years under a form of proportional representation called Mixed Member Proportional (MMP).

A unique feature of leadership is the role of women; New Zealand is the only country in which women have simultaneously occupied the highest offices in the land. From March 2005 to August 2006, Queen Elizabeth II, Governor-General Dame Silvia Cartwright, Prime Minister Helen Clark, Speaker of the House of Representatives Margaret Wilson, and Chief Justice Dame Sian Elias were all in office. Also worthy of note is the fact that at the time, New Zealand's largest listed company, Telecom New Zealand, had a female chief executive officer, Theresa Gattung.

Recent Economic History

New Zealand's economic growth and prosperity have been built on primary product exports, principally wool, meat, and dairy products, mainly to the United Kingdom. Up until the 1970s, the country's relatively high standard of living depended on its strong trade relationship with Britain. The country's prosperity eroded over the next two decades due to several events, including the world oil crisis and the end of a guaranteed market for commodity exports in 1973, when Britain joined the European Community. Consequently, the nation entered a prolonged economic crisis such that by 1982, per capita income was reported by the World Bank to be the lowest of all developed nations surveyed.

Efforts to restructure the highly protectionist and regulated economy to a liberalized, free trade market began in 1984. *Rogereconomics* and *Ruthanasia* are names commonly used to describe the program of macroeconomic restructuring implemented during this period, after Finance Ministers Roger Douglas and Ruth Richardson. Despite these changes, the global share-market crash in 1987 triggered recession, and unemployment rose to 10 percent in the early 1990s.

New Zealand's economy gradually recovered, and the country regained its status as a prosperous nation with a gross domestic product (GDP) of NZ$155.672 billion in 2006. In addition, the nation once again enjoys a relatively high standard of living, with GDP per capita in 2006 of NZ$37,873 and life satisfaction ranking 20th on the 2006 Human Development Index. Quality of life in New Zealand cities is also ranked relatively highly, with Auckland placing 5th and Wellington 12th in the 2008 Mercer Quality of Living Survey.

Services play an important role in the economy, particularly the tourism industry, which contributes around 9 percent of the country's GDP. Even though the primary sector contributes just 4.3 percent of GDP, agricultural and other primary products make up a disproportionate share of exports, and almost a quarter are exported. As a result of this imbalance, the economy is susceptible to fluctuations in commodity markets. In particular, dairy products accounted for 21 percent ($7.5 billion) of total merchandise exports in the year to June 2007. The dairy cooperative Fonterra, the largest company in the country, controls almost one-third of the international dairy trade.

In 2006 Australia was New Zealand's leading export partner (20.5 percent), followed by the United States (13.1 percent), Japan (10.3 percent), China (5.4 percent), and the United Kingdom (4.9 percent).

One of the biggest challenges facing New Zealand's economy is a series of brain drains, beginning in the 1970s, in which many well-educated New Zealanders migrated to Australia, Britain, and the United States. To counteract this outflow, New Zealand has a relatively open immigration policy, especially in relation to attracting skilled and talented professionals. Due in part to this policy, New Zealand has one of the highest proportions in the world of residents born overseas, at around 23 percent, and has drawn educated professionals from around the world.

See Also: Australia; Brain Drain; NZSE 50 (New Zealand Stock Index); Pacific Rim.

Bibliography. CIA, "New Zealand," *World Factbook*, www.cia.gov (cited March 2009); John Janssen, *New Zealand's Productivity Performance* (New Zealand Treasury, 2008); M. King, *The Penguin History of New Zealand* (Penguin, 2003); Norman LaRocque, *Skill Development and Skill Shortages in New Zealand* (Education Forum, 2007); Gordon McLauchlan, *The Illustrated Encyclopedia of New Zealand* (Premier Books, 1992); Mercer, "2008 Mercer Quality of Living Survey," www.mercer.com (cited March 2009); Statistics New Zealand, Census, www.stats.govt.nz/census (cited March 2009); *United Nations Development Programme, Human Development Report 2007/2008* (UNDP, 2007).

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Nigeria

The west African country of Nigeria was a major economic power when the British invaded and occupied parts of the country from 1861. Nigeria gained its independence in 1960. With a population of 135 million and covering 923,700 sq. km, it still dominates—politically and economically—much of west Africa.

In the early 17th century, European powers started to establish trading posts along the coast of what is now Nigeria. Initially, some of these posts were for trading with the local people, but soon the English and other Europeans started the slave trade. The Company of the Royal Adventurers was chartered in 1660, succeeded 12 years later by the Royal Africa Company. Along the coast, trading posts were replaced by English and Dutch forts where slaves were held before being transported to the Americas.

During the Napoleonic Wars, following the French invasion of the Netherlands, the British broke the hold of the Dutch. By the middle of the 19th century, most of the British trade was focused on the area around Lagos and the delta of the River Niger. This trade coincided with many wars in the region among different tribes. With the abolition of the slave trade, the British started expanding into plantation agriculture, dealing in palm oil, and also attempting to secure sources of oil and ivory.

A fishmonger arranging her wares in a Nigerian market. The country's oil industry employs just 10 percent of the workforce.

The British started ruling Nigeria in 1861, with Lagos becoming a crown colony. Ostensibly, the aim was to prevent illegal slave trading and also involvement in the Yoruba civil wars. In 1900 the Protectorate of Northern Nigeria was established. By 1906 the whole of Nigeria was under British control, with the colony of Lagos being incorporated into the Protectorate of Southern Nigeria. In 1914 the Northern and Southern protectorates were merged. The economic focus of the country was on growing cash crops and exploiting raw materials and minerals to help industrial development in Europe.

In the 1890s a railway was built, and in the late 1920s, roads were improved, thereby helping create a wealthy elite in Nigeria that started consuming British manufactured exports. The pound sterling became the medium of exchange. As a result, many British companies and some local firms started mining tin; growing cotton, cocoa, and groundnuts; and continuing palm oil plantations. As a result of increasing wealth in Nigeria, many British and other agency houses operated in the country, and many Nigerians enlisted in the British armed forces during World War I and World War II. During the latter conflict, agitation for independence increased, and in 1945, a large 40-day strike crippled the country's economy. The British made many concessions, and Nigeria started preparing for independence. After experiments in federalism, independence was granted in 1960.

Political problems started in 1962 along tribal lines. In 1966 the military staged a coup d'état, which was followed by countercoups. In May 1967 Lt. Col. Odemegwu Ojukwa urged autonomy for eastern Nigeria, which then formally seceded as the Republic of Biafra. This secession led to a civil war from May 1967 to January 1970, in which tens of thousands of people were killed or died of starvation or lack of medical supplies. It ended with defeat for Biafra.

Oil and Natural Gas

The oil crisis of 1973 and 1974 led to a financial windfall for Nigeria—so much so that in 1975, about 90 percent of the export revenue of the country came from oil. Soon afterward, deposits of natural gas were found. At the same time, coal production fell; it had been 940,000 tons a year in 1958 but was only 73,000 tons in 1986, when it made up less than 1 percent of the country's energy.

The wealth in Nigerian oil led to more disputes and military coups, which in turn led to a succession of military leaders, some of whom were involved in widespread corruption and graft. Although Western companies were eager to do business with Nigeria owing to the wealth there, many were nervous about the government's poor human rights records.

Despite the oil deposits, some 70 percent of the workforce is still involved in agriculture, although it accounts for only 27 percent of the nation's gross domestic product (GDP). Industry, especially oil, employs 10 percent of the workforce and generates 49 percent of Nigeria's GDP. The service sector accounts for 20 percent of the workforce and produces 24 percent of the GDP.

Oil and petroleum products make up 95 percent of the country's exports, with most of the remainder coming from cocoa and rubber. Some 46 percent of the exports go to the United States, with India and Spain being other major importers of Nigerian oil. Imports—especially of manufactured goods, machinery, transportation equipment, food, and live animals—come from many countries, with 9 percent from the United States and 8 percent from both China and the United Kingdom.

See Also: Africa; Chevron; Company Profiles: Africa; Royal Africa Company.

Bibliography. Claude Abe, ed., *Political Economy of Nigeria* (Longman, 1985); D. S. P. Alamieyeseigha, Steve S. Azaiki, and Augustine A. Ikein, *Oil, Democracy, and the Promise of True Federalism in Nigeria* (University Press of America, 2008); Olufemi Amao and Kenneth Amaeshi, "Galvanising Shareholder Activism: A Prerequisite for Effective Corporate Governance and Accountability in Nigeria," *Journal of Business Ethics* (v.82/1, 2008); Soala Ariweriokuma, *The Political Economy of Oil and Gas in Africa: The Case of Nigeria* (Routledge, 2008); Emmanuel A. Erondu, Alex Sharland, and John O. Okpara, "Corporate Ethics in Nigeria: A Test of the Concept of Ethical Climate," *Journal of Business Ethics* (v.51/4, 2004); Peter Kilby, *Industrialization in an Open Economy: Nigeria, 1945–1966* (Cambridge University Press, 2008); I. A. Oduola, M. O. IIori, and J. B. Akarakiri, "Capability Building and Business Development Practices in the Public Research and Development Organisations in Nigeria," *South African Journal of Economic and Management Sciences* (v.9/4, 2006); J. K. Onoh, *The Nigerian Oil Economy: From Prosperity to Glut* (Croom Helm, 1983); Scott R. Pearson, *Petroleum and the Nigerian Economy* (Stanford University Press, 1970); Chad Steinberg, Stephen Swaray, and Jennifer Moyo, *Nigeria: Selected Issues* (International Monetary Fund, 2008).

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Nikkei Index

The Nikkei Index reflects a number that expresses the market-value-weighted average of a group of stocks. There are five Nikkei indices: the Nikkei 225, Nikkei 500, Nikkei 300, Nikkei JASDAQ, and Nikkei All Stock Index. The Nikkei 225 is the most widely tracked Japanese stock market index in world. Other popular Japanese stock market indices are the Tokyo Stock Price Index (TOPIX) and Nomura 400. Similar to broad-based stock market indices in other countries, the Nikkei 225 is an indicator of future economic performance of the overall economy. It is composed of the most liquid 225 stocks on the Tokyo Stock Exchange (TSE) First Section. These 225 companies represent about 69 percent of the total current profits and 68 percent of total assets of all TSE First Section companies. At the end of 2007, there were 2,976 publicly traded companies in Japan. The number of public companies listed are TSE (2,389), TSE First Section (1,727), TSE Second Section (467), and TSE Mothers (195).

Nikkei 225 is calculated and published by the privately held Nikkei Inc. (Nikkei). Nikkei was established in 1876 and is the parent company of Japan's largest daily business newspaper, Nihon Keizai Shimbun. Occasionally, Nikkei removes stock issues from the index and replaces them with other issues because of bankruptcies, mergers, and annual reviews in consideration of changes in each stock's liquidity and Japan's industrial structure. Nikkei uses industry sector r ebalancing rules to assure that the index reflects possible changes in Japan's industrial structure. The 225 stocks that compose the index are grouped into six sectors: Technology, Financial, Consumer Goods, Materials, Capital Goods/Others, and Transportation/Utilities. The six sectors are composed of 36 industries: (1) Technology: pharmaceuticals, electrical machinery, automobiles, precision machinery, telecommunications; (2) Financial: banks, securities, insurance, miscellaneous finance; (3) Consumer Goods: marine products, food, retail, services; (4) Materials: mining, textiles, paper and pulp, chemicals, oil, rubber, ceramics, steel, nonferrous metals, trading companies; (5) Capital Goods/Others: construction, machinery, shipbuilding, transportation equipment, miscellaneous manufacturing, real estate; and (6) Transportation/Utilities: railroads and buses, trucking, shipping, airlines, warehousing, electric power, gas.

The Nikkei 225 is modeled after the Dow Jones Industrial Average (DJIA). As with the DJIA, it is a price-weighted average of stocks in the index. The DJIA consists of just 30 stocks and is much older. DJIA was first published in May 1896 by Charles Dow, former editor of the *Wall Street Journal*. The Nikkei 225 was created in 1950. Since its beginning, the Nikkei 225 has been calculated using the Dow Jones method. Ex-rights-adjusted prices of 225 stocks are summed and divided by a "divisor," which on July 28, 2008, was 24.424. The divisor is occasionally adjusted to maintain consistency as firms enter and exit the index.

The Bubble Economy

Nikkei 225 peaked at 38,916 Japanese yen on December 29, 1989, its highest level ever. At the peak, market capitalization of TSE-listed shares accounted for 97 percent of the market capitalization of all Japanese equity markets combined and was roughly equivalent to the collective market capitalizations of the New York Stock Exchange, London Stock Exchange, Deutsche Borse, Swiss Exchange, Borsa Italiana, and BME Spanish Exchanges. From 9,703 yen in 1984, the index soared 300 percent over five years, creating one of two colossal "asset price bubbles" experienced by Japan during the latter half of the 1980s—reminiscent of the manias recounted in Charles Mackay's *Extraordinary Popular Delusions and the Madness of Crowds*: Tulipomania, the South Sea Bubble, and the Mississippi Scheme of the 17th and 18th centuries. In addition to the stock market bubble, another bubble appeared in Japan's real estate market. The market value of one square meter of land in Tokyo's Ginza district rose to US$1.5 million. According to some estimates, the market value of the Imperial Palace grounds in central Tokyo was higher than all of the land in California.

The Nikkei 225 descent from the peak was nearly as steep as the climb had been. Between 1990 and 1991, the index descended rapidly, falling to as low as 14,309 yen—a loss of 63 percent of market value in just over two years. By 2003 it sank further to as low as 7,608 yen, equal to only 20 percent of value at the December 1989 peak. On October 20, 1987, as the bubble was forming, the Nikkei 225 experienced the largest percentage decline in its history, falling 14.9 percent in a single day—so-called Black Tuesday, coming on the heels of Wall Street's Black Monday, when on October 19, 1987, the DJIA fell 22.6 percent, its largest, single-day decline in history. On October 2, 1990, during one of the worst long-term market declines in Japanese stock market history, the index experienced its largest percentage gain in a single day of 13.2 percent.

Other Nikkei Indices

The Nikkei 500 was created in January 1972 and comprises 500 First Section–listed companies. In other important respects, it is similar to the Nikkei 225. The index is reconstituted each year according to changes in trading volume, trading value, and market capitalization. The last reconstitution took place on July 22, 2008. Nikkei introduced the Nikkei 300 in October 1982. The base year of the Nikkei 300 is 1982, with October 1, 1982, equal to 100. As with most other Nikkei indices, component stocks are selected from the TSE First Section. The index is periodically rebalanced in consideration of liquidity, stability, and sector coverage. The Nikkei JASDAQ Average contains all stocks listed on the JASDAQ Securities Exchange.

There are six securities exchange markets in Japan: the Tokyo Stock Exchange (TSE), Osaka Stock Exchange (OSE), Nagoya Stock Exchange (NSE), Sapporo Stock Exchange (SSE), Fukuoka Stock Exchange (FSE), and JASDAQ. JASDAQ is the only one specialized solely in venture firms and small capitalization stocks. Other Japanese exchanges created "sections" that specialize in "small cap" stocks—TSE's Mothers exchange, OSE's Hercules exchange, NSE's Centrex exchange, SSE's Ambitious exchange, and FSE's Q-Board exchange. In terms of market capitalization, the top four JASDAQ-listed firms are Yahoo Japan Corporation, Rakuten, Jupiter Telecommunications, and McDonald's Holdings Japan.

Of the 700 IPOs in Japan between 1998 and 2007, 48 percent were listed on JASDAQ. The other 52 percent were listed on Mothers, Hercules, TSE, and other markets. At the end of 2007, the number of listed companies on the following Japanese securities exchanges were: TSE1 (1,727), TSE2 (467), OSE1 (641), OSE2 (249), Hercules (172), Mothers (195), and JASDAQ (976). Note that some companies are listed on more than one exchange. At the end of 2007, the total market capitalization, in trillions of Japanese yen, for each, was: TSE1 (475.6), TSE2 (5.4), OSE1 (322.1), OSE2 (2.1), Hercules (1.7), Mothers (2.8), and JASDAQ (13.4). Total trading value for each, in trillions of Japanese yen was: TSE1 (688.5), TSE2 (3.4), OSE1 (22.9), OSE2 (0.8), Hercules (6.2), Mothers (13.3), and JASDAQ (10.8). The last of the Nikkei indices, the Nikkei All Stock Index, is comprised of all stocks on Japan's five stock exchanges: Tokyo, Osaka, Nagoya, Sapporo, and Fukuoka. Only JASDAQ is excluded.

See Also: Dow Jones Index; Japan; S&P 500 Index; Shanghai Composite Index; Stock Exchanges.

Bibliography. Edwin J. Elton and Martin J. Gruber, *Japanese Capital Markets* (Harper & Row, 1990); Chin-Tsai Lin and Yi-Hsien Wang, "The Impact of Party Alternative on the Stock Market: The Case of Japan," *Applied Economics* (v.39/1, 2007); Charles Mackay, *Extraordinary Popular Delusions and the Madness of Crowds* (Harriman House, 2003 [1841]); *Nihon Keizai Shimbun*, *Nikkei Kaisha Joho* (in Japanese) (Nihon Keizai Shimbun-sha, 2008).

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Nippon Life Insurance

Nippon Life Insurance Co. (Nihon Seimei Hoken Sōgo-gaisha or Nissay in Japanese) provides life insurance products to individual and corporate customers. In addition to providing life insurance and annuity products, the company engages in real estate development and management and in a variety of educational and philanthropic projects.

Nippon Life employs around 62,000 people (as of January 1, 2008). Its headquarters is located in Osaka, Japan. Although the company primarily operates in Japan, where it has 130 branch offices, it also has operations in North America, Europe, and Asia, including a New York representative office. Nippon Life's principal overseas subsidiaries have also offices in the United Kingdom, Germany, and China.

While Nippon Life engages in the life insurance business, its subsidiaries and affiliates conduct nonlife insurance and other life insurance operations. Its business includes underwriting whole life, whole life medical treatment, long-term care, term life, retirement, and reinsurance policies. Nippon Life provides insurance accounts that allow customers to combine death, medical treatment, long-term care, retirement, and nonlife coverages. Moreover, the company provides asset management; serves as proxy for other insurance companies and other financial institutions; and engages in credit guarantees, counter sales, private placement of securities, transaction of trading securities, and sales of investment securities and investment trust beneficiary securities.

Nippon Life's underwriting insurance is a product of its life insurance business licenses. Its asset management contains financial assets invested in loans, securities, and real estate. Nippon Life underwrites bonds and then offers them to the public.

History

Historically, the company has been successful. It was established as a limited company in 1889. In 1891, the company was renamed Nippon Life Assurance Co. The company then faced a major restructuring and reformed as a mutual company in 1947. Nippon Life continued its operations by choosing to grow either by acquiring other companies or by forming joint ventures.

Major events in Nippon Life's history include the 1991 foundation of a U.S. insurance subsidiary, Nippon Life Insurance Company of America, which enabled Nippon Life to offer products and services under its own brand. In 1997, the company established a joint venture called Nippon Life Insurance Company of the Philippines. Also in 1997, Nippon Life acquired shares of a Thailand insurer, Bangkok Life Assurance. The company later increased its stake in Bangkok Life Assurance. In 2003 the company established China-based Nissay-SVA Life Insurance in a joint financing agreement with a consumer electronics manufacturer in China. Beginning in 2007, this joint venture offered insurance products related to stock investment. In 2008 Nippon Life became the largest shareholder of the U.S.-based Principal Financial Group.

Key executives of Nippon Life include Ikuo Uno (chairman), Kunie Okamoto (president), Mitsuhiro Ishibashi (vice chairman). Members of the board of directors include Eitaro Waki, Takashi Minagawa, Tetsuro Taki, Keizo Tsutsui, Kiyoshi Ujihara, Chiaki Hamaguchi, Yoichi Fujita, Yoshikazu Takeda, Kenichi Kobayashi, Yoshinobu Tsutsui, Takeshi Furuichi, Yoshihisa Akiyama, Akito Arima, and Shin Ushijima.

Market Position

Nippon Life is successful for many reasons. First, it is the foremost figure in the Japanese insurance market. Thanks to its long history and leading market position, the company enjoys strong brand awareness and brand loyalty. Also, supported by its massive financial resources, the company dominates the Japanese market with greater bargaining power than its rivals. Nippon Life has managed increasing profitability in its operations. Through strong profitability, the company attracts investors and provides a strong base for future growth plans.

Probably the best way to assess the power of Nippon Life is to review its strong solvency margin. The solvency margin ratio is one of the indicators that determine whether a company has the leeway to pay benefits in the event of a catastrophe or a stock market collapse. This ratio not only proves that Nippon Life is a strong insurance company, but also shows its ability to threaten its competitors.

See Also: Dai-ichi Mutual Life Insurance; Japan; .

Bibliography. Nippon Life, www.nissay.co.jp (cited March 2009).

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Nippon Oil

Nippon Oil Corp. (Shin Nihon Sekiyu Kabushiki-gaisha in Japanese) is engaged in the refining and marketing of oil and gas. As a group of companies, it is also engaged in exploration, production, and importation of oil and gas; infrastructure construction; fuel cells; and other energy-related activities.

Nippon Oil operates primarily in Japan. The company was incorporated in 1888 and now employs around 13,000 people (as of January 1, 2008). Its headquarters is located in Tokyo. Although its domestic facilities—such as oil refineries, oil stocks, and plants—are scattered throughout Japan, the company's principal subsidiaries maintain overseas facilities, such as in Liberia and Canada.

Japan is the company's largest geographic market (95.7 percent of its total revenue in 2007). Other geographical areas of operation are Asia and Oceania (3 percent of total revenue in 2007), North America (0.8 percent of total revenue in 2007), and Europe (0.5 percent of total revenue in 2007).

The company generates revenue from four of its business divisions. These divisions include refining and marketing (89.9 percent of total revenue in 2007), construction (6.2 percent of total revenue in 2007), oil and natural gas exploration and production (3.1 percent of total revenue in 2007), and other (0.9 percent of total revenue in 2007).

One of the flagship businesses of Nippon Oil is the distribution of petroleum products. Principal products include fuel oils (such as automotive gasoline and aviation fuels), automobile lubricants (such as gasoline- and diesel-engine oils), marine lubricants (such as cylinder oils for high-speed engines), industrial lubricants (such as turbine oils, compressor oils, and vacuum-pump oils), metalworking fluids (such as heat-treatment oils, rust-preventive oils, electric insulation oils, and asphalt), and petrochemicals (such as ethylene, propylene, benzene, and carbon fiber products). Nippon Oil markets its products with the brand name ENEOS.

Also, especially throughout its subsidiaries, the company stores and transports petroleum products; manufactures and sells liquefied gas and petrochemical products; explores and develops crude oil and natural gas; manufactures, sells, and purchases crude oil and petrochemical products overseas; and designs, constructs, and engineers oil-related facilities. Major subsidiaries of Nippon Oil that conduct these operations include Japan Canada Oil Co., Nippon Oil Exploration USA, Nippon Oil Exploration and Production UK, Japan Vietnam Petroleum Co., Mitsubishi Oil Company Exploration UK, and Mizushima LNG Co.

History

Nippon Oil was formed in the late 1880s as Nippon Oil Ltd. and changed its name to Nippon Oil Co. in 1894. The company established strong exploration projects in 1960s and further developed these activities throughout the 1990s. In 1999 the company merged with Mitsubishi Oil Co. to become Japan's largest oil importer and distributor. This merged company was initially called Nippon Mitsubishi Oil Corp. and was renamed Nippon Oil Corp. in 2002. Today, it continues its operations with the help of numerous overseas subsidiaries.

The key people of Nippon Oil include Fumiaki Watari (chairman) and Shinji Nishio (president). Its board of directors consists of Naokazu Tsuda, Makoto Satani, Toshikazu Kobayashi, Yukihiro Matsuyama, Masahito Nakamura, Shigeo Hirai, Kan Ueno, Seiichi Isshiki, Yasushi Kimura, Yasuo Kamino, Junichi Kohashi, Naoaki Tsuchiya, Makoto Kuramochi, Akira Kitamura, Hideo Tabuchi, Michio Ikeda, Hiroshi Ono, Teruo Omori, Hideaki Kobashi, Yukihiro Tabata, Jun Matsuzawa, and Hajime Okazaki.

Market Position

One of the reasons for Nippon Oil's success may be its strong market position in the Japanese oil industry. As the largest refiner in Japan, Nippon Oil is responsible for 22.5 percent of total petroleum-products sales in Japan (as of 2007). Also, Nippon Oil has the largest service-station network in Japan, with more than 10,000 facilities, constituting more than one-fifth of the total stations in Japan. Another reason is Nippon Oil's broad product portfolio, which gives it a steady cash inflow and increases its customer base. Finally, strong research and development capabilities help the company modernize and improve its products. The company spent more than $100 million in 2007 for research and development, supporting exploration, production, and refining activities.

See Also: Asia; Company Profiles: East Asia; Japan.

Bibliography. Nippon Oil, www.eneos.co.jp (cited March 2009).

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Nippon Steel

Nippon Steel Corp. (Shin Nippon Seitetsu Kabushikigaisha in Japanese) is one of the principal iron and integrated steelmakers in the world. The company is also Japan's largest steelmaker, with production capacity of more than 30 million tons annually. As a group of companies, it is also engaged in various engineering and construction activities, production of chemicals, and development of new materials.

Nippon Steel operates primarily in Japan. Its subsidiary companies include Nippon Styrene Monomer Co. Ltd., Nippon Micrometal Corp., Nippon Steel Chemical Korea Co. Ltd., NSCC Asia Ltd. (Hong Kong), Nippon Technoresearch Corporation and Nippon Steel Chemical Carbon Co. Ltd. The company's global strategic alliances and joint business activities vary from different levels of core-steel production to logistics and technical issues. The company employs around 47,000 people (as of January 1, 2008). Its headquarters is located in Tokyo.

The company generates revenue from six business divisions: steelmaking and steel fabrication (80 percent of total revenue in 2007), engineering and construction (7 percent of total revenue in 2007), urban development (2 percent of total revenue in 2007), chemicals (6 percent of total revenue in 2007), new materials (2 percent of total revenue in 2007), and system solutions (3 percent of total revenue in 2007).

The steelmaking segment produces multipurpose and multiservice products such as electric power supply and services, fabricated and processed steels, titanium, and flat-rolled products. In addition, this segment designs and provides maintenance for equipment, transportation, facility management, and related analysis and testing.

Among the other segments, the engineering and construction segment provides civil engineering and marine construction, which includes natural gas platforms and undersea pipeline infrastructure. The urban development segment is responsible for effective use of idle land owned by the company. This segment also provides housing and large-scale urban development operations, including real estate and rental of buildings. The chemicals segment provides industrial chemicals as raw materials for other products, such as materials for liquid crystal displays (LCDs). This segment is well known for its large share of the global market for advanced electronic materials. The new materials segment provides advanced composite materials for industrial use, including fine ceramics, bonding wires for semiconductors, and carbon fibers. Finally, the system solutions segment provides engineering consultation services on computer systems related to industrial use.

History and Market Position

Nippon Steel was formed in 1970 as a result of the merger of Yawata Iron and Steel and Fuji Iron and Steel, both of which were established in 1950. During the 1980s, the company expanded its operations into other segments, such as new materials (1984) and electronics (1986). Throughout the 1990s and 2000s, Nippon Steel progressed its business operations by conducting joint ventures and strategic alliances in different geographical markets.

Key employees of Nippon Steel include Akio Mimura (president), Akira Chihaya (chairman), Hideaki Sekizawa, Shoji Muneoka, Hiroshi Shima, Kiichiroh Masuda, and Bun'yuu Futamura.

The company is the dominant power in the Japanese market, not only in crude-steel production, but also in nonferrous materials. Some of its unique chemical products that are used in consumer electronics, such as plasma displays and cellular phones, hold about half of the market share. This share is meaningful considering the constantly growing household-appliances market, especially in countries such as China and India. Its prevailing market position gives the firm the advantage of economy of scale and increases its bargaining power.

Nippon Steel is known for technological innovations. The company's research and development achievements result in low production costs, making the company competitive in the worldwide steel industry.

See Also: Company Profiles: East Asia; Japan; *Kaizen;* Mittal Steel.

Bibliography. Adam Paul Brunet and Steve New, "*Kaizen* in Japan: An Empirical Study," *International Journal of Operations and Production Management* (v.23/11–12, 2003); Nippon Steel, www.nsc.co.jp (cited March 2009).

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Nippon Telegraph and Telephone

Nippon Telegraph and Telephone (NTT) began its existence in 1953 as a government-owned corporation. It has since changed into a privatized firm after a 20-year conversion program with the Japanese government holding one-third of the company's stock. NTT is the largest provider of telecommunications in Japan and the largest telecommunications company in Asia.

Based in Tokyo, NTT has more than 193,000 employees. Revenue in the year ending March 2008 was $91,192,000, with profits of $4,042,000. NTT provides the entire range of telecommunications services: mobile phones, land lines, and data communications. In addition, the company sells telecommunications equipment and operates Japan's telecommunications networks. In 2008 NTT provided service to 46 million customers.

Through the years, NTT has been recognized as a leader and innovator in telecommunications. It has, however, encountered the problems plaguing other telecommunications companies in recent years: competing for market share in an environment of increasingly fierce competition and small profit margins. As a result, NTT has looked at ways of going beyond its core capabilities to widen its customer base.

NTT is currently divided into five operational components: Regional Communications, Long Distance and International Communications, Mobile Communications, Data Communications, and Other. Regional Communications provides telephone and related services within the prefects (provinces) of Japan. Long Distance and International Communications provides communications services between the prefects. Mobile Communications provides mobile telephone services, while Data Communications supports system and network services. Finally, the Other component provides a wide range of miscellaneous support service for the company ranging from building maintenance to research and development.

As a result of legislation passed in 1984, NTT's status as a government-owned and -operated monopoly began to change. From 1985 to 2005, the Japanese government privatized the company. In 2005 the last optional shares were sold with the government in possession of only the mandated one-third ownership (actually, 33.7 percent).

The process of privatization and removal of the monopoly apparatus included not only government divestiture of shares, but it also entailed reorganization of NTT as well as other actions. In 1985 NTT was incorporated as a private company. Two years later, it was listed on the Tokyo Stock Exchange. In the 1990s various branches of NTT came into being, began operations, and were subsequently listed on the Tokyo Exchange. In 1999 NTT was reorganized. There were now three subsidiaries: NTT East, NTT West, and NTT Communications. NTT East and West were given the responsibility for providing telephone service for Japan.

With the removal of the monopoly came competition, and as the 21st century began, competitors very quickly started to crowd NTT, cutting into its customer base. In 2001 the telecommunications company Softbank offered broadband internet services. With that success, Softbank began to expand, buying Japan Telecom and beginning to offer the basic fixed-line service that NTT had been offering. With the acquisition of Cable & Wireless PLC, Softbank placed itself as the second-largest provider of fixed-line telecommunications in Japan.

In 2002, the year after Softbank entered the scene as an internet provider, NTT announced that it had suffered losses of $6.5 billion. NTT's response, as shown the next year, was to decrease losses by providing a wider range of services, even though to keep customers, it had reduced the costs for phone service within Japan. In June 2003 NTT announced that it had developed significant improvements in fiber optics that would allow it to transmit at speeds 10 times faster than had previously been the case. The technical innovation was seen as a means of allowing NTT to expand into Japan's broadband market to make up for the losses occurring that would continue as fixed-line services were not expanding and the mobile phone market appeared to reach saturation and gains could only be made by lowering the price for service. NTT was also looking for the number of customers it served through fiber optics to increase.

In May 2006 NTT reported that it had a 30-percent decline in full-year profits based on losses in both its mobile phone and fixed-line businesses. The president of the company had to acknowledge that the trend was not good and there were no grounds for optimism in the near-term future, although it was hoped that internet and computer services would at least partially offset the decline. The following year, NTT announced that it would maintain its strategy of looking beyond fixed-line communications as a way to counter losses.

Two years later, in March 2008, NTT had recovered and reported that profits were up by 32 percent based on the performance of long distance and international operations. Later in the year, NTT announced that net profit had increased in the April/June quarter by 17 percent mostly because of sales of mobile phone handsets.

See Also: Asia; Company Profiles: East Asia; Japan.

Bibliography. Marie Anchordoguy, "Nippon Telegraph and Telephone Company (NTT) and the Building of a Telecommunications Industry in Japan," *Business History Review* (v.75/3, 2001); NTT, *2007 Annual Report*, www.ntt.co.jp (cited March 2009); Hidetaka Yoshimatsu, *Politics of Telecommunications Reform in Japan* (Australia-Japan Research Centre, 1998).

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Nissan Motor

Nissan Motor Co. Ltd. is a multinational enterprise headquartered in Ginza, Tokyo, Japan. With 3.5 million cars sold worldwide in 2006, Nissan is one of the top 10 car producers in the world and is number two in Japan. Of these 3.5 million cars, only 740,000 cars (21 percent) were sold in Japan; the remaining 2.8 million cars were sold overseas, mainly in the United States and Asia. Although Nissan has increasingly shifted its production abroad, it still produces significantly more cars (1.2 million) than it sells in its domestic market. The main plants in Japan are located in Kanagawa-ken and Tochigi-ken, both in the Kanto region not far from Tokyo. Both plants are open for public visits. In addition, Nissan produces in North America, southeast Asia, China, Europe, and Africa.

From 2004 to 2006, Nissan steadily increased its sales from 8,576 billion yen ($83 billion) to 10,468 billion yen ($102 billion) while keeping its net income relatively constant at around 800 billion yen ($7.8 billion, outperforming all major American car producers but still falling behind Toyota.

History

Compared with other Asian carmakers, Nissan has a long history dating back to 1914. At that time, the company produced mainly trucks under the Datsun brand and only later started to produce cars under the Nissan brand. The company raised capital in 1933 and was formally acknowledged as Nissan Motor Co. Ltd. in 1934.

In the 1960s Nissan started to export small cars to the United States and Australia. By 1970, Nissan had established itself as one of the major carmakers in the world. The oil crisis in 1973 gave Nissan, as well as other Japanese carmakers, a major boost in sales abroad, because consumers became aware of fuel prices and appreciated the small Japanese economy cars.

To overcome trade barriers in the 1980s, Nissan set up plants in Australia, Mexico, Taiwan, South Africa, the United Kingdom, and the United States. As a result of this aggressive international expansion, the company had to scale back some of its operations, closing its plant in Australia, among others. In the late 1990s, Nissan had suffered consecutive losses to such an extent that it needed a partner to survive; in 1999 Nissan was virtually bankrupt.

Through outlets such as this dealership in the United States, Nissan sold 2.8 million cars overseas in 2006. Despite a serious downturn in the 1990s, it rose to become one of the world's top 10 car manufacturers.

After other Japanese carmakers and Daimler-Chrysler rejected an alliance, Renault was the only remaining bidder for the ailing Nissan. In March 1999, Renault acquired a 36.8 percent stake of Nissan for $5.4 billion. Renault later increased its investment in Nissan to 44.3 percent, and also invested 15 percent in Renault. At that time, the financial press was extremely skeptical that medium-size Renault would be able to turn Nissan around. Limited financial resources, cultural differences, and the complicated Japanese bureaucracy posed serious challenges. On the positive side, the companies brought complementary assets into the alliance. Nissan had a strong presence in Asia and North America, as well as advanced engineering skills. Renault offered a presence in Europe and a more marketing- and sales-focused approach.

Soon after his arrival in Japan, Carlos Ghosn, a charismatic Renault manager, implemented the Nissan Revival Plan. Even before the targeted timeline, Ghosn achieved his ambitious goals and turned Nissan into a profitable carmaker. This successful turnaround of a Japanese company through a foreign investor attracted worldwide attention, resulting in various publications ranging from books to academic case studies, and made Ghosn one of the most famous executives in Japan.

Not immune to the cutthroat competition in the global automobile industry, Nissan has failed to increase profitability during recent years. That Ghosn has become chief executive officer of both Nissan and Renault has not made the situation any better. To compete, Nissan has increased its investment in research and development and is expanding into Russia and India.

See Also: Japan; Renault; Strategic Alliance; Toyota Motor.

Bibliography. F. J. Froese and L. E. Goeritz, "Integration Management of Western Acquisitions in Japan," *Asian Business & Management* (2007); Stewart Lone and Christopher Madeley, *The Automobile in Japan* (London School of Economics and Political Science, 2005); Nissan Motor Co. Profile 2007, www.nissan-global.com (cited March 2009); Alex Taylor III, "Nissan's Radical Chic," *Fortune* (v.156/9, October 29, 2007).

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Nokia

The giant mobile phone company Nokia had its origin in 1865, when mining engineer Knut Fredrik Idestam (1838–1916) set up a paper mill at Tampere, Finland. After six years, he shifted to the town of Nokia on the banks of the Nokianvirta River in Finland. Nokia went into the rubber business in 1898. Its cable and electronics venture began in 1912 with the setting up of Finnish Rubber Works. Finally, Nokia Corp. emerged after a merger between Finnish Rubber Works and Finnish Cable Works in 1967. The corporation manufactured varied products, including personal computers, television sets, capacitors, cables, cycles, tires, and even the well-known Wellington boots. Its major focus, however, was mobile communications, in which it became a pioneer.

The Mobira Cityman 200 was the earliest communications model used for military and commercial purposes. In 1979 a merger with Salora Oy resulted in new Mobira Oy–produced mobile phones. After three years, the company introduced the Mobira Senator, an automobile phone. In the same year, Nokia's DX200 switch became the world's first operational digital telephone. Nokia launched the world's first transportable phone, the Mobira Talkman, in 1984. Three years later, it manufactured the Mobira Cityman 900, the first handheld phone. In 1989 the company changed its name from Nokia Mobira Oy to Nokia Mobile Phones. Nokia produced GSM (Global System for Mobile Communications) phones in 1991, making international roaming feasible. International calls through mobile phones ushered a new era of globalization: it was through Nokia's network that the premier of Finland made the first GSM call in 1991.

The computer and television divisions were not profitable, and beginning in 1992, the company focused on telecommunications only. This important strategic decision was made mainly due to the initiative of Chief Executive Officer Jorma Jaakko Ollila. Ollila's tenure as CEO from 1992 to 2006 was an eventful period during which Nokia became the world leader in the mobile telephone industry.

In 1992 the company launched Nokia 1011, the first GSM handset. Two years later, it introduced the Nokia tune in its Nokia 2100 model. The first satellite call was made in the same year with the help of a Nokia GSM handset.

The company introduced the snake game in the Nokia 6110 in 1997. It also launched a Wireless Application Protocol (WAP) handset, the Nokia 7110. In the new millennium, Nokia continued to improve mobile technology, and mobiles with sophisticated features flooded the world market. The 3G Nokia 6650 was launched in 2002, and the next year, multiplayer gaming was introduced. The Nseries of 2005 was another improved multimedia version. Nokia had now sold one billion phones to its customers. Olli-Pekka Kallasvuo became CEO of Nokia in 2006, and Ollila remained as nonexecutive chairperson.

Recent Developments

In April 2007 Nokia and Siemens formed the Nokia Siemens Networks. In the internet era, Nokia realized the value of connectivity, which had transformed the communication industry, and introduced the new internet services brand, Ovi. By this time, Nokia was the fifth-most-valued brand in the world. In 2007 and 2008, Nokia acquired companies such as Twango, Enpocket, and Navteq, which operated in video, personal media, and data-sector mapping. Nokia and Microsoft cooperated on network security and e-mail services.

The Comes with Music plan, launched in December 2007, helped Nokia regain its position as the world's leading manufacturer of mobile phones. Under this plan, customers could download music from Universal Music Group and Sony BMG for one year free of cost.

See Also: Finland; Siemens; Western Europe.

Bibliography. Yves Doz and Mikko Kosonen, "The Dynamics of Strategic Agility: Nokia's Rollercoaster Experience," *California Management Review* (v.50/3, 2008); Martti Haikio and Olli V. Virtanen, *Nokia: The Inside Story* (Edita, 2002); Pertti Karkkainen and Tero Ojanpera, "Pushing Technology to Where the Market Will Be: The Case of Nokia," *International Journal of Technology Management* (v.34/3–4, 2006); Michael Lattanzi, Antti Korhonen, and Vishy Gopalakrishnan, *Work Goes Mobile: Nokia's Lessons From the Leading Edge* (Wiley, 2006); Christian Lindholm et al., *Mobile Usability: How Nokia Changed the Face of the Mobile Phone* (McGraw-Hill, 2003); Trevor Merriden, *Cold Calling: Business the Nokia Way: Secrets of the World's Fastest Moving Company* (Capstone, 2001); Nokia, www.nokia.com (cited March 2009); Jouni Paavilainen, *Mobile Games: Creating Business With Nokia N-Gage* (New Riders, 2004); Jurgen Scheible et al., *Mobile Python: Rapid Prototyping of Applications on the Mobile Platform* (John Wiley & Sons, 2007); Dan Steinbock, *The Nokia Revolution: The Story of an Extraordinary Company That Transformed an Industry* (AMACOM, 2001).

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Nonfinancial Information Reporting

The complexity of modern business requires a company to disclose various information, formatted in numerous reports. Financial reporting traditionally has been regarded as the backbone of business reporting, which was more or less enough when an enterprise was primarily, if not exclusively, assessed on its crude financial performance. On the other hand, financial reports have been statutory driven and therefore compulsory, and companies have had little choice but to comply with the requirements set in the Accounting Law (Act) and/or a set of financial standards.

With the introduction and worldwide promotion of International Accounting Standards (IAS), nowadays the International Financial Reporting Standards (IFRS), the process of harmonization of accounting rules and principles has been accelerated. A set of annual financial statements prepared by a business entity, although reporting primarily and numerically the results achieved in the past financial year, includes a narrative statement by the chairperson or president, giving his or her views on the position and performance of the company in the past year. Often, this statement is an additional important source of information for financial and business analysts studying the performance of the company.

Growth of Nonfinancial Reporting

The growth in nonfinancial information reporting has had exponential growth with the rise in the importance of social reporting, corporate social responsibility (CSR), environmental reporting, and sustainable development and growth. The nature of investors may not have changed, but their perception of socially related information certainly changed in the last decade of the 20th century and the first decade the of 21st century. A famine for information exists, going beyond classical financial reporting. A good report by today's standards encompasses not only detailed financial information but also information on the market; the human resources function; the potential and problems of the company; the legal, political, and economic environments in which the company operates; and the view of management on all the major issues that may influence the company's position and market performance.

Financial performance as a prime descriptor of the company's success has been replaced by market performance. Business/financial analysts, investors, executives, and business and management scholars would agree that the very concept of market performance is more complex today and that making an appropriate assessment requires extensive use of information of a nonfinancial nature, more future oriented than a mere report on the past.

Motivation

Motivation for nonfinancial reporting usually is strategy driven, ensuring that the reputation and brand of the company are taken care of. Managers perceive that nonfinancial reporting practices are increasingly important due to competitor pressure. Fewer than 50 companies used nonfinancial reporting as late as 1992, but in 2006, more than 2,000 companies regularly reported nonfinancial information.

Nonfinancial reporting is perceived to be driven by the clear interest of various stakeholders in receiving information beyond mere financial reports, regardless of how detailed those reports are. Stakeholder/shareholder activism directly influences trends in company reporting. The most recent empirical research, however, has shown that pressure from nongovernmental organizations (NGOs) is declining and that direct shareholder activism is exerting further pressure for nonfinancial information reporting.

Financial and business analysts are the driving force behind the increasing thirst for nonfinancial information. Financial analysts testified to the Jenkins Committee in the United States that nonfinancial information reporting is of ultimate importance for analyzing financial markets and understanding future development.

Although the pressure from analysts is present at the macro level, the perception of companies is that financial markets, per se, are not the key driver in defining the need for nonfinancial information reporting. The investment community is focusing increasingly on social information reporting, and the top (Forbes 500) companies realize that they must comply with the expectations of current and potential investors.

Future Reporting

It is difficult to foresee how nonfinancial information reporting will develop in the future, because the very nature of nonfinancial information reporting may change. At present, it is largely voluntary; whether some information will be disclosed is a decision of the firm, based on management's assessments of costs and benefits. Empirical research has not as yet corroborated the belief that voluntary disclosures have a direct positive influence on the movement of share prices. In contrast, some researchers have suggested that it may have an adverse effect.

Overall, nonfinancial information reporting may remain a dominant practice primarily in large Western companies, most likely those that are on the Forbes 500 list. Leading firms in emerging and developing markets may also endorse the practice, but it is not clear what benefits they will draw. The investment community will also have to learn how to deal with the increasingly important inflow of indirect information voluntarily given by companies, well above the level prescribed by law.

See Also: Corporate Social Responsibility; Environmental Standards; Financial Reporting; International Financial Reporting Standards; Shareholder Activism.

Bibliography. D. Alexander and A. Britton, *Financial Reporting* (Cenage, 2004); K. Gazdar, *Reporting Nonfinancials* (John Wiley & Sons, 2007); J. Grant, T. J. Fogarty, R. J. Bricker, and G. J. Previts, *Corporate Reporting of Nonfinancial Performance Indicators and Operating Measures* (Financial Executives Research Foundation, 2000); H. V. A. Johnsson and P. E. Kihlstedt, *Performance-Based Reporting: New Management Tools for Unpredictable Times* (John Wiley & Sons, 2005); Kai Kristensen and Anders H. Westlund, "Valid and Reliable Measurements for Sustainable Non-Financial Reporting," *Total Quality Management and Business Excellence* (v.14/2, 2003); Anna Rylander, Kristine Jacobsen, and Goran Roos, "Towards

Improved Information Disclosure on Intellectual Capital," *International Journal of Technology Management* (v.20/5–8, 2000); United Nations Conference on Trade and Development, *Guidance on Corporate Responsibility Indicators in Annual Reports* (United Nations, 2008).

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Nongovernmental Organizations

A nongovernmental organization (NGO) is a specific type of voluntary organization characterized by its involvement in international relief and development activities. As part of the voluntary sector, NGOs are distinct from government and commercial organizations and are characterized by being formal, private, non-profit-distributing, self-governing, and possessing a degree of voluntarism.

It is possible to distinguish between NGOs based in developed countries (Northern NGOs) and those based in developing countries (Southern NGOs). Northern NGOs can be further divided according to their principal method of operation: operational NGOs, which pursue international development by working directly with beneficiaries; advocacy NGOs, which seek to facilitate change through lobbying and awareness-raising activity; and fund-raising NGOs, which gather resources that are subsequently delivered to beneficiaries through partner organizations.

These methods of operation are not mutually exclusive. Some NGOs have very broad mission statements; others restrict themselves to specific geographic areas or types of activity. In a broader sense, NGOs make a distinctive contribution to international development as a result of their independence. In particular, they are credited with an ability to reach the poorest and most marginalized groups while retaining the flexibility to respond quickly to changing environments. Conversely, they are criticized for their lack of global impact, as they often focus on community-level projects, although working alongside other types of organizations in the international development community serves to enable impact at multiple levels.

The Voluntary Sector

In simple terms, it is possible to divide organizations into three categories, or sectors: private (commercial), governmental (public), and voluntary (third). The scale and importance of the voluntary sector is vast. In the United Kingdom (UK), 2008 data on civil society showed that the sector had a workforce of 1.3 million people (around 4.5 percent of the country's working population), comprised 865,000 organizations, and had a combined income of £109 billion.

The boundaries among these sectors are becoming progressively blurred, however, with governments funding the voluntary sector to deliver public services and to pursue government objectives, and businesses entering relationships with voluntary organizations to demonstrate their social responsibility. Volvic, for example, is currently working with World Vision to develop water and sanitation resources in Africa. In its "1L for 10L" campaign, Volvic, through World Vision, will provide 10 liters of drinkable water for every one liter it sells. The project will take place in Zambia, Ghana, Malawi, and Mali through the building of wells and associated infrastructure. The UK government provides competitive grants to fund the delivery of a wide range of services, including schemes for urban regeneration; youth projects; and the refurbishment of community facilities through the Big Lottery, the Voluntary Sector Support Unit, and other funding schemes.

Voluntary Organizations

An NGO is a specific type of voluntary organization, so before focusing on NGOs, it is useful to define voluntary organizations in general. The voluntary sector is sometimes defined as comprising organizations that are neither commercial nor governmental—a so-called residual approach. By contrast, structural-operational definitions identify voluntary organizations according to key characteristics of voluntariness.

One such definition identifies five key features of voluntary organizations. They must be *formal* (with some degree of institutionalization), *private* (institutionally separate from government), *non-profit-distributing* (not returning profits to owners or directors), *self-governing* (equipped to control their own activities), and *voluntary* (involving some meaningful degree of voluntary participation). Although few people would disagree with the principles behind these criteria, in practice they do have limitations.

The suggestion that a voluntary organization must exhibit a degree of formality or institutionalization is useful in distinguishing between ad hoc and organized action. In making this distinction, however, informal associations are effectively excluded from the voluntary sector. This exclusion may not be desirable, as the vast majority of voluntary action takes place through small, informal, and ad hoc associations.

A further concern is that research suggests that as an organization becomes more formal, the level of voluntary participation falls. Consequently, two of the defining features of voluntary organizations inherently conflict.

Although the requirement to be institutionally separate from government is sound, it can be difficult to achieve in practice. Since the late 1980s, a gradual shift toward a contract culture has occurred, with voluntary organizations entering into contracts with governments to undertake specific projects or to provide particular services. Governments often attach strict planning and reporting requirements to their funding, with the result that some voluntary organizations end up operating in a manner similar to public-sector bodies. Overreliance on funding of this kind can have an adverse effect on the image of the voluntary organization, as well as on its freedom and operational efficiency. Data from the United Kingdom indicate that the proportion of voluntary-sector income being received from the public sector continues to increase.

Several definitions include the requirement that voluntary organizations should not distribute profits, but different perspectives exist on what this requirement means in practice. One view is that an organization should not distribute net earnings to anyone who exercises control of it. The reference to net profits suggests that it is acceptable to pay staff. Some observers question this practice on the basis that it can be difficult to determine the point at which fair compensation becomes profit distribution.

The issue of self-governance is inextricably linked to the concept of an organization. For an organization to be recognized as an entity, it must be in a position to influence its own actions. It is widely acknowledged, however, that voluntary organizations have complex stakeholder groups. The emphasis placed on accountability to stakeholders suggests that it may be difficult for voluntary organizations to truly determine their own actions.

The issue of voluntary participation is also problematic in the sense that no reference is made to the level at which the volunteers should work. In some larger voluntary organizations, volunteers are active in fund-raising, whereas decision making is undertaken by paid professionals. This arrangement raises the question of whether such volunteers have a suitably significant role to justify calling the organization a voluntary one.

Despite the problems with structural-operational definitions, they are nevertheless more positive than the residual approach outlined earlier, in that they provide criteria for inclusion in the voluntary sector. NGOs are a specific type of voluntary organization that meet this structural-operational definition.

Terms

Any consideration of the voluntary sector and the organizations that reside within it invariably becomes engaged in a debate about terminology. There appears to be a lack of consensus on the use of specific terms and the meanings associated with them. The result is that it can be difficult to interpret research studies, as it is not always clear what type of organization is being examined. Therefore, no treatment of this subject area would be complete without considering some of the terms that are in use and the ways in which they may be interpreted.

In addition to *nonprofit,* terms that are in widespread use include *charity, nongovernmental organization (NGO), private voluntary organization (PVO), not-for-profit, nonprofit,* and *third-sector organizations.* Similarly, these organizations are collectively labeled as the *third sector;* the *nonprofit sector;* the *voluntary sector;* and, more recently, *civil society.* What might these terms mean, and are they really just different labels for the same type of organization?

Charity is the easiest term to define as a result of its legal standing. In the United Kingdom, a charity is a legally recognized entity. To become a registered charity, an organization must have aims consistent with the current interpretation of the principle of charitable purposes, which sets out acceptable types of activity. After being awarded charitable status, an organization must fulfill strict criteria that dictate how and for what purpose it operates.

Registered charities are strictly regulated by Charity Law, and the Charity Commission has a range of powers to intervene if this law is contravened. One of the challenges with this approach, however, is that the definition of acceptable activity changes over time. Consequently, some registered charities would not be given charitable status under the current interpretation of the criteria.

At first sight, the terms *nonprofit* and *not-for-profit* (NFP) appear to be very similar, implying that they may be interchangeable. Indeed, there is no discernible difference in the way these terms are used by the literature. It is possible, however, to make a subtle but important distinction between nonprofit and not-for-profit organizations. It can be argued that although not-for-profit organizations do not have the generation and distribution of profits as a primary goal, they may still make profits without jeopardizing their status. By contrast, it may be argued that nonprofit organizations must not make a profit, whether or not it is their intention to do so.

The term *third-sector organization* differs from the others in that it doesn't describe organizations themselves. Instead, it is a generic term used to refer to the set of organizations that have been placed within the third sector. Therefore, the definition of this term relies on the definition of the third sector and perhaps on the structural-operational definition outlined earlier. It seems that these two terms are simply alternative inert labels adopted by some to avoid using terms that have the potential to carry deeper meanings.

The term *nongovernmental organization* is meaningless if taken literally; after all, businesses are also nongovernmental. The term is in widespread use, however, and was officially recognized in 1950 through a United Nations resolution. It has gained a meaningful definition through historical association, being traditionally used to describe voluntary organizations that are specifically involved in international relief and development activities. Thus, general support exists for the suggestion that NGOs represent a specific type of voluntary organization defined by principal purpose.

Some literature uses the term *private voluntary organization* to refer to organizations engaged in this kind of activity. There is some debate as to whether the terms *NGO* and *PVO* are interchangeable, although recent use exhibits convergence of the terms. The only apparent difference seems to be that these organizations tend to be called NGOs in Europe and PVOs in North America—a distinction echoed by some intergovernmental bodies.

Methods of Operation

One problem that does arise is the current trend toward using the term *NGO* to refer to organizations that carry out development work in their own countries (so-called grassroots or indigenous NGOs). This use is inconsistent with the idea that NGOs carry out international development work, and it would be logical to argue that organizations operating solely in their own countries are really examples of voluntary organizations. The term is used this way, however, which leads to an initial categorization of NGOs that distinguishes between those based in developed countries and those based in developing countries. These are often referred to as Northern NGOs and Southern NGOs, respectively. The use of the terms *Northern* and *Southern* reflects prevailing terminology, which refers to the developed world as the global North and the developing world as the global South.

Northern NGOs can be divided according to their principal method of operation, distinguishing among operational, advocacy, and fund-raising. Operational NGOs make a distinctive contribution to international development, providing practical help, support, and expertise to host communities. They are credited with an ability to work at the level of individual communities and to reach the poorest, most marginalized groups. These NGOs may be involved in campaigning and fund-raising too, but their focus is on delivering resources directly, taking a practical and hands-on approach to international development.

Debate exists about the continued role of operational NGOs as Southern NGOs grow in number and power. The role of operational NGOs perhaps grew out of the traditional view of international development as being based on technology transfer from developed to developing countries. Over time, however, this view has changed, and an argument has been made that Northern NGOs should focus on advocacy and fund-raising, leaving operational work to their Southern counterparts.

Advocacy NGOs make their contribution to international development by raising awareness of specific issues at individual and governmental levels. It has been argued that advocacy in developed countries is an alternative approach to NGO operation, which reflects a focus on the root causes of poverty and inequity. Indeed, some NGOs focus entirely on this approach and consequently have no overseas activity. In this way, international development is pursued by raising awareness of issues to mobilize public support and to lobby governments to take action to address development and humanitarian issues.

Advocacy as an approach is argued to be beneficial, as many of the causes of poverty can be linked to inequities in political and economic structures, and as such, these issues cannot be addressed effectively by simply providing resources to local communities. Instead, it is argued that it is necessary to pursue changes at political and economic levels to enable developing countries to help themselves out of poverty. Such approaches are consistent with the criticism of NGO activity for being too small-scale and failing to recognize the wider structures within which their work takes place. Advocacy can be achieved through direct lobbying of key individuals, collaborative work, research and publication, attendance at conferences, and participation of NGOs in working groups.

Although all NGOs arguably engage in fund-raising to finance their activity, for some, fund-raising is their principal purpose. Fund-raising NGOs focus on raising money and other material resources for distribution to organizations in developing countries. Many smaller NGOs operate in this way and may combine fund-raising with advocacy work. NGOs of this type tend to work in partnership with one or more Southern NGOs to distribute the resources to beneficiaries, viewing this practice as a more sustainable method of development, as it enables developing countries to build their own support mechanisms and make use of local resources and expertise.

Activities

In addition to the method of operation, it is possible to identify NGOs according to their type and location of activity. International development can be pursued through various types of activity, including projects relating to children and education, HIV/AIDS and other health issues, water and sanitation, community and personal development, advocacy and human rights, natural resources and agriculture, business and economic development, and emergency relief.

Large international NGOs such as Oxfam, Save the Children, and Christian Aid have broad mission statements. Consequently, they operate in several countries and are involved in a wide range of project types. Some large NGOs, such as WaterAid and FARM-Africa, focus on specific types of activity; many smaller NGOs, such as Pumpaid, Book Aid International, and Children in Crisis, have a similar focus. Also, numerous small NGOs focus on specific countries or regions, including the Bihar Foundation, India Development Group, and Friends of Northern Uganda.

Contributions to International Development

NGOs make a distinctive contribution to international development. Governments are often criticized for focusing on economic development, commercial benefit, and the creation of export opportunities for their own firms yet being ineffective at the grassroots level. Intergovernmental bodies such as the International Monetary Fund (IMF) and World Bank are similarly criticized for emphasizing economic development.

Although economic inequity is undoubtedly a root cause of poverty, some argue that changes at this level alone are ineffective in improving people's lives at a grassroots level. By contrast, it is argued that NGOs should pay more attention to the lives of individuals, families, and communities by focusing on social, economic, and environmental welfare. This argument is consistent with the view that NGOs are proponents of community-based (participative) approaches to international development. As such, NGOs are considered to be particularly effective in reaching the poorest and most marginalized communities. Their size and agility enable them to act quickly, and their closeness to communities allows them to readily identify and respond to local needs. NGOs attempt to use local skills, expertise, and resources as much as possible, which serves to empower communities and is consistent with the goal of achieving sustainable development.

It has been argued that NGOs are more efficient and effective than governmental organizations in tackling poverty as they are less bureaucratic. Further, it is frequently suggested that beneficiaries trust NGOs as a result of their perceived impartiality. This trust is especially important, as an increasing number of humanitarian crises are linked to conflict, which makes it difficult for governmental organizations to become involved. These qualities characterize the distinctive contribution of NGOs to international development.

Criticisms

Concurrently, however, NGOs are criticized for the lack of global impact that their small-scale projects are able to achieve. Thus, NGOs and governmental organizations appear to have complementary strengths, suggesting that a development community in which these types of organizations work together would be effective at both micro and macro levels. Indeed, this appears to be happening, with increased cooperation among NGOs, intergovernmental bodies, and governmental agencies. Cooperation has been noted by several UN agencies, including the United Nations Development Programme and the United Nations Children's Fund, as well as the UK government's Department for International Development.

Such cooperation has resource benefits for NGOs, enabling them to reach more beneficiaries than they otherwise would. It also presents potential problems, as official donors have specific reporting requirements. Additionally, acting as a subcontractor can have an impact on the very modus operandi that makes NGOs so important to international development. The relationship with official donors, therefore, is an important one that can affect the way in which NGOs work.

The International Development Community

The international development community is large and complex. The guiding principle of international development—working toward global equity in areas such as health, education, and opportunity—naturally attracts a range of organizations. Large humanitarian operations such as those in the Great Lakes region of Africa in the mid-1990s and the Balkans in the late 1990s, for example, are reported to have involved up to 300 organizations of various types.

Different models of the flow of aid exist, illustrating the movement of resources and the range of organizations that are involved in this process. The basic model consists of three major components: the constituency from which resources enter the system, intermediaries through which resources are channeled, and beneficiaries that receive the resources. NGOs are one type of intermediary facilitating the movement of aid resources from developed to developing countries.

Movement of Resources

Resources enter the system principally, although not exclusively, from developed countries. These resources ultimately derive from a combination of private donations and taxation. Private donations are made to Northern NGOs, whether advocacy, fund-raising, or operational. Advocacy NGOs use these donations to finance their lobbying work. Fund-raising NGOs act as a conduit through which the donations will be channeled. They may direct the donations through Northern operational NGOs, through Southern NGOs, or through community-based organizations in developing countries.

Operational NGOs by definition use donations to directly finance their work with beneficiaries in developing countries. Simultaneously, governments in developed countries receive income through taxation, which enables governments to finance their contribution to the international community. This contribution is made in several ways. Many governments operate their own development programs through dedicated departments that enable them to give direct support to beneficiaries. Such activities are invariably connected with the pursuit of the Millennium Development Goals, which were initiated through the United Nations in 2000 to guide development action. The UK government's Department for International Development (DfID), for example, is active in pursuing these goals, which include eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and the empowerment of women, reducing child mortality, improving maternal health, combating HIV/AIDS and other diseases, ensuring environmental sustainability, and developing a global partnership for development.

Resources can also be directed to beneficiaries through the governments of developing countries in what is referred to as bilateral aid. Another approach is for resources to be directed through intergovernmental bodies such as the UN or World Bank in what can be labeled multilateral aid. In addition, Northern governments channel development resources through Northern operational NGOs to benefit from the distinctive characteristics that NGOs can offer.

Oxfam

Oxfam is a well-known example of an international NGO. Oxfam receives its income from several sources, including private donations, trading through its retail operations, and government and other pub-

These northern Vietnamese women assessing sales figures for their crafts in 2002 received marketing assistance from an NGO.

lic authorities. Oxfam has a broad mission statement that commits to tackling poverty and suffering. Such a broad purpose requires a range of approaches. Consequently, Oxfam seeks to tackle poverty and suffering through initiatives relating to education, health, debt and aid, climate change, HIV/AIDS, gender equality, and trade and livelihoods.

As well as performing operational work, Oxfam carries out research to support its lobbying and advocacy. It operates in more than 70 countries and engages in both emergency relief and long-term development activities.

See Also: Antiglobalization Movement; Corporate Social Responsibility; Democratic Globalization; Development Assistance; Economic Development; International Development Agency; Less Industrialized Countries; Sustainable Development; Underdevelopment; World Bank, The; World Health Organization.

Bibliography. Henry W. Chesbrough, Shane Ahern, Megan Finn, and Stephanie Guerraz, "Business Models for Technology in the Developing World: The Role of Non-Governmental Organizations," *California Management Review* (v.48/3, 2006); Luis de Sousa, Peter Larmour, and Barry Hindess, *Governments, NGOs and Anti-Corruption: The New Integrity Warriors* (Routledge, 2008); Michael Edwards and David Hulme, eds., *Making a Difference: NGOs and Development in a Changing World* (Earthscan, 1997); Michael Edwards and David Hulme, eds., *Non-Governmental Organisations: Performance and Accountability* (Earthscan, 1998); Alan Fowler, *Striking a Balance: A Guide to Enhancing the Effectiveness of Non-Governmental Organisations in International Development* (Earthscan, 1997); Volker Heins, *Nongovernmental Organizations in International Society: Struggles Over Recognition* (Palgrave Macmillan, 2008); Dirk-Jan Koch, *Aid From International NGOS: Blind Spots on the Aid Allocation Map* (Routledge, 2009); Natalia Negrea and Balogh Marton, "The Involvement of the Business Sector in Corporate Social Responsibility (SCR) Projects," *Transylvanian Review of Administrative Sciences* (22E, February 2008); Debora L. Spar and Lane T. LaMure, "The Power of Activism: Assessing the Impact of NGOs on Global Business," *California Management Review* (v.45/3, 2003); Anna Vakil, "Confronting the Classification Problem: Toward a Taxonomy of NGOs," *World Development* (v.25/12, 1997); Yongian Zheng and Joseph Fewsmith, *China's Opening Society: The Non-State Sector and Governance* (Routledge, 2008).

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Nontariff Barrier

One of the few things on which most economists agree is that in the long run, countries will be better off with a free trade regime—that is, unrestricted flow of goods and services among countries. For a variety of reasons, however, many countries choose to discourage unrestricted imports or exports of goods and services. The main tools used to achieve this goal are tariffs and quotas. Countries may impose a tariff on foreign goods entering the country. Countries may also specify that only a certain quantity of a particular product (or service), called a *quota,* may enter the country. In addition, countries may impose other conditions or restrictions on the flow of goods among countries. These conditions are known as *nontariff barriers.* Whereas sometimes these restrictions are motivated by objectives other than restriction of trade, they are classified as nontariff barriers as long as one of their consequences is restriction of trade flows.

Examples of nontariff barriers include subsidies for producers; national procurement policies that give preference to domestic producers; health, safety, and customs procedures when they discriminate against foreign goods; and voluntary or legislated export restrictions. Subsidies for producers include all programs that artificially lower domestic production costs or increase prices, subsidized prices for inputs to manufacturers or tax rebates, export financing subsidies, or tax rebates on exports. Continuing disputes between the United States and Canada regarding lumber rests on the U.S. claim that Canadian provincial governments unfairly subsidize saplings needed by lumber firms. The U.S. government encourages U.S. farm exports through its Export Enhancement Program and its Dairy Export Incentive Program. The European Union (EU) had created notorious "butter mountains" and has followed "common agricultural policy" to support EU farmers.

National procurement policies, now illegal under World Trade Organization (WTO) rules, take the shape of restricting a certain percentage of government purchases to domestic producers or giving domestic producers a specified price advantage.

Health-related nontariff barriers are the most difficult to assess as to whether they are justified. In 2003, concerned that EU-style restrictions on genetically modified foods would spread around the world, the United States, Canada, and Argentina launched a case with the WTO against the EU, demanding that the EU lift its restriction on the imports of genetically modified beef and other products. In 2006 the WTO ruled against the EU, finding no scientific justification for Europe's failure to allow use of new varieties of corn, soybeans, and cotton. The ruling, however, was criticized by environmental and consumer groups for failing to protect consumer health and safety.

Similarly, in the spring of 2008, the EU appeared to be close to removing health-related restrictions on the imports of U.S. poultry. The EU had banned imports of U.S. poultry on the grounds of health effects in 1997 because of the U.S. practice of washing chicken carcasses with chlorinated water. U.S. policy makers have challenged the health effects and demanded an end to the ban. An agreement seems likely that will require the imports to be washed with potable water and to label the product as having been cleaned earlier with chlorine.

Export restrictions may be imposed in a bilateral or a multilateral arrangement. In the 1980s auto producers in Japan agreed to voluntarily limit the number of automobiles they would export to the United States and Canada. This arrangement was in response to threats that U.S. automakers faced in view of the oil crisis and the resulting demand for fuel-efficient cars.

Although the restriction gave American automakers room to breathe, it had some unanticipated side effects. First, Japanese producers upgraded the quality of cars they exported while maintaining the quantitative limits to which they had agreed. Second, these restrictions resulted in increased exports of knocked-down autos and auto parts that were then assembled within the United States. The net consequences of these restrictions were to allow Japanese automakers to entrench themselves deeply in the North American market.

In the 1950s, U.S. textile producers managed to place voluntary restrictions on cotton textiles from Japan. As new producers and new materials came into the market, these restrictions were replaced by a multilateral Multi-Fiber Agreement, which placed quotas on the exports of all major exporting countries to all the major importing countries of textiles.

Effects

The economic effects of nontariff barriers on imports are similar to those of tariffs and quotas in some ways. Nontariff barriers against imports raise the profits of the domestic producers of competing goods by reducing competition within the industry. Consumers generally are worse off when the restrictions are motivated by the desire to protect domestic producers and better off as a result of the imposition of health-related barriers imposed in view of valid and verifiable risks associated with imported products.

Export subsidies almost always result in the fall of national welfare, even though they bring some benefits to the producers who receive the subsidies. Unlike the case with tariffs, however, governments do not earn any revenue from the imposition of nontariff barriers.

See Also: Barriers to Entry; Common Agricultural Policy; Countervailing Duties; Generalized System of Preferences; Most Favored Nation Status; Multi-Fiber Agreement; Tariff; Terms of Trade; World Trade Organization.

Bibliography. Kym Anderson and L. Alan Winters, *The Challenge of Reducing International Trade and Migration Barriers* (Centre for Economic Policy Research, 2008); Martha B. Kessler, *Trade Barriers and China* (Nova Science Publishers, 2008); Paul R. Krugman and Maurice Obstfeld, *International Economics: Theory and Policy* (Addison-Wesley, 2008); Paula R. Lignelli, *European Union and Trade Barriers in Europe* (Nova Science Publishers, 2008); Aseem Prakash, "Beyond Seattle: Globalization, the Nonmarket Environment and Corporate Strategy," *Review of International Political Economy* (v.9/3, 2002).

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North American Free Trade Agreement

Linking more than 400 million citizens in a single economic unit producing more than $12 trillion worth of goods and services, the 1993 North American Free Trade Agreement (NAFTA) is among the most pivotal agreements in the social, political, and economic evolution of an integrated North America. NAFTA's goals are to eliminate barriers to trade; promote conditions of fair competition; increase investment opportunities; provide adequate protection for intellectual property rights; establish effective procedures for the implementation and application of the agreement and for the resolution of disputes; and further trilateral, regional, and multilateral cooperation. Since its inception, NAFTA has been credited with boosting economic productivity, creating greater employment opportunities, and reducing the costs of business, as well as for privatization, deregulation, environmental concerns, and the erosion of the sovereignty of national governments in favor of corporations.

Impetus for NAFTA

U.S. President Ronald Reagan (1981–89) was a prominent advocate of North American free trade, part of an ideology that espoused loosening governmental regulation of businesses and the primacy of the free market in society. Nonetheless, increased American protectionism, a result of massive trade deficits with Japan and a restructuring economy, prompted fears in Canada that it would be shut out of its most important market (by the mid-1980s, the United States was taking more than 70 percent of Canada's exports), and convinced traditionally protectionist Conservative Canadian Prime Minister Brian Mulroney (1984–93) that free trade was Canada's best bet. After years of often-acrimonious negotiations (and a spirited 1988 Canadian election), the Canada-U.S. Free Trade Agreement came into force in 1989.

Reagan's successor, George H. W. Bush (1989–93), was also an advocate of free trade. Keen to build on the Canada-U.S. agreement, the United States sought an identical deal with Mexico. President Carlos Salinas (1988–94) of the Institutional Revolutionary Party (PRI) had, like Mulroney, turned his back on decades of PRI policy. Mexican industry had been heavily protected, but advocates of free trade argued that Mexico would benefit immensely from access to the U.S. market. Salinas believed that Mexico could use its low-cost-labor advantage to lure American business, particularly to specially created industrial zones called *maquiladoras.* Not wanting to be left out, Canada joined in the U.S.-Mexico negotiations, and in 1992 an agreement was reached that largely echoed the earlier Canada-U.S. Free Trade Agreement. On January 1, 1993, the North American Free Trade Agreement became reality.

Key Components

The reduction of tariff barriers was the main goal of NAFTA. Under the agreement, almost all tariffs among the three countries were eliminated by January 1, 2003, covering a host of sectors including energy, agriculture, and manufactured goods. Mexican tariffs on U.S. goods, which averaged 10 percent, were phased out over 10 years, allowing the Mexican economy time to adjust to the new competitive reality. Several tariff

Spinning cotton by traditional methods in Mexico in 1994. Wages increased after NAFTA, but poverty still plagues Mexico.

exceptions remain, however. Canada's dairy and poultry industries are exempted. Similarly, the sugar, dairy, peanut, and cotton sectors are exempted in the United States. In Mexico, tariffs remained on corn, beans, and powdered milk until 2008.

Rules of origin establish whether products are made in a NAFTA country and, thus, can enter into member countries duty free. Each NAFTA partner maintains its own external tariffs governing goods from non-NAFTA countries. These rules of origin are particularly important in certain sectors, including the auto industry, in which cars and parts must have 62.5 percent North American content (that is, must be made in one of the three countries) before they enter the other two NAFTA partner countries duty free. Nonetheless, more than 90 percent of trade among the three countries is duty free.

Investment is a second key component of NAFTA. The agreement's Chapter 11, which governs investment, makes rules on how investors should be protected by the NAFTA member governments. These rules state that NAFTA countries cannot treat companies that set up or invest in any of the NAFTA countries any differently.

In 1997, for example, Canada banned the importation of MMT, a fuel additive produced by American Ethyl Corp., which the government felt might be environmentally damaging (the product was not banned in the United States). American Ethyl sued Canada based on Chapter 11 rules and won, forcing Canada to pay $20 million in damages. This outcome led to some severe criticism that Chapter 11 creates a bill of rights for corporations, allowing them to conduct business at the expense of environmental or health standards.

Dispute settlement is another central element of NAFTA. Although most trade among Canada, the United States, and Mexico is problem free, in some instances governments disagreed and imposed penalties, such as countervailing duties, that applied tariffs on products coming from one of their NAFTA partners. The dispute-settlement mechanism also governs antidumping, in which one country claims that another is selling its goods for a price that is below its actual value—dumping goods into a country. In cases of countervailing duties or dumping, the countries go to an arbitration panel made up of representatives of the two disputing countries and a chairperson who is picked by both countries to decide whether penalties should apply or whether they should be lifted and restitution should be paid.

NAFTA dispute resolution is not always effective. In 2002 the United States attached a 27-percent duty on softwood lumber from Canada. Canada claimed that this duty was unfair and sought recourse under NAFTA. When the panel found in Canada's favor, the United States ignored the decision. This long-running lumber dispute illustrates the fact that NAFTA's dispute-resolution decisions are not necessarily binding.

Other Issues

NAFTA allows the citizens of each country to move across borders for work outside the regular immigration channels, through special visas for specialized workers and intracompany transfers. This arrangement facilitates the flow of cross-border professionals and businesspeople to meet economic needs in member countries and also expands the pool of labor and job opportunities. These measures have been criticized by some labor groups as allowing employers to lower labor costs, hurting workers in all three countries.

NAFTA contains special side agreements on the environment and labor. These agreements were added during the negotiations to ensure that each country enforced proper labor laws and environmental standards in an effort to maintain a certain level of consistency from country to country, and to ensure that none of the countries would weaken these areas to attract investment.

Some observers have criticized these agreements as not being effective in maintaining proper standards in either the environment or in the workplace. Many critics point to the Mexican maquiladoras as examples of situations in which lower wages and poorer working conditions have hurt workers and their communities.

Impact

The economic impact of NAFTA on the economies of the three countries since 1993 has been significant. Trade growth is by far the most telling statistic. In 1994, total trade among Canada, the United States, and Mexico amounted to $297 billion. By 2002 that figure was $676 billion, an increase of 128 percent. Every day, NAFTA partners trade $1.8 billion worth of goods. By 2001, Mexico had overtaken Japan as the United States's second-largest trading partner (12.4 percent of U.S. trade), after Canada (20.4 percent). The key sectors for trade in the NAFTA region include transportation equipment, electronics and communications equipment, and textiles.

The impact of free trade on each of the three countries has been impressive. Canada attributes 40 percent of its gross domestic product to external trade. Every day, more than $1 billion worth of goods crosses the Canada-U.S. border. Canada's merchandise trade with the United States and Mexico rose from $112 billion in 1993 to $235 billion in 2000. Canadian trade with NAFTA countries has more than doubled, whereas its trade with the rest of the world has grown by only 29 percent. Along with the auto trade, lumber, agricultural products, and energy (oil and gas) exports constitute the primary trade for Canada.

The United States, by far the largest economy of the three partners, has also witnessed a significant growth in its NAFTA trade. Between 1993 and 2000, U.S. merchandise exports to its NAFTA partners more than doubled and was well ahead of the 52 percent growth in exports to the rest of the world. In 1993 total U.S.-Mexico trade amounted to $150 billion. By 1999 that figure had grown to $320 billion, as exports to Mexico from the United States increased by 133 percent, primarily in electronic and electrical equipment, industrial machinery, transportation equipment, and chemical and metal products. U.S. trade with Canada has also increased significantly, although Canada-U.S. trade had been increasing since the 1989 agreement. U.S. exports northward increased 35 percent between 1993 and 2001, whereas imports from Canada increased 69 percent. Overall employment in the United States increased by 12 percent, or 15 million jobs, during that period.

The growth in trade in Mexico since that country joined NAFTA has been equally significant. By 1996, Mexico's third year in the NAFTA agreement, Mexico-U.S. trade reached $148 billion, a 65 percent increase from the 1993 pre-NAFTA level. Canada-Mexico trade increased 43 percent by 1996 over pre-NAFTA levels and positioned Canada as Mexico's third-largest trading partner, whereas Mexico is now Canada's sixth-largest trading partner.

Although all these statistics point to a massive growth in trade and investment among the three countries, the human benefits of NAFTA are more difficult to ascertain. Unemployment rates in some parts of Canada and the United States have remained relatively stable since 1993, and deindustrialization has increased, particularly in the American Midwest. Poverty remains significant in Mexico, and although wages and employment may have increased in some areas, much of Mexico retains the status of a developing country. Many have argued that the true benefits of freer trade have been unevenly distributed to corporations that have taken advantage of the new regime.

Political Aspects

Politically, free trade in North America has not been without its challenges. In Canada, free trade has historically been linked to national identity and sovereignty, and opposition to the 1989 FTA was particularly intense. During the 1992 U.S. presidential campaign, free trade was a divisive issue, most visibly exhibited by the stunning electoral story of H. Ross Perot, the anti–free trade Texan famous for his warning that Americans would inevitably hear the "giant sucking sound" of U.S. jobs being drained southward by Mexico.

Mexico, however, has experienced the most pointed challenges. On January 1, 1994, the Zapatista National Liberation Army (EZLN), led by Subcomandante Marcos, took over villages in the Mexican province of Chiapas. The Zapitistas declared NAFTA a "death sentence" for the indigenous peoples of Mexico and proclaimed a state of war against the federal government. Although the Zapatista uprising was eventually quelled, the Zapatista legacy is strong, and a consistent anti-NAFTA organization remains in Mexico, uniting labor, academic, aboriginal, and nationalist groups.

Since the initial outburst of protest against the agreement in the early 1990s, opposition to NAFTA and free trade has remained significant. Civil-society groups believe that governments have ceded too much sovereignty to corporations and to pro-trade bodies such as NAFTA and the World Trade Organization (WTO), and that the globalization represented by free trade has given anti–free trade forces significant traction. The high-profile protests against the WTO and the proposed Free Trade Area of the Americas (FTAA) have given anti–free trade groups significant publicity. But civil-society groups are not the only ones that have continued to challenge free trade. Mainstream opposition to NAFTA continued in the 2008 presidential election, in which Democratic candidates Barack Obama and Hillary Clinton called for the agreement's renegotiation. Nonetheless, NAFTA remains a central aspect of an emerging North American polity.

See Also: Antiglobalization Movement; Bilateral Free Trade Agreement; Canada; Economic Integration; Free Trade; Free Trade Area of the Americas; Mexico; Regional Integration; United States.

Bibliography. Ted Chambers and Peter Smith, eds., *NAFTA in the New Millennium* (University of Alberta Press, 2003); Kerry A. Chase, "Protecting Free Trade: The Political Economy of Rules of Origin," *International Organization* (v.62/3, 2008); Dorothee J. Feils and Manzur Rahman, "Regional Economic Integration and Foreign Direct Investment: The Case of NAFTA," *Management International Review* (v.48/2, 2008); Ralph Haughwout Folsom, *NAFTA and Free Trade in the Americas in a Nutshell* (Thomson/West, 2008); Mordechai Krenin, *Building a Partnership: The Canada–United States Free Trade Agreement* (Michigan State University Press, 2000); Gordon Laxer and John Dillon, *Over a Barrel: Exiting from NAFTA's Proportionality Clause* (Parkland Institute, 2008); Joseph A. McKinney and H. Stephen Gardner, *Economic Integration in the Americas* (Routledge, 2008); Karl Meilke, James Rude, and Steven Zahniser, "Is 'NAFTA Plus' an Option in the North American Agrifood Sector?" *World Economy* (v.31/7, 2008); Isidro Morales, *Post-NAFTA North America: Reshaping the Economic and Political Governance of a Changing Region* (Palgrave Macmillan, 2008); *NAFTA and the Maquiladora Program: Rules, Routines, and Institutional Legitimacy* (Western Press, 2008); Leslie Rockenbach, *The Mexican-American Border: NAFTA and Global Linkages* (Routledge, 2001).

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Norway

With its long coastline and mountainous geography, Norway has long traditions of natural resources extraction. The Organisation for Economic Co-operation and Development (OECD) has characterized Norway as a paradox, because it ranks low in terms of average innovation outcome but it performs well regarding the economy and standard of living, including extensive public funding of welfare services. The country's population was 4.7 million as of 2008.

Norway's geography facilitated an industrialization process that relied on natural resources such as timber, fisheries, and shipping in the late 19th century. After having been a part of first Denmark (1536–1814) and then Sweden (1814–1905), Norway's 1905–20 period showed several initiatives for colocating heavy industry and power plants at large waterfalls. During the German occupation in World War II, numerous projects related to railways, energy, and heavy industry were started, and many of these projects were completed after the war. The postwar government furthermore initiated extensive public programs for regional planning and industrial development. From 1974 to 1992, the service sector experienced considerable growth.

Within manufacturing and mining, the most important natural resources sectors besides fisheries and aquaculture are the sectors centered on oil and gas extraction, which developed from the early 1970s onward. By the beginning of the 21st century, oil and gas extraction accounted for approximately a quarter of gross domestic product, and in terms of all export revenues, it accounted for 42.5 percent. Oil and gas extraction has increasingly been supported by adjoining sectors specializing in high-technology supply ships, finance engineering, and other supplies, where several specialized Norwegian firms are at the international forefront. After the discovery of oil resources in 1969, Norway ran a countercyclical financial policy during the 1970s. Thus, economic growth was higher and unemployment lower than for most other Western countries. In the early 2000s, much of the policy debate in Norway has focused on how the economy should be turned in other directions than the heavy emphasis on oil and gas extraction. The historian Ola Grytten, for example, claims that Norway, despite its wealth, has lost competitive power because past policy focused on subsidies and Norwegian firms adapted to domestic policies rather than to market trends.

Norway is also known as one of the prime examples of social policies for wealth distribution and intergender equality. Social insurance was gradually implemented, starting with accident insurance for factory workers (1895) and later expanding into also covering other occupational groups and types of insurance, including old age pensions (1936), unemployment insurance (1939), disability insurance (1960), and welfare benefits for widows and single mothers (1964). Postwar reforms focusing on families and the labor force participation of females include maternity leave (1956), separate taxation for married couples (1959), a day care act (1975), working environment act (1977), parental leave act (1978), and equal status act (1978). In the early 2000s, the governing parties initiated reform measures aimed at extending optimal participation in the labor market to previously marginalized persons by integrating labor market and welfare-related programs, including an abolition of strict cognitive and organizational division between these two areas of social security policy.

Norwegian politics has maintained a balance between overall taxation levels and implementation of social security programs and instability, especially in recent years when it comes from gaining a left vs. conservative majority in the parliament. Main political issues include concrete funding of the welfare state and the relationship to the European Union (EU). The Labor Party and its allies strive to uphold a high level of public funding and responsibility of welfare programs and hence argue for continued high levels of income and corporate taxes, supplemented with a modest consumption of the state Petroleum Fund created from oil revenues. The conservative parties agree on the basic principles of the welfare state, but argue for lower taxation levels supplemented with selective privatization programs. In addition, the liberal Progress Party has a competing view in arguing for more drastic privatization and consumption of Petroleum Fund assets. It achieved about 25–30 percent of the votes in popular polls as of 2008, that is, about the same level as the Labor Party, albeit hitherto failing to achieve sole or coalition government formation. Norway continues to be a nonmember of the EU following public referendums in 1972 and 1994. The issue continues to be a focus for political debate; however, the actual EU linkages are to a certain degree upheld through the country's membership in the European Economic Area, which permits Norway to participate in the EU internal market.

See Also: European Union; OSE All Share Index (Oslo); Social Contract; Statoil; Western Europe.

Bibliography. Charles Edquist and Leif Hommen, eds., *Small Country Innovation Systems: Globalization, Change and Policy in Asia and Europe* (Cheltenham, 2008); Jan Fagerberg, David C. Mowery, and Bart Verspagen, *Innovation, Path Dependency and Policy: The Norwegian Case* (Oxford University Press, 2008); Kjetil Fretheim, *Rights and Riches: Exploring the Moral Discourse of Norwegian Development Aid* (Peter Lang, 2008); Ola Honningdal Grytten, "The Economic History of Norway," in *EH.Net Encyclopedia,* R. Whaples, ed., eh.net/encyclopedia (cited March 2009); Knut Halvorsen, *Work, Oil and Welfare: The Welfare State in Norway* (Universitetsforlaget, 2008); Organisation for Economic Co-operation and Development, *Economic Survey Norway 2004* (OECD, 2004); Organisation for Economic Co-operation and Development, *Norway* (OECD, 2008); Wayne C. Thompson, *Nordic, Central, and Southeastern Europe, 2008* (Stryker-Post Publications, 2008).

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Novartis

Novartis is the outcome of the consolidation of three Basel-based firms—Sandoz, Ciba, and Geigy—that in 1996 created the second-largest pharmaceutical firm in Switzerland and the third-largest in the world at that time. Talks of a possible merger began in the early 20th century (between Ciba and Geigy), and by 1918, the three firms came together to form Basler Interssengemeinshaft (also known as Swiss IG) to face competition from the large international cartels based in Germany, France, and England. Swiss IG was dismantled in 1950. In 1970 Ciba merged again with Geigy to form Ciba-Geigy, and 26 years later, a merger with Sandoz created Novartis.

All three firms started operations in the 19th century with the production and commercial exploitation of a newly discovered process to create synthetic (aniline) dyes and technological complementarities to the textile industry cluster.

History of Sandoz

Sandoz was founded in 1885 by businessman Edward Sandoz and chemist Alfred Kern under the name Chemische Fabrik Kern und Sandoz. In 1893, after the death of Kern, Sandoz transformed the firm into a public limited company under the name Chemische Fabrik vormals Sandoz. The firm changed its name again in 1939 to Sandoz Ltd. In the early days, the firm produced mainly dyestuffs and textile chemicals; saccharine, a sugar substitute; and some basic pharmaceuticals. Sandoz's early attempts to diversify further in pharmaceuticals did not meet with success. Only the soaring prices of pharmaceuticals during World War I and the favorable conditions of the Swiss environment persuaded the board to commit to research and development in drugs.

The new laboratory was headed by Arthur Stoll, who elevated research quality; introduced new processes to achieve more accurate dosing of drugs; set the foundations of calcium therapy; and developed ergot, the first successful home-developed product and one from which many other drugs were subsequently developed, notably lysergic acid diethylamide (LSD).

History of Geigy and Ciba

Geigy traces its origins to Johann Rudolf Geigy-Gemuseus, who commenced his import business in 1758 in Basel. His descendants built the first dyestuffs production facility in 1833 and, in 1859, began production of the synthetic dye fuchsin. Commercial success led to the development of an extensive network of sales representatives. In 1911 the firm became a limited company, and at about the same time, the production of the first pharmaceutical products started. During the interwar period, Geigy diversified into chemicals used for the protection of textiles and subsequently into the development of pesticides, notably dichlorodiphenyltrichloroethane (DDT).

In 1859 Alexandre Clavel, who had run a silk dyeworks since 1838, obtained the license of the Venguin process to produce fuchsin and became the first producer of aniline paints in Basel. In 1864, due to environmental complaints, production moved outside Basel, and in 1873, the company was sold to Bindschedler und Busch.

Under chemist Dr. Robert Bindschedler and businessman Albert Busch, the company grew rapidly. In 1884 the owners transformed it into a limited company and renamed it Gesellschaft für Chemische Industrie in Basel. The abbreviated form of the company name, Ciba, became widely known and in 1945 was adopted as the official name of the company.

In the 1960s Geigy surpassed Ciba in terms of sales due to the worldwide success of the pesticide DDT. The benefits of a merger in terms of international expansion and economies of scale and scope became apparent. The two firms, which were already running joint international operations, started negotiations for a joint research center that led in 1970 to an "absorption fusion" of J. R. Geigy Ltd. into Ciba Ltd. under the name Ciba-Geigy. The new firm expanded further in genetic engineering with the acquisition of Chiron Corp.

Market Position

Today, Novartis is the fourth-largest pharmaceutical firm in the world and represents 8 percent of world sales of drugs. The firm is highly internationalized, with 99 percent of its sales and 53 percent of its assets in 2004 outside Switzerland.

Although Sandoz expanded abroad as late as 1964, Ciba and Geigy internationalized much earlier. In the late 19th century, J. R. Geigy built a plant at Maromme, and in 1899, Ciba acquired the French branch of the Basel firm L. Durand & Huguenin, established in 1882 in St. Fons to avoid rising duties on imported dyes. Today, Novartis has 253 of its 280 affiliates outside Switzerland.

See Also: Pfizer; Research and Development; Roche Group; Sanofi Aventis; Switzerland.

Bibliography. L. F. Haber, *The Chemical Industry During the Nineteenth Century: A Study of the Economic Aspects of Applied Chemistry in Europe and North America* (Clarendon Press, 1958); Antje Klitkou and Aris Kaloudis, "Scientific Versus Economic Specialisation of Business R&D: The Case of Norway," *Research Evaluation* (v.16/4, 2007); Rajesh Kumar and Tore Markeset, "Development of Performance-Based Service Strategies for the Oil and Gas Industry: A Case Study," *Journal of Business and Industrial Marketing* (v.22/4–5, 2007); R. Landau, B. Achilladelis, and A. Scriabine, *Pharmaceutical Innovation: Revolutionizing Human Health* (Chemical Heritage Foundation, 1999); Novartis, www.novartis.com (cited March 2009); Renate A. Riedl, "A Brief History of the Pharmaceutical Industry in Basel," in *Pill Peddlers: Essays on the History of the Pharmaceutical Industry,* J. Liebenau, G. Highby, and E. Stroud, eds. (American Institute for the History of Pharmacy, 1990); Razeen Sally, "The Basel Chemical Multinationals: Corporate Action Within Structures of Corporatism in Switzerland," *West European Politics* (v.16, 1993); Mert Sandalcı and Bahadır Taşkın, *Novartis* (Novartis, 2006); UNCTAD World Investment Report, *FDI From Developing and Transition Economies: Implications for Development* (United Nations, 2006).

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NZSE 50 (New Zealand Stock Index)

The NZSE 50 (also known as NZX 50) is the group of 50 top companies measured by free-float adjusted market capitalization listed on New Zealand's stock exchange. According to New Zealand Exchange (NZX) guidelines, the free float is determined by excluding blocks of shares greater than 20 percent and blocks between 5 and 20 percent, which are considered strategic. The weights of corresponding stocks are determined on the basis of the resulting free-float market capitalization. This adjustment is considered to provide an index that closely reflects the main index because it is designed to represent the composition of stocks traded.

The NZX 50 is available as a total return and as a gross index indicator. Companies included in this headline index are among the nation's premium brands, long-established heritage companies, and several foreign firms. These companies—which include Telecom, Air New Zealand, Fisher & Paykel, and ING—are part of more than 200 companies that form NZX's premier equities market, formerly known informally as the Main Board. Aspects of the old system of indices are still present in the new system and specifically the NZX 50. Thus, it is important to consider the major changes in New Zealand's stock exchange in general and development of the major indices in particular.

History of NZX

Before 2002, NZX's predecessor, the New Zealand Stock Exchange (NZSE), was a mutual organization owned by its member broking firms. This organization was the successor of the Stock Exchange Association of New Zealand and the Auckland, Wellington, Christchurch-Invercargill, and Dunedin Stock Exchanges, established under the Sharebrokers Amendment Act of 1981. New Zealand's Stock Exchange became a public company, following its demutalization at the end of 2002 to a limited liability structure: NZSE Ltd. Former members of NZSE were each issued 10,000 shares in the new company. This transition became official when the company changed its name to New Zealand Exchange Ltd. (NSX). In turn, the NSX's markets were renamed the NZSX Market (stock market), the NZAX Market (alternative market), and the NZDX Market (debt market). NZX began to trade and list securities on its main equity market, the NZSX, in June 2003. These changes placed the NZX in the dual position of being a listed company on its own exchange and regulating the conduct of the exchange.

Since the middle of 2005, the NZX Centre has been located in the nation's capital city of Wellington, housed in the renovated Odlins Building on the waterfront. Other important developments that have shaped New Zealand's stock exchange include the move to a national computerized screen trading system in June 1991, ending the open cry pit. Eight years later, this system was updated by the FASTER trading system, and in 2001, the internet-based eFaster facility was introduced, allowing direct online access to the market.

Before its introduction in November, the stock exchange's trading hours were extended on September

1, 2001, to be in line with market trading in Australia and the United States.

Index System

Developments in the old index system influenced the new system, which still exhibits many of the features of the previous one. Until 2003, the NZSE 40, with a base value of 1,000 (as of July 1, 1986) was the most widely quoted index of New Zealand stock market prices. Stocks included in this index were chosen based on their market capitalization, and the index's composition was reviewed quarterly. A capital and a gross index were calculated for this index, but the capital index was generally referred to as the NZSE 40 index. From March 3, 2003, the NZSE 50 replaced the NZSE 40 and was later renamed the NZX 50 and NZX 40, reflecting changes in the name of the stock exchange company and its equities board.

Due to the high proportional representation of single companies in the index, Telecom in particular, the NZX 50 Portfolio Index was introduced. This index caps the weights for large companies in the NZX 50 to 5 percent of the index market capitalization. Both the NZX 50 and NZX 50 Portfolio indices' base value were set at the NZSE 40 closing value on February 28, 2003.

In addition to these indices, the NZSX 15 (now the NZX 15) was launched on February 9, 2004; it comprises the 15 largest and most liquid domestic securities listed on the NZSX market. Constituent companies are weighted by free-float market capitalization, but the weighting of any security in the index is capped at 30 percent. This index has a base value of 3,000 as of October 1, 2001, and its composition is reviewed every six months.

Focused Indices

The exchange has several focused indices, including the NZX SciTech Index, which highlights the performance of companies with significant business interests in the development and commercialization of new technologies, and the NZX 10 Index, which provides a measure of the price trends of New Zealand's top 10 listed companies, excluding overseas stocks.

Other indices—the NZX MidCap Index, the NZX SmallCap Index, and the NZX All Index—are also monitored to evaluate the performance of New Zealand's stock exchange market and constituent companies.

See Also: Company Profiles: Australia and Pacific; New Zealand; Pacific Rim; Stock Exchanges.

Bibliography. R. Bowden and J. Zhu, *Kiwicap: An Introduction to New Zealand Capital Markets* (Kiwicap Research, 2005); D. Grant, *Bulls, Bears & Elephants: A History of the New Zealand Stock Exchange* (Victoria University Press, 1997); M. King, *The Penguin History of New Zealand* (Penguin, 2003); NZX, New Zealand's Stock Market, Stocks and Shares Web site, www.nzx.com (cited March 2009).

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Off-Shoring

Off-shoring is the migration of jobs rather than people between countries and regions. Firms ship at least part of their production and jobs abroad and then reimport the products and services into their home country. Examples include the relocation of call center and medical transcription jobs from the United States to India. In a sense, off-shoring is simply a different manifestation of the principle of comparative advantage. India has a well-educated, English-fluent labor force willing to work for less than comparably educated Americans.

Jobs can be off-shored from a rich country to a poorer one, as in the call center example. But jobs can also be moved in the opposite direction. Legal services, computer programming, engineering, and management services are all examples of jobs off-shored from other countries to the United States. (The United States has a substantial surplus in services trade—more than $50 billion in 2003.) What makes off-shoring a controversial topic is the qualitative difference between traditional trade in goods and services (paired with labor mobility between countries and regions) and the actual shift of the jobs.

When taking advantage of the lower labor costs in another country required either moving an entire factory or encouraging the low-wage workers to emigrate, trade in services was limited by the high cost of relocation. As communication costs fall, however, off-shoring makes possible trade in specific service jobs that previously was not cost-effective. In particular, low communications costs make it possible to outsource many high-skill jobs as well as low-skill ones. Thus, medical radiographs taken in the United States are routinely transmitted digitally to radiologists in India to be read for U.S. hospitals.

Candidate Jobs

Recent estimates are that as many as 11 percent of U.S. jobs are at risk of off-shoring, based solely on industries in which some off-shoring is already taking place. Which jobs can be off-shored depends on a wide range of factors. India shares both English and a common law legal heritage with the United States. As a result, some routine legal work is also already being off-shored from the United States to India, highlighting the importance of cultural factors in making off-shoring possible. Some jobs, of course, require a physical presence, and these jobs are less vulnerable to off-shoring. But even jobs traditionally performed in person sometimes can be performed virtually. Security firms are already off-shoring the monitoring of security cameras, for example.

On the other hand, the ability to off-shore jobs has important limits. Although some countries offer significantly lower wages for particular occupations, labor costs must be compared on a productivity-adjusted basis. (Unit labor costs statistics provide productivity-adjusted wages.) When these adjustments are made, the cost advantage of the low-wage country often is significantly less than it initially appeared. Moreover, off-shoring is driving up labor costs in the low-wage economies. Wages in the computer programming industry in India have been rising at a rate of almost 15 percent per year recently, reflecting the high demand for skilled labor due to off-shoring. Such rapid increases erode the cost advantage of the off-shoring operation.

Policy Issues

Off-shoring raises three important policy issues. First, if off-shoring continues to expand, groups that previously did not view themselves as vulnerable to international competition will experience disruption and insecurity. If the gains from trade are worth these costs, an important policy question is whether and how to compensate individuals and firms that suffer dislocation costs as a result of off-shoring through transition assistance, retraining, and other programs.

Second, the expansion of economic vulnerability due to off-shoring threatens the political coalition supporting free trade in some rich countries. Although the consensus among economists is that the gains from increasing the scope of trade to include service sector jobs are large enough to outweigh, in the aggregate, the costs of the resulting disruptions, this situation could lead to a change in the post–World War II worldwide trend toward trade liberalization.

Third, some people argue that particular jobs produce benefits for the countries where they are located. In particular, research and development work is widely thought to produce significant benefits through the creation of innovation clusters like Silicon Valley in California.

See Also: Comparative Advantage; Free Trade; Globalization; Near-Shoring; Outsourcing; Trade Liberalization.

Bibliography. Ashok Deo Bardhan and Dwight Jaffee, *Innovation, R&D and Offshoring* (University of California, Berkeley, Fisher Center for Real Estate and Urban Economics Research Report, 2005); Alan E. Blinder, "Offshoring: The Next Industrial Revolution?" *Foreign Affairs* (v.85, 2006); Francesco Daveri and Cecilia Jona-Lasinio, *Off-Shoring and Productivity Growth in the Italian Manufacturing Industries* (CESifo, 2008); Thomas L. Friedman, *The World is Flat: A Brief History of the Twenty-First Century* (Farrar, Straus & Giroux, 2005); Douglas A. Irwin, *Free Trade Under Fire,* 2nd ed. (Princeton, 2005); Harbhajan S. Kehal and Varinder P. Singh, *Outsourcing and Offshoring in the 21st Century: A Socio-Economic Perspective* (Idea Group Publishing, 2006); National Academy of Public Administration, *Off-Shoring: An Elusive Phenomenon* (National Academy of Public Administration, 2006); National Academy of Public Administration, *Off-Shoring: How Big Is It?* (National Academy of Public Administration, 2006); New Jersey, *Final Report [of Assembly Outsourcing and Off-Shoring Commission]* (New Jersey Office of Legislative Services, Public Information Office, Hearing Unit, 2008); Frédéric Robert-Nicoud and Bernard M. Hoekman, *Off-Shoring of Business Services and Deindustrialization: Threat or Opportunity—and for Whom?* (Centre for Economic Policy Research, 2006).

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Old Mutual

Old Mutual is an international insurance, savings, and wealth management company, headquartered in London, with recognized brands in South Africa, the United States, the United Kingdom (UK), Europe, Latin America, India, China, and Australia.

Old Mutual was founded as the Mutual Life Assurance Society of the Cape of Good Hope in South Africa in the British Cape Colony in 1845, and demutualized on July 12, 1999. Old Mutual's stock is listed (with percentage of shares in parentheses) on the London Stock Exchange [LSE] (64.69), the Johannesburg Stock Exchange [JSE] (31.52), the Zimbabwe Stock Exchange [ZSE] (1.64), the Namibian Stock Exchange [NSE] (0.29), and the Malawi Stock Exchange [MSE] (0.1). The company has American Depository Receipts (ADRs) available through the Bank of New York. The company is organized around four customer-centered global regions: North America, Europe and Latin America, South Africa, and Asia Pacific.

The company follows a philosophy of decentralization to allow each of its units to react quickly to local economic market conditions and regulation. Recognizing changes in demographics, lifestyles, and wealth management, the company has positioned itself to shift from life products to open-architecture (investment funds run by third-party fund managers) unit trusts and mutual funds with lower front-end charges.

Old Mutual's North American operations are in the United States, Canada, and Bermuda. In the United States, Old Mutual's asset-management brands and boutique affiliates include Old Mutual Asset Managers; Old Mutual Capital; Acadian Asset Management; Barrow, Hanley, Mewhinney & Strauss, Inc.; Dwight Asset Management Co.; Rogge Global Partners; The Campbell Group; Ashfield Capital Partners; Analytic Investors; Clay Findlay; 2100 Capital Group; Copper Rock Capital Partners; Heitman; ICM; Larch Lane Advisors; Liberty Ridge Capital; Lincluden; Provident Investment Counsel; Thompson Horstmann & Bryant; and Thompson, Siegel & Walmsley Investment Management. In North America, the company's life insurance brands are Old Mutual Financial Network and Old Mutual Bermuda. Old Mutual Bermuda alone accounts for 25 percent of all funds managed by Old Mutual. The North American region accounts for £170.1 billion of funds under management by Old Mutual.

In 2006 Old Mutual acquired Skandia, an insurance (Skandia Life), internet banking (SkandiaBanken), and financial services (Selestia Investment Solutions) firm based in Sweden that expanded its scope of operations by 20 countries. Old Mutual's UK, Nordic, European, and Latin American operations are in the UK, Sweden, Norway, Finland, Denmark, Switzerland, Austria, Poland, the Czech Republic, the Netherlands, France, Germany, Hungary, Italy, Portugal, Spain, Colombia, Mexico, and Chile. In Europe, Old Mutual's asset management brands include Old Mutual and Palladyne. The Europe and Latin America region accounts for £60.6 billion in funds under management by Old Mutual.

Old Mutual's operations in southern Africa are in South Africa, Botswana, Kenya, Malawi, Namibia, and Zimbabwe. The operations in southern Africa include asset management, life insurance, banking, and general insurance. The company's asset management brands in this region include Old Mutual Investment Group, Marriott Income Specialists, SYmmETRY, and Umbono Fund Managers.

Old Mutual's banking group, Nedbank Group Ltd. (Nedbank Retail, Nedbank Capital, Nedbank Corporate, and a 50.1 percent interest in Imperial Bank), has assets of some 489 billion Rand and operates branches in South Africa, Lesotho, Malawi, Namibia, Swaziland, and Zimbabwe. Old Mutual has a 75 percent interest in a general insurance company, Mutual & Federal (M&F), which provides automobile, fire, property, and casualty insurance in South Africa, Namibia, Botswana, and Zimbabwe. Old Mutual plans to sell its interest in M&F to Royal Bafokeng Holdings. The South Africa region accounts for 41.7 billion Rand of funds under management by Old Mutual.

Old Mutual's Asia Pacific operations are in Australia, India, Hong Kong, and China. In India, Kotak Mahindra Old Mutual Life Insurance Ltd. (KMOM) is part of a joint venture (26 percent interest) with the Kotak Mahindra Group. KMOM currently operates 106 branches in 74 cities throughout India. In China, Skandia BSAM is part of a joint venture (50 percent interest) with the Beijing State-owned Asset Management Co. (BSAM). Skandia BSAM is authorized to operate in Beijing, Shanghai, Jiangsu Province, and Guangdong Province. The Asia Pacific region accounts for £6.5 billion in funds under management by Old Mutual (£6.4 billion in Australia alone).

Total assets under management in fiscal 2007 were approximately £279 billion. Total assets under management were derived from the United States (61 percent), Europe (22 percent), southern Africa (15 percent), and the rest of the world (2 percent). In fiscal 2007, Old Mutual delivered a European Embedded Value (EEV) adjusted operating profit from its long-term business of about £1,621 million and an International Financial Reporting Standards (IFRS) adjusted operating profit about £1,624 million.

Operating profits by region for 2007 were as follows: 70 percent from southern Africa operations (£1,254 million), 15 percent from Europe and Latin America operations (£268 million), and 15 percent from operations in the United States (£260 million).

See Also: Asia; Latin America; South Africa; United Kingdom; Sweden.

Bibliography. Old Mutual, www.oldmutual.com (cited March 2009); Old Mutual South Africa, www.oldmutual.co.za (cited March 2009).

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Oman

Oman's history stretches back to 3000 B.C.E., when Sumerian traders imported copper from the people of this region. The region also was a key supplier of frankincense, highly desired in the Middle East and Mediterranean Europe. Arabs arrived from present-day Yemen in the 2nd century, and there were settlers also from Persia. Islam arrived in Oman in 630 C.E., during Prophet Muhammad's lifetime, in the form of a letter carried by the Prophet's emissary Amr Ibn al-As to the brothers Abd and Jaifar al-Julanda, who ruled Oman. Having embraced Islam, Oman's leaders unified the Arabs and drove the Persians out. Maritime trade flourished. Sohar became the largest seaport in the Islamic world. Omani merchants and delegates spread the message of Islam and Arab culture as far as China.

After Vasco da Gama's voyage, the Portuguese projected imperial power briefly in the area but were expelled in 1650. Although never considered a foreign occupational power, the British declared Oman a protectorate and assumed control of the Omani military. Oman flourished as a major trade link between Europe and Asia.

In 1970, with the assistance of the British, Qaboos bin Said al-Said overthrew his father, declared Omani independence, and became the sultan of Oman. The sultan appoints a cabinet with ministers known as the Diwans. Remaining quietly in the background of regional politics, Oman housed British and American troops during the Iraq wars of 1991 and 2003 as well as the 2002 Afghanistan war.

Nearly 50 percent of Oman's 3.3 million residents live in the capital Muscat. Of Oman's population, 75 percent are Ibadhi Muslim. Indian merchants, the majority of whom are Hindu, have traded in Muscat for over 200 years. Some people of Persian and Baluchi ancestry live in the north. The official language is Arabic. English is quickly becoming a second language. Hindi is also growing due to the influx of Indian migrants.

Commercial petroleum exports from Oman commenced in 1967. With over 740,000 barrels of oil produced per day, petroleum revenues are crucial to the economy. Oman's main petroleum buyers are China, South Korea, Japan, and Thailand. To reduce dependence on oil, al-Said has implemented plans to open Oman to the outside world and to diversify and transform the economy. Tourism and natural gas exports are being developed.

With globalization, education has become increasingly important. Sultan Qaboos University, Oman's first, opened in 1986. Nine other private institutions specialize in study-abroad programs and international education. Education reforms led by al-Said are vital to the country's social and economic progress. Women are being brought into the social and economic mainstream. Women have training and career opportunities equal to men, traditional culture and Muslim religious practices are honored, and international differences are respected. The sultan appointed a woman to head the new Ministry of Tourism.

Oman's natural attractions include beaches, mountains, deserts, and wadis. Multinational companies are opening luxury hotels. Resorts surrounding Muscat offer tropical marine excursions and tours of the country's most breathtaking sights. The booming tourist hotspot of the Musandam Peninsula is not connected to Oman's mainland, but juts out into the Strait of Hormuz at the tip of the United Arab Emir-

A telecommunications tower in Muscat, the Omani capital, which is home to half the country's population.

ates. Musandam Peninsula is easily accessible by road from Dubai, and attracts visitors seeking a relaxed interlude from the high-energy bustle of Dubai. The Muscat Festival, held annually from January to February, offers a traditional cultural experience. Tony shopping malls are springing up such as the Muscat City Centre, financed by the United Arab Emirates.

See Also: Company Profiles: Middle East; Saudi Arabia; United Arab Emirates; Yemen.

Bibliography. Tracy Barnett, *Oman* (Mason Crest Publishers, 2004); CIA, "Oman," *World Factbook,* www.cia.gov (cited March 2009); Hussein Ghubash, *Oman: The Islamic Democratic Tradition* (Routledge, 2006); Francis Owtram, *A Modern History of Oman: Formation of the State Since 1920* (I.B. Tauris, 2004); United States, Congress, Senate, Committee on Finance, Subcommittee on International Trade, *United States–Oman Free Trade Agreement: Hearing Before the Subcommittee on International Trade of the Committee on Finance, United States Senate, One Hundred Ninth Congress, second session, March 6, 2006* (U.S. Government Printing Office, 2006).

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Open Economy Macroeconomics

Much of the influential research in macroeconomics in the post–Great Depression era has focused on domestic economic fluctuations. For a large country such as the United States, the assumption that foreign interest rates had little effect on domestic economic variables was accepted. Foreign investment and net factor flows were small relative to the domestic economy. Furthermore, the Bretton Woods system of fixed exchange rates ensured that little reason to model currency fluctuations existed. Today, however, understanding linkages between national economies is of critical importance.

The first step toward a serious modeling of open economy macroeconomics came with the introduction of the Mundell-Fleming model, which was an improvement on the basic Keynesian IS-LM structure. Recently, scholars have developed more advanced models based on microeconomic foundations. Some of these models are based on closed economy versions of equilibrium models of the business cycle. Other scholars have attempted to incorporate "sticky prices" into their models in the tradition of New Keynesian macroeconomics.

Whatever the approach, it is crucial to realize that the basic challenges of open economy macroeconomics are that linkages exist between markets and must be respected, and that there are limits to what government policy can accomplish because they cannot control all the variables simultaneously—a problem sometimes referred to as the trilemma.

Models

One possible reason that progress in open economy macroeconomics began rather slowly is that the United States, as the dominant economy, was largely assumed to be able to pursue its own domestic policy objectives without regard for interest rates and other prices in the rest of the world. Hence, research in macroeconomics focused mainly on domestic prices and interest rates. In the Keynesian paradigm, the overriding objective was to understand how active intervention with fiscal and monetary policy could promote economic stabilization.

One basic approach simply adds net exports to the Keynesian model. Domestic spending (absorption) depends positively on domestic income and negatively on the domestic interest rate. Net exports depend positively on foreign income and negatively on domestic income. Real exchange-rate depreciation at home causes domestic goods to become cheaper on the world market and, thus, improves the trade balance. Putting these statements together yields an open economy IS curve.

As a result, for example, an increase in foreign income will increase domestic aggregate demand, causing both domestic output and interest rates to increase. The amount that output and interest rates increase depends on the money market and whether the economy is near full employment.

The Mundell-Fleming model builds on this approach by further specifying that in a world of perfect capital mobility and fixed exchange rates, the situation described above would result in an increase in domestic interest rates relative to world rates and lead to increased capital inflows. The result is a balance-of-payments surplus. As foreign capital rushes in, upward pressure is put on the value of domestic currency. If the economy is small (by definition, an economy that cannot affect world prices or interest rates), this pressure would require the central bank to sell the domestic currency (buy foreign reserves). This action takes the pressure off, discouraging capital inflows and bringing the balance of payments back into balance. As a result, of course, the domestic interest rate would fall back toward the world rate. In the case of perfect capital mobility and fixed exchange rates, the monetary authority of a small open economy is completely at the mercy of external factors.

The monetarist approach takes a somewhat different view. Whereas the Keynesian approach to macroeconomic stabilization policy puts more emphasis on fiscal policy, the monetarist school of thought (associated with Milton Friedman and the University of Chicago) asserts that the supply of money is an important determinant of the balance of payments. Key features of the monetarist approach are that a stable money demand function depends on domestic prices and income. The money supply consists of both the supply circulating in the economy and foreign reserves. Finally, purchasing power parity holds, and money supply equals money demand.

The consequence of the monetarist setup of the model is that given foreign prices and domestic income, money demand remains constant. Therefore, in a fixed-exchange-rate regime, a change in the domestic money supply leads to an equal and opposite change in foreign reserves. As a result, the monetary authority need not intervene in the exchange market but can restore balance-of-payments equilibrium through monetary policy alone.

Both the Keynesian and monetarist approaches can be extended to models of exchange-rate determination under floating exchange-rate regimes. Although these models did much to increase understanding of how international variables (e.g., exchange rates and balance of payments) respond to changes in global economic conditions, they are not based on microeconomic principles. Recent research has focused on modeling international economic relationships, giving special attention to the microeconomic foundations.

Recent Developments

Numerous puzzles in open economy macroeconomics cannot be resolved in the older Keynesian and monetarist frameworks. Among those puzzles is why a home bias tends to exist in both trade in goods and in asset holdings. Another question is why consumption growth across countries is less correlated than standard macroeconomic theory would predict. These puzzles exist because economic models based on perfectly competitive markets and rational optimizing behavior by consumers and firms predict more trade and economic integration than scholars observe. One branch of open economy macroeconomic research has tried to explain these anomalies through the use of dynamic macroeconomic models similar to those that have been employed to analyze domestic macroeconomic issues such as business cycles.

Some of these puzzles can be solved without resorting to the assumption of price stickiness. The home-bias problem can be partially explained by adding transaction costs. The cost adds a friction that prevents consumers and firms from fully optimizing. Models based on microeconomic foundations can often be constructed to enough precision so that they can be calibrated to empirical data and tested quantitatively.

Price anomalies such as the failure of purchasing power parity and the failure of the exchange rate to correlate systematically with other variables require more than just transaction costs to explain. Nominal price rigidity (or sticky prices) may also be necessary.

Research in the new open economy macroeconomics builds on previous work by incorporating price rigidities. The Mundell-Fleming model, like other models in the Keynesian tradition, assumed an extreme form of price rigidity: prices were assumed to be fixed. In the new open economy macroeconomics, prices are not fixed by assumption but are allowed to be somewhat fixed in the short run. Often, the mechanism by which the price rigidity occurs is based on microeconomic foundations. Imperfect competition and price discrimination are common features of such models. Menu costs and other mechanisms for allowing prices to update slowly ensure that the model does not go immediately to the long-run equilibrium. As a result, pricing anomalies arise endogenously; as a result, government intervention in currency and money markets may have real economic effects.

Unanswered Questions

Many unanswered questions remain, and many important recent economic phenomena present an ambitious agenda for open economy macroeconomic research. There is fundamental agreement among the many models that an economy cannot simultaneously achieve price stability, exchange rate stability, and perfect capital mobility—a situation known as the trilemma.

Until recently, China achieved the first two conditions by controlling capital flows. As the Chinese economy loosens the capital controls, China will lose its grip on either domestic prices (higher inflation) or the exchange rate (revaluation). What remains uncertain is the precise mechanism by which internal and external prices will be affected.

Other economies face decisions about whether to abandon fixed exchange rate regimes to regain control of their domestic money supply. Fixed exchange rates offer stability but are subject to speculative attack. Understanding the nature of nominal price rigidity in international markets is crucial to evaluating the various policy options available to governments. Researchers in open economy macroeconomics continue to grapple with these critical issues.

See Also: Bretton Woods Accord; Business Cycles; Macroeconomics; Mundell-Fleming Model; Purchasing Power Parity.

Bibliography. Malin Adolfson, Stefan Laséen, Jesper Lindé, and Mattias Villani, *Evaluating an Estimated New Keynesian Small Open Economy Model* (Centre for Economic Policy Research, 2007); Paul R. Bergin, "How Well Can the New Open Economy Macroeconomics Explain the Exchange Rate and Current Account?" *Journal of International Money and Finance* (v.25/5, 2006); Giancarlo Corsetti, *New Open Economy Macroeconomics* (Centre for Economic Policy Research, 2007); Rudiger Dornbusch, Stanley Fischer, and Richard Startz, *Macroeconomics* (McGraw-Hill Irwin, 2008); Steven L. Husted and Michael Melvin, *International Economics* (Pearson Addison-Wesley, 2007); Yongseung Jung, "Can the New Open Economy Macroeconomic Model Explain Exchange Rate Fluctuations?" *Journal of International Economics* (v.72/2, 2007); Paul Krugman, *The Return of Depression Economics* (W. W. Norton, 2000); G. C. Lim and Paul D. McNelis, *Computational Macroeconomics for the Open Economy* (MIT Press, 2008); Maurice Obstfeld, Jay C. Shambaugh, and Alan M. Taylor, "The Trilemma in History: Tradeoffs Among Exchange Rates, Monetary Policies, and Capital Mobility," *The Review of Economics and Statistics* (v.87/3, 2005); Ozge Senay, "Interest Rate Rules and Welfare in Open Economies," *Scottish Journal of Political Economy* (v.55/3, July 2008).

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Operations Management

Operations management (OM) is the synergetic group of business activities responsible for developing, implementing, operating, managing, and improving business processes aiming at transforming resources (i.e., inputs) into products and services (outputs). OM is closely related to the process of value creation within a company; therefore, it is essential to success in business. Inputs cover designs, specifications, energy, materials, shop floor workers, management, and more. The transformation is intrinsically related to the nature of the business and can be physical (e.g., manufacturing), the result of an exchange of monetary value (e.g., retail), informational (e.g., an Internet Service Provider), a change in location (e.g., delivery system), and even psychophysiologic (e.g., a movie or healthcare). Naturally, outputs depend on the type of transformation and can vary from goods (e.g., a car) to sensations (e.g., listening to a live concert). Ultimately, OM is about assuring optimum value creation through efficient and effective use of resources to deliver the best products and services.

The roots of OM go as far back as the Industrial Revolution (i.e., the 17th century), when our capacity to produce goods was multiplied by many times, mostly through the introduction of machines. Later, the same machines enabled the so-called scientific management era in the early 20th century to develop. Careful analysis, in-depth study, and precise design made possible the mass production of goods. The large amount of quantitative methods developed to support decision making and problem solving generated a new scientific field—management science. The World War II effort helped make many of these methods more sophisticated and, more importantly, helped create another foundation of modern operations management—computational methods.

The 1980s increased pressure for quality, productivity, and efficiency. Hence, there were large investments in Just-in-Time, Total Quality systems, and reengineering. Environmental issues, globalization of the supply chain and competition, process integration (e.g., enterprise resource planning [ERP]), mass customization, the Basic Research in Computer Science system, and the internet have made OM even more challenging and sophisticated in recent years.

OM covers the core of a firm's whole value chain from developing products and services to delivering products and services. More specifically, OM incorporates development, production, and delivery of products and services. Operations strategy, forecasting, development of products and services, process management, location and layout, supply chain management, and aggregate planning are all examples of activities under the OM umbrella.

See Also: Customization; Facilities Location Decision; Inventory; *Kaizen*; Management Science; Optimization; Product Development; Productivity; Quality; Quality Control; Scheduling; Supply Chain Management; Value Chain.

Bibliography. Christopher W. Craighead and Jack Meredith, "Operations Management Research: Evolution and Alternative Future Paths," *International Journal of Operations and Production Management* (v.28/7–8, 2008); D. Danreid and N. Sanders, *Operations Management: An Integrated Approach* (John Wiley & Sons, 2007); J. Heizer and C. Render, *Operations Management* (Pearson Prentice Hall, 2008); L. P. Ritzman et al., *Foundations of Operations Management* (Pearson Prentice Hall, 2007); B. W. Taylor and R. S. Russell, *Operations Management: Creating Value Along the Supply Chain* (John Wiley & Sons, 2009).

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Opportunistic Behavior

Opportunism is one transactional partner's execution of such devious plans that others cannot help blaming him or her for injustice unless they blame themselves for inattentiveness, complacency, or timidity. Stockholders, suppliers, buyers, insurers, employers, and citizens must always be vigilant: never expecting deviousness is utopian.

Contracts usually involve consideration. Each party provides benefit to another, planning his or her own net benefit. No given distributive ratio of fair outcomes exists. Candidly using others instrumentally is a fair procedure. If one-sided outcomes arise consensually, such fair procedure counts as fairness of substantive outcome. Hence, procedural injustice counts as substantive injustice. Undisclosed plans are devious. Impromptu ploys, too, deviate from consensus, if any partner, farsighted enough, would have required them to be forsworn. Schemes are very devious if, having been forsworn, they are executed anyway. Predictable outcomes, however, cannot be blamed on deviousness.

A Contested Example

In 1926 General Motors bought its body supplier, Fisher Body, outright. Sixty percent owned by GM since 1919, Fisher Body supplied GM at cost plus 17.6 percent. From 1923 to 1925, Fisher doubled its return on assets to 17.3 percent as transport costs burgeoned. GM was used to colocation by Fisher. As demand for GM cars boomed, however, colocation no longer suited Fisher: from 1924, no new Fisher plant was sited near GM. Such unhelpfulness was predictable, given on-cost profits. By conceding 17.6 percent on-cost, probably overestimating its power to persuade Fisher not to take advantage, GM consented to potential injury. An untoward share of profit looks substantively unjust, but no procedural injustice was done. Only a loyal steward might be expected disinterestedly to undo what GM wittingly accepted. According to Oliver Williamson, the General Motors/Fisher Body case, though factually disputed, illustrates contractual friction.

Evidence

Opportunism is not evident unless one partner misleads the other. Calculated opportunism exists if facts or intentions, knowledge of which would disquiet a trading partner, are deliberately misrepresented. Otherwise, a sufficient sign of opportunism is that, impromptu and postcontract, a crafty inclination emerges: relying on facts not known previously to redistribute net benefit or forming redistributive intentions not at first contemplated. This state of mind is dispositional, not intentional.

Williamson defines opportunism as guileful self-seeking. Instrumental self-interest is open. Candid deals victimize no one. Misrepresentation lulls dupes into devious deals. The spirit of markets is, doubtless, not unequivocally caveat emptor (vendor). Goodwill and courtesy subsist. Yet trade is risky if gains from breaking solemn pledges outweigh self-enforced fairness. Opportunism need be neither feral nor pervasive, but as tricksters occur randomly, distrust abounds and must be mitigated. Arrangements such as vertical integration, not necessarily anticompetitive by intent, often are designed primarily for private dispute resolution, whereas sovereign dispute resolution is impracticable.

Mitigation

Opportunists thrive on "impacted" information: conditions that make it costly to scrutinize the state of the world, including a partner's state of mind. Vertical integration facilitates scrutiny. Otherwise, beneficial deals are deterred, efficient trades frustrated, and costly precautions induced for fear of opportunism. Sellers eschew price discrimination, suspicious of cunning buyers pleading poverty or of arbitrageurs. Though scale economies are available, industry rivals may not outsource research to one another because a sly supplier of knowledge might distort it. Market failure also explains integration of research and development: afraid to be gulled, independent researchers hide the slightest clues to their ideas in case they complement alternative ideas already partly formed by others.

Insurers cannot guess whether clients will be negligent after they are insured; neither can they easily uncover deceit. Experience rating (familiarization with partners' characteristics) ranks partners by their probity. Insurers offer counteropportunist incentives, such as discounts for proven clients that eschew petty or dishonest claims, and abate risk. Because insurers pool information, risky clients struggle to get better deals elsewhere when their charges rise with each claim.

Penalized like flighty insurance claimants, job quitters encounter rules mandating entry-level pay when they flit from job to job. Employers using cumulative audits of overall performance eventually pay premiums to highly rated employees, just as insurers eventually grant discounts.

Some firms need distinctively skilled workers who are adaptable to vagaries in technological, trade, and product life cycles. They need people who, without haggling, helpfully share tricks of the trade with apprentices. Codified ideas accessible to employers can be told to recruits, but even if they are similarly qualified, they cannot be told the ropes; someone must show them. Incumbents gain over time a monopoly grasp of idiosyncratic processes: they may, unhelpfully, interact inscrutably with recruits and perform so perfunctorily as to squander a firm's uniqueness.

Internal labor-market rules sweeten a firm's atmosphere; bonds of "citizenship" unlock impacted information. Upstarts from outside, faking eligibility, are thwarted by port-of-entry rules. Not paid specifically on the basis of performance (quid pro quo) but rewarded after tactful, cumulative experience rating and upon achieving seniority, incumbents are protected from opportunistic queue jumpers.

Antitrust authorities may compel release of complete know-how. Operational kinks are ironed out by sharing insight into makeshift solutions with customers. Not disclosing intuitive know-how embedded within a supplier's experience may suggest caginess in relations with customers, in whose work such inscrutability begets inefficiency; uses of supplies may be shown unhelpfully. Unhelpful showing and selective disclosure of know-how, or its distortion, betokens a more begrudging disposition than customers expect. It is understandable that customers are so treated—they are potential rivals, after all—but unfair if an artful dodger led them to expect openness.

Symmetrical Information, Asymmetrical Audacity

Trading partners necessarily omit to plan for all unforeseen contingencies. Starting with symmetrical information, sometimes they are not symmetrically creative concerning what is to come. Not designedly contrived by one partner, emergent gray areas prompt anyone so disposed to improvise impromptu. A maintenance firm, for example, stipulated payment by a rail track owner after workers were on site. It bought motorcycles so its employees were punctual. Supplies were delayed by congested traffic.

Opportunism sometimes involves gall: Traders are not symmetrically bold. Partners may hold symmetrical information, but knowing his state of mind full well, the confident opportunist often challenges timid victims to act on that knowledge.

A hotelier boasted of his skill, years earlier, in "stringing creditors along." His checks bore inconsistent words and numbers; and although he needed an associate's signature, he signed solo. Paying "as late as possible" was a "question of nerve," he said. Cunningly, not impromptu, he shifted costs to suppliers without consensus. In commercial dealing, governments, too, are disposed—or intend—to pay late. As to the social contract, it is stealthily breached in numerous sovereign abuses of the rule of law.

Conditions

Two conditions must exist to constitute opportunism. The first is bounded rationality. This term means that only a little of what needs to be known can be known. What little is known, moreover, is complex and subject to change. Anyone who is boundlessly rational would not be prey to opportunism, unless he were timid, but would know everything about the state of mind of potential and current trading partners, and about all possible states of the world bearing on all plans.

The second condition is small numbers. Victims of opportunism would not be its prey if large-numbers bargaining were not, as is common, subject to fundamental transformation into small-numbers situations. A supplier or employee initially interchangeable with others grows with experience and by embedding himself becomes virtually irreplaceable. In large-numbers situations, one can turn away from one to many other partners. Often, though, victims sink by degrees into small-numbers situations with partners to whom, for the time being, they are inextricably wedded.

Functionaries (and Predators)

According to Oliver Williamson, in large U-form and corrupted M-form organizations, functionaries entrenched in enclaves of private power enjoy various discretionary abuses: uncompetitive supply, persistent cross-subsidy of pet projects, and empire building, among others. Given stockholders' inhibited propensity to displace them, their irreducible opportunism is abetted by diffuse accountability, partisan misrepresentations, and weak auditors, lost in byways of impacted information.

Using qualified majority voting, concert parties, poison pills, stock dilution (or support), vexatious litigation, and so on, miscreant functionaries defy stockholders' displacement efforts. Predators too, quite opportunistically, discredit incumbent managers, who need deep pockets to restore stockholder confidence.

Oligopolists are secretive mines of impacted information, inscrutable to one another. Therefore, collusion sufficiently concerted to mimic market dominance or monopoly is problematical. Accordingly, natural (and patented) monopoly aside, dissolving monopolies into oligopolies is not quite fruitless.

See Also: Bribery; Contracts; Corruption; Earnings Management; Make-or-Buy Decision.

Bibliography. Jeffrey R. Cohen, Lori Holder-Webb, David J. Sharp, and Laurie W. Pant, "The Effects of Perceived Fairness on Opportunistic Behavior," *Contemporary Accounting Research* (v.24/4, 2007); *Daily Telegraph* (February 5, 1996); *Daily Telegraph* (October 18, 2003); Benjamin Klein, "The Economic Lessons of Fisher Body-General Motors," *International Journal of the Economics of Business* (v.14/1, 2007); John Rawls, *A Theory of Justice* (Oxford University Press, 1972); Oliver Williamson, *Markets and Hierarchies: Analysis and Anti-Trust Implications* (Free Press, 1975); Oliver Williamson, "The Theory of the Firm as Governance Structure: From Choice to Contract," *Journal of Economic Perspectives* (v.16/3, 2002).

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Optimization

Optimization is the study of organizational problems in which one seeks to minimize or maximize a real function by systematically choosing the values of real or integer variables from within an allowed set. In mathematics, optimization is called mathematical programming. This type of programming is not computer programming, though computers are used extensively to solve complex optimization problems.

Practically, optimization is a process, technique, or methodology to make a decision, system, or design as perfect, functional, and effective as possible under the given circumstances.

Over time, optimization has developed into a field of study in recognition of the fact that several disparate disciplines present situations in which commonalities in terms of mathematical elements can be identified. Based on these commonalities, optimization problems can be formulated and resolved by the use of a unified set of ideas available in the field of optimization.

Optimization forms part of a larger repertoire of techniques in the field of operations research or management science that includes probability theory, queuing theory, games theory, decision analysis, and simulation. Operations research (in the United States) or operational research (in the United Kingdom) is an interdisciplinary branch of applied mathematics that deals with optimization of the performance of a system.

A typical situation requiring the application of optimization involves the manager of a business call center who faces a problem such as the following. A client service group has 50 call center staff members. On an average, each executive handles 800 calls per work session. For each staff member added to the group, the call-handling capacity per executive drops by 10 calls. The manager wonders how many staff members should be added to the existing group so that the total call-handling capacity of the group is maximized. The solution to this problem requires the technique of optimization. (The solution is to add 15 staff members to have a call-handling capacity of 42,250 calls per session. Adding fewer or more than 15 staff members would reduce the total number of calls handled.)

The optimization problem involves three elements: the objective function, a set of variables, and a set of constraints. The objective function is the variable that is to be optimized. The set of variables affects the value of the objective function. The set of constraints prevents the variables from taking on certain values that are not admissible. In the problem above, the objective function is the total call-handling capacity of the client group at the business call center. The set of variables is the number of staff members and the number of calls per session. The set of constraints is the limitations set on the variables—the number of staff members or calls cannot be negative, for example.

Applications

Optimization finds applications in a wide range of disciplines that include biology, business, economics, engineering, and information technology. The basic idea of optimization applications is that situations have common elements that could be expressed mathematically in terms of a model. This model brings together several variables that can be used to solve optimization problems. The complexity of the model depends on the number and variety of variables involved in the problem being resolved. Thus, linear programming could be used to solve simple optimization problems.

A simple problem in linear programming is one in which it is necessary to find the maximum (or minimum) value of a simple function subject to certain constraints, as illustrated in the call center example earlier in this article. More complex techniques include nonlinear programming, integer programming, and stochastic programming.

Applications of optimization in organizations have increased greatly after the availability of computers to solve optimization problems with several variables. Optimization can be applied in many situations in business organizations. Application areas include airline optimization, finance and economics, marketing, production and logistics, scheduling, supply-chain management, telecommunications, transportation, and yield management.

International Applications

Myriad areas are available for application of optimization in international business, too. Optimization methods enable international businesses to increase their responsiveness to changing global market forces while minimizing their cost. Areas of applications in the international context include material allocation; transportation logistics; workforce and production planning; and efficient management of inventories, customers, risk, compliance, pricing, and marketing.

A multinational corporation could face a situation in human resource management in which it needs to match highly skilled and multicultural employees to available job positions, using a method that is scalable so that it can handle large pools of jobs and resources in a dynamic market. The approach could use constraint programming, for example, to manage the complex constraints encountered in the field and reach near-optimal assignments that take into account all resources and positions in the job pool. The constraints, which are applied at both the individual and team levels, concern job role, skill level, geographical location, languages, and many other factors.

In international organizations, marketing optimization can deal with the typical problem of multichannel marketing event optimization. An increasing number of firms use multiple channels—such as e-mail, call centers, and direct mail—to contact customers with marketing events. The determination of an optimal set of marketing events to present to an individual customer, given a set of marketing events by channel, a set of individuals, some additional constraints, and the concepts of saturation and cannibalization can be a useful application of optimization.

Optimization has certain limitations, such as facing difficulties with the specification of the objective function, unrealistic linearity, lack of feedback, and lack of dynamics. Often, organizations that want to deploy optimization tools face the challenge of the relatively high cost of such tools.

See Also: Decision Making; Distribution; Diversifying Investment; Facilities Location Decision; Management Science; Operations Management.

Bibliography. Urmila Diwekar, *Introduction to Applied Optimization* (Springer-Verlag, 2008); Christodoulos A. Floudas and P. M. Pardalos, eds., *Encyclopedia of Optimization* (Springer, 2008); T. A. J. Nicholson, *Optimization in Industry* (Aldine Transaction, 2007); Stephen G. Powell and Kenneth R. Baker, *Management Science: The Art of Modeling With Spreadsheets* (John Wiley & Sons, 2007).

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Option

In the finance world, an option is a contract between two parties when one party grants the other the right to buy/purchase a specific asset at a particular price within a particular time period. Alternatively, the contract may grant the other party the right to sell a specific asset at a particular price within a particular time period. The party who has received the right but has no obligation and instead has the right of decision to make (buy/sell in the case of a call or put option) is known as an option buyer or option holder. The party who has sold the right and is under the obligation to respond to the buyer's decision is known as the option writer or option issuer. The price at which options are exercised is known as the strike price or exercise price. The option buyer pays an option price to the option seller known as an option premium. An option premium is not refundable even when an option is not exercised. Options can take many forms, such as the following:

- Call Option: A call option gives the option buyer the right to buy a specific asset on a specific date for a specific price. The option seller is under an obligation to fulfill the contract, that is, to sell, and he/she is paid for an option premium by the option buyer. A call option can be long call or short call. A long call is when the trader who believes that the stock price will increase might buy the call option rather than buy the stock. If the stock price increases over the exercise price of the call option by more than the premium paid, he/she will get a profit. On the contrary, if the stock price decreases, he/she will not use the call option and buy the stock from the market and lose the amount of premium. A short call is when the trader who believes that the stock price will decrease might short sell the stock instead of selling a call option.
- Put Option: A put option gives its holder, that is, the option buyer, the privilege or right to sell a specific asset by a specific date for a specific price. The option seller is under an obligation to fulfill the contract, that is, to buy, if the option buyer is ready to sell. The option writer charges the option premium initially for the same. The put option can be long put or short put. A long put is when the trader who hopes that the stock price will decrease can buy the put option. If the stock price decreases below the exercise price by more than the option premium paid,

then the trader would get a profit. If the stock price increases, he/she will not exercise the put option and lose the option premium being paid by him/her. A short put is when the trader who hopes that the stock price will increase can buy the stock instead of buying the put option. If the stock price increases, a short put would give him/her profit, and vice versa.

- American Option: An option, either call or put, that can be exercised even before maturity/expiration date is called an American option.
- European Option: An option, either call or put, that can be exercised only on the maturity/expiration date is called a European option.
- Bermuda Option: An option that can be exercised only on few specific dates prior to maturity is known as a Bermuda option.
- Preference Option: In this option, the option buyer gets a privilege to designate the option either as a call option or put option.
- Average Rate Option: This is the arithmetic average of the spot rate during the life of the option. It is the rate that is considered at the time of maturity instead of the spot rate. This rate can be applied to call as well as put options.
- Compound Option: This is the option on an option. It can be a call on a call or a call on a put or a put on a put or a put on a call.

An option is a derivative instrument that is used to hedge risk. Both the option buyer and option writer can protect themselves from an uncertain situation. Hedging is being done by resorting to the purchase or sale of options. Speculators use options for speculative purposes. Normally, the speculator enters into vertical spread on call combinations, horizontal spread on call combinations, or diagonal spread on call combinations, or straddles and strangles. Basically, there are three situations in option exercises. The first is at-the-money: this is the situation in which the strike price is equal to the spot rate on the expiration date. The second is in-the-money: in the case of a call option, an in-the-money situation is confronted when the strike price is lower than the spot price. Conversely, in the case of a put option, an in-the-money situation occurs when the spot price is lower than the strike price. The third situation is out-of-the-money: this is the opposite of the in-the-money situation. In the case of a call option, an out-of-the-money situation is confronted when the spot price is lower than the strike price. Conversely, in the case of a put option, an out-of-the-money situation occurs when the strike price is lower than the spot price.

Option prices depend on a number of factors such as degree of volatility, interest rate differential, expiration date, change in forward rate, change in spot price, and so forth. It is said that an option is "a double-edged sword to hedge against risk."

See Also: Financial Hedge; Futures Markets; Hedging.

Bibliography. Roger C. Charke, *Options and Futures: A Tutorial* (Research Foundation of the Institute of Chartered Financial Analysts, 1992); John C. Cox and Mark Rubenstein, *Options Markets* (Pearson Prentice Hall, 1985); David A. Dubosky, *Options and Financial Futures: Valuation & Uses* (McGraw-Hill, 1992); Peter H. Ritchken, *Options: Theory, Strategy, and Applications* (Scott, Foresman, HarperCollins 1988); Vyuptakesh Sharan, *International Financial Management* (Prentice Hall, 2001); Hans R. Stoll and Robert E. Whaley, *Futures & Options: Theory & Applications* (Southwestern, 1993).

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Organisation for Economic Co-operation and Development

With headquarters in Paris, the Organisation for Economic Co-operation and Development (OECD) began in 1948 as the Organization for European Economic Co-operation (OEEC), to promote the Marshall Plan for the reconstruction of Europe after World War II. Membership of the OEEC was gradually extended to non-European states, and in 1961, 20 countries joined to reform the international organization into the OECD by authority of the Convention on the Organisation for Economic Co-operation and Development.

In mid-2008, the OECD comprised 30 member states. As members, these nations share the principles of representative democracy and free market economy. Member nations meet in committees to exchange ideas; review their efforts to improve national economic performance; and advance policies on trade, science, employment, education, and financial markets. The scope of the OECD agenda, therefore, is broad, covering economic, environmental, and social policy.

Through exchange of information, the organization aims to provide a forum where members can identify best practices, design solutions to common problems, and coordinate domestic and international policies, often by adopting nonbinding agreements that can develop into binding treaties and other legal instruments.

Structure and Mission

Together, the council, secretariat, and committees form the OECD's structure. The council is comprised of member countries, each with an ambassador leading its delegation. The secretary-general heads the secretariat, which in turn is made up of 14 directorates and about 2,500 staff members. Finally, around 200 committees, working groups, and expert groups comprised of experts from member and nonmember countries are dedicated to a specific theme of the OECD's agenda.

The OECD engages nonmembers through its Centre for Cooperation with Non-Members (CCNM). About 25 nonmember countries participate at varying levels in OECD committees, and about 50 nonmembers contribute to OECD working parties, schemes, or programs. The organization also provides policy-dialogue and capacity-building activities—country programs, regional approaches, and global forums—in which participants can share best-policy practices and obtain input into the OECD's policy debate. Dialogue has also been established with several countries on the possibility of accession, enhanced engagement, and cooperation with nonmembers, particularly those of strategic importance to the OECD.

The OECD functions primarily as a forum for the exchange of experiences, ideas, and information between national governments on a range of contemporary policy issues. As part of this role, the secretariat's statistical agency, based in Paris, collects and analyzes data on a broad range of subjects, including patterns in society, trade, the environment, agriculture, taxation, technology, and economic development forecasts. Statistics on these topics are published in a variety of formats and are viewed as being reliable sources of comparable statistics.

Each year, the organization releases several hundred books as well as working papers and reference materials. Flagship titles include *OECD Economic Outlook, Main Economic Indicators, OECD Factbook, OECD in Figures,* and *OECD Observer.*

Toward the goal of achieving transparency in international tax affairs, the agency periodically publishes a list of uncooperative tax havens. It also produces and regularly updates the Model Tax Convention and a set of guidelines for the testing of chemicals, both of which have become de facto standards.

International Policy Activities

Apart from providing information, the OECD takes an active role in shaping international policy and treaties by engaging with business, trade unions, and other groups in civil society on topics such as bilateral taxation, investment, and transfer pricing. In the mid-1990s, for example, the OECD created the OECD Anti-Bribery Convention, which came into effect in February 1999 and led the design of a proposed Multilateral Agreement on Investment (MAI), which was later rejected.

Other recent initiatives include a task force on spam and suggested best practices for internet service providers and e-mail marketers, a review and forecast of environmental problems and solutions, and policy direction and guidance on the future of the internet economy.

Partner Organizations

As an international organization, the OECD works closely with governmental and nongovernmental organization (NGO) bodies and agencies, including the Business and Industry Advisory Committee (BIAC), Development Centre, International Transport Forum, International Energy Agency, and Trade Union Advisory Committee (TUAC). In addition to participation by individual member states of the European Union, the European Commission is involved in the OECD's work.

Like similarly structured organizations, the OECD participates as an independent organization in the system of coordinated European organizations, whose other members include the North Atlantic Treaty

Organization, the Western European Union, and the European Patent Organisation to maintain similar employment conditions for its staff.

See Also: Economic Development; Economic Indicators; Economic Statistics; European Union; Nongovernmental Organizations.

Bibliography. T. Bainbridge, "A Brief History of the OECD," *OECD Observer* (Summer 2000); Organisation for Economic Co-operation and Development, "About the OECD," www.oecd.org (cited March 2009); Organisation for Economic Co-operation and Development, *OECD Annual Report 2008* (OECD, 2008).

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OSE All Share Index (Oslo)

The Oslo Stock Exchange is a medium-sized stock exchange based in Oslo, Norway. Domestic market capitalization, or the number of issued shares of domestic companies, including their several classes, multiplied by their respective prices at a given time, is $353,353 million (2007)—an increase of 26.2 percent from 2006, making the Oslo Stock Exchange 24th in the world in terms of domestic market capitalization. It is also ranked 28th in the world in terms of growth. Market capitalization over gross domestic product, an indicator of the relative importance of stock exchange in local markets, has been increasing sharply, from 43 percent in 1997 to 81 percent in 2007.

As of 2007, 241 companies were listed on the Oslo Stock Exchange, 40 of which were foreign. Also in 2007, 30 new companies were listed, six of which were foreign. Concurrently, a relatively large number of firms—18, all domestic—was delisted.

The origin of the Oslo Stock Exchange is commonly traced to the Exchange Act of 1818 and the April 1819 opening of the Christiania Exchange. Originally, the stock exchange facilitated exchanges of foreign currencies, specific goods (e.g., ships), and a limited number of commodities. The exchange started listing prices for stocks and shares on March 1, 1881. The level of activity in stock and shares trade was very modest before World War I. The postwar era was characterized by a shift from trading commodities and foreign currencies to trading stocks and shares. The Norwegian economy was strictly regulated following World War II. Deregulation in the 1980s and the revival of the Norwegian economy after the discovery of commercially viable oil fields off the west coast of Norway were largely responsible for the steady growth of the exchange ever since.

It should be noted, however, that like many other exchanges around the world, the level of activity in the Oslo Stock Exchange has been affected by global economic shocks (e.g., the Great Depression, the oil crisis of the 1970s, and Black Monday in 1987) and speculative booms (e.g., the period after World War I and the dotcom era).

The Oslo Stock Exchange was one of the first movers into the age of electronic trading. As early as 1988, the exchange put an electronic trading support system in place. As of 1999, a new electronic system both eliminated brokers' need to have any physical connection to the exchange and, more important, allowed trading to take place from anywhere in the world. The exchange was very late in introducing option trading, however. It was not until 1990—some 20 years after option trading had begun in the United States—that an option market was opened at the Oslo Stock Exchange.

The OBX index is a weighted summary of the value of the 25 most liquid stocks traded on the Oslo Stock Exchange. The index is adjusted for divided payments and is revised every June and December. The index is tradable in its own right, and futures and options services are available. It is heavily dependent on the energy sector generally and on the performance of StatoilHydro ASA in particular. The weight of this company in the index varies at around 25 percent, and its market capitalization is approximately 40 percent of the market cap of all 25 firms in the OBX index.

The exchange is fully owned by Oslo Børs VPS Holding ASA. The largest shareholder is the largest financial institution in Norway, DnB NOR ASA, which holds approximately 19 percent of the shares. The top management team of the exchange is very homogeneous, with few international team members. The board of directors exhibits the same tendency with regard to lack of international representation but exhibits gender diversity, as required by Norwegian law.

The exploitation of newly discovered oil fields off the west coast of Norway helped revive the Norwegian economy and contributed much to the steady growth of the Oslo Stock Exchange. Above, a Norwegian-owned oil rig in operation off shore.

Trade in stocks is done by 57 brokers who trade on behalf of customers and multiple relatively small brokers. The largest two brokers, SEB Enskilda ASA (plc) and DnB NOR Bank ASA (plc), control merely 15.6 percent of stock turnover (2008). The broker market for other market instruments, such as derivatives, is highly concentrated.

The Oslo Stock Exchange is renowned not only for its early use of electronic means of communication but also for its information transparency. Information on specific exchanges, prices, and turnover can be found as early as 1881 in *Kierulfs Håndbok* (handbook). A related unique source of information, the shareholder registry, contains multiple shareholder characteristics. The book and the shareholder data registry have been used repeatedly for research purposes.

The stock exchange is open for trade between 9:00 A.M. and 4:30 P.M. Central European Time. Currently, like other stock exchanges, the Oslo Stock Exchange provides real-time and delayed trading data, as well as a range of trade-related statistics distributed through a wide range of communication platforms.

See Also: Norway; Statoil; Stock Exchanges.

Bibliography. Ø. Bøhren and B. A. Ødegaard, "Governance and Performance Revisited," in *International Corporate Governance After Sarbanes-Oxley,* G. Gregouriu and P. U. Ali, eds. (Wiley, 2006); Ø. Bohren, R. Presely, and B. A. Ødegaard, "The Duration of Equity Ownership at the Oslo Stock Exchange 1989–1999," *Research Report* (2006); FIBV, www.fibv.com (cited March 2009); Oslo Børs, www.oslobors.no (cited March 2009).

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Outsourcing

Outsourcing, also known as blind off-shoring, is a process by which companies hire other companies, usually located in other countries, to perform lower-level work. The main motivation behind the practice of outsourcing is for a company to minimize its costs while at the same time increase its revenue and productivity and thus gain advantage over other firms.

The 1970s saw a change in the outsourcing trend where global outsourcing shifted from comprising solely manufacturing services to including information technology outsourcing (ITO), and later, business process outsourcing (BPO). As the name suggests, the former involves the provision of some or all information systems by one or more providers, which might include data conversions, database administration, help desk, and network management, among many others. BPO, on the other hand, takes place when a firm turns over its management to a third party by outsourcing call centers, human resources administration, finance, as well as accounting functions. ITO and BPO are currently two of the fastest-growing sectors in outsourcing.

Today, India in particular has become the leading destination for ITO and BPO because its cheap and skilled labor makes it a very affordable destination for foreign companies. Although the IT industry in India has been present since the 1980s, it was not until the following decade that Indian firms became the outsourcing destinations for companies around the world, which included firms such as American Express, GE Capital, and British Airways. In comparison, the BPO industry has been in existence for little more than five years, making it a fairly new, yet rapidly developing, sector today. Presently, India is characterized by being home to numerous IT "giants" such as Infosys or Wipro, which are the leaders in this particular field. Moreover, trying to stay on top, India is actually beginning to outsource its outsourcing services, hoping that such a step will place it ahead of other outsourcing nations such as China. Indian companies are hiring representatives all over the world so as to ensure a broader range of language skills along with other abilities to offer companies who outsource their services to this nation.

As the number of companies outsourcing to India increases, what has to be taken into account is that not all of these transactions end up being a success. In the case of the insurance and financial firm Conseco, the decision to outsource has definitely done more harm than help, and it experienced numerous problems. On the other end of the spectrum, however, is the air industry giant Boeing, which has experienced tremendous gains as a result of transferring manufacturing offshore.

Benefits and Risks

A company that decides to delegate some of its operations to a foreign country like India is able to focus on its core competency, which is yet another benefit to outsourcing as core competencies are where the success and the profit of the firm lie. After all, having all the responsibility of finishing the mundane and everyday tasks transferred to a foreign company enables the firm to dedicate more of its at-home personnel and resources to doing what truly distinguishes the company from its competition. The improved communication system makes this process even easier as companies in India can collaborate daily with their customer companies so as to make sure that everything is being done according to the predetermined standards. In addition, time differences mean that a U.S. company can shut down for the day while the partner in India is continuing on with the work, making the home company more efficient.

Yet another important benefit that companies can enjoy when outsourcing is having no overhead costs. Seeing that the offshore companies provide their own facilities and personnel, a U.S. firm does not have to deal with all of the logistics associated with building its own plant overseas, such as is the case with greenfield investments. Specifically, there is no need to recruit, hire, or train new employees in addition to other expenses such as insurance, worker's compensation, social security, and company benefits, as all are put on the shoulders of the outsourcing company. The U.S. business reaps the benefits of having another firm provide them with a ready service or product.

The most controversial issue with outsourcing is whether this business method is a boon to workers and employees of particular firms and society in general. Namely, to many workers the word *outsourcing* is feared and despised, as they automatically assume that it goes together with job termination. The truth is, however, that although outsourcing does

A young man undergoing computer training in 2008 in preparation for work in India's growing high-tech industry.

involve delegating jobs to people in other countries, it does not mean that workers in a home country are left jobless. After all, in some cases outsourcing may create services not previously available, which means that new positions will be created and workers acquired to fill those job openings. In addition, hiring cheaper labor overseas enables companies to hire more "higher-end" skilled workers or dedicate funds to further train current workers. Moreover, the common mistake is to believe that every job can be outsourced; the truth is that jobs, especially in the service sector, which may require face-to-face interaction, can be very difficult to transfer overseas.

Despite the benefits described above, outsourcing does have its faults and shortcomings. Many of the companies that decide to engage in this business method share the common fear of losing their intellectual property or trade secrets. Joining in with a firm in a foreign country requires the home company to share some of its strategy and strengths, making both easy targets for the outsourcing firms to steal and incorporate into their own operations. As part of learning operations, offshore workers can gain knowledge that can be applied to other projects down the road. Seeing as most offshore workers act as contractors, there is the possibility that they might use the information they gain to help competitors. In other words, outsourcing threatens the safety of the know-how of the home company.

Language and cultural differences can pose yet another disadvantage for a firm that plans to engage in offshore outsourcing. Customers may find it difficult to communicate with customer service representatives when they are located in another country. As a result, companies might find that they have many customers who, dissatisfied with the service, are looking for a different company. The need to study cultural differences is, therefore, a crucial step that every company should consider before entering into an outsourcing contract.

Outsourcing is closely related to the concept of foreign direct investment (FDI). Much like FDI, outsourcing involves investing in a foreign country, only on slightly different terms. The main difference between the two concepts is that through FDI, the home company is looking to sell the goods on the foreign market whereas in outsourcing, the services and the products are brought back to be sold or implemented in the company's home facilities.

Because outsourcing is becoming a dominant trend in today's world, it should not be forgotten that the business strategy carries both benefits and disadvantages, meaning that not every company is set to gain from applying outsourcing. It is a fault of many firms to not take into account the risks of this business decision and instead focus solely on the good that it can provide. It is imperative that a company do thorough research on the country before plunging in. To make the process of outsourcing more efficient, studies should be conducted illustrating the necessary steps a company should take to successfully implement outsourcing strategy in a particular country. Such research can help eliminate some of the risks associated with outsourcing. In all, patience and careful planning seem to be the determinants of any successful business decision, especially one as complicated as investing overseas.

See Also: Boeing; Call Center; China; India; Near-Shoring; Off-Shoring.

Bibliography. A. Bhushan, "Offshore Outsourcing: India," www.sourceexperts.com (cited March 2009); Alan E. Blinder, "Offshoring: The Next Industrial Revolution?" *Foreign Affairs* (v.85, 2006); Boeing, www.boeing.com (cited March 2009); Conseco, www.conseco.com (cited March 2009); A. Giridharadas, "In India, Outsourcing Moves to the Top Floor," www.globalpolicy.org (cited March 2009); B. W. Hornaday, "Conseco Shows Outsourcing Is Not Always Best Call," www.usatoday.com (cited March 2009); Harbhajan S. Kehal and Varinder P. Singh, *Outsourcing and Offshoring in the 21st Century: A Socio-Economic Perspective* (Idea Group Publishing, 2006); P. McDougall, "8 Expensive Blunders," www.informationweek.com (cited March 2009); P. McDougall, "Boeing's IT Outsourcing Deals Generate More Savings Than Expected," www.informationweek.com (cited March 2009); A. Mitchell, "Debunking Myths of Offshoring Failures," www.ecommercetimes.com (cited March 2009); J. Newhouse, "Boeing Versus Airbus: Flight Risk, Outsourcing Strategies," www.cio.com (cited March 2009); Frédéric Robert-Nicoud and Bernard M. Hoekman, *Off-Shoring of Business Services and Deindustrialization: Threat or Opportunity—and for Whom?* (Centre for Economic Policy Research, 2006).

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Overseas Private Investment Corporation

The Overseas Private Investment Corporation (OPIC) has played a vital role in advancing globalization for over three and a half decades. It does so by encouraging outward foreign investment by U.S. businesses to developing countries. Established in 1971, OPIC is an agency of the U.S. government that advances the economic development of new and emerging markets. To this end, OPIC has the responsibility of aiding U.S. companies to invest in a wide variety of overseas development projects.

OPIC performs its central responsibility by: (1) financing U.S. companies through direct loans and loan guarantees to eligible investment projects in developing countries and emerging markets; and (2) providing political risk insurance to U.S. development companies against the uncertainties of political instability, currency conversion issues, and expropriation possibilities (i.e., the risk that a host government will confiscate the assets—such as a factory, inventory, bank accounts—of foreign businesses). Funding for OPIC operations and services comes from market-based fees it charges for its products and services. Consequently, OPIC is a self-sustaining agency. OPIC provides funding and insurance to U.S. investors, contractors, exporters, and financial institutions. To assess appropriate countries, industries, and companies in which to invest, OPIC undertakes economic and market analyses of products, firms, and nations; these studies are done either in-house or are subcontracted on a competitive basis to outside consulting firms.

OPIC spreads its investment activity over a wide geographical area, including (but not limited to) sub-Saharan and northern Africa, eastern Europe and Russia, Latin America and the Caribbean, the Middle East, and Asia and the Pacific. As of 2008, OPIC invested in U.S. companies undertaking development work in over 150 countries dispersed throughout these (and other) regions. OPIC's mission in its financing function is to complement the private sector and provide financing in countries where conventional financial institutions are unable to finance on the required scale.

OPIC divides its financing role into two categories, depending on the size of the U.S. company looking to undertake international development projects. On one end of the size spectrum are the small and medium-sized enterprises with annual revenues of less than $250 million, and at the other end of the scale are the larger companies with annual revenues over $250 million. In this latter case, the investment is generally for projects that require large amounts of capital, such as infrastructure, telecommunications, power, water, housing, airports, hotels, high-tech industries, financial services, and the natural resource extraction industry. If projects require capital in excess of what OPIC itself can support because of resource limitations and regulatory restrictions, OPIC will work with colenders to extend its resource base for certain projects.

In general, OPIC provides support for the creation of privately owned and managed investment funds that make direct equity and equity-related investments in companies—often small and medium enterprises (SMEs)—within newly emerging market economies. As part of its financing function, OPIC facilitates the transfer of information, skills, and expertise from U.S. companies and their management team to their counterparts in the developing countries, and thus aids the latter in achieving self-sufficiency that extends beyond the life of the particular project.

OPIC sources indicate that, from 1991 through 2007, the corporation has committed close to $3 billion in funding to approximately 40 private equity funds. These funds, in turn, have invested approximately $3.5 billion in over 400 privately owned and managed companies operating in over 50 developing countries worldwide. OPIC's credit-based support of such funds that invest in companies creates a multiplier effect in attracting additional foreign direct investment in, and international financing of, companies in the developing and newly emerging countries.

OPIC's function in reducing the risk of doing business abroad is an important part of its mission in facilitating American companies to invest in international development projects. Many companies shy away from foreign direct investment in the face of perceived political (and other types of) risk. This reticence is in large part the result of the difficulty in constructing a business model for undertaking foreign investments when the possibility of political problems that can arise and threaten project success is a real concern and, moreover, is generally unpredictable over a number of dimensions. OPIC thus encourages private investment in developing countries through its political risk insurance.

As an agency of the U.S. government, OPIC operates through funding provided by Congress. In 2008 OPIC's authorization was extended in the Consolidations Appropriations Act of 2008 (P.L. 110–161). This Act provides $47.5 million for OPIC's 2008 administrative expenses and allows a transfer of $20 million from OPIC's noncredit account to fund its credit program.

See Also: Development Assistance; Economic Development; Foreign Direct Investment, Horizontal and Vertical; Risk; Risk Management.

Bibliography. Congressional Research Report, *The Overseas Private Investment Corporation: Background and Legislative Issues* (May 22, 2008); John D. Daniels, Lee H. Radebaugh, and Daniel P. Sullivan, *International Business: Environments and Operations* (Pearson Prentice Hall, 2009); Charles W. L. Hill, *International Business: Competing in the Global Marketplace* (McGraw-Hill Irwin, 2009); Sanford L. Moskowitz, *The International Automotive Parts Industry* (Overseas Private Investment Corporation, 1986); Overseas Private Investment Corporation, www.opic.gov (cited March 2009).

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Overtime

Overtime occurs when an employer requires or permits an employee to work extra hours over and above their normal working hours for the day or week. Where overtime is worked, this can take the form of paid overtime (normally at a premium rate), unpaid overtime, or the hours worked in overtime are recompensed by time off in lieu from normal working hours, either on a like-for-like basis or at a 1.5 rate.

In the United States the Fair Labor Standards Act (FLSA) requires employers to pay nonexempt employees time and a half the regular rate for all hours worked over 40 in each work week. The regular rate of pay can be the hourly rate or it can be calculated on a piece rate, salary, commission, or other basis, but the overtime compensation due to employees must be computed on an hourly basis. Discretionary bonuses, however, are excluded from such calculations. Hours cannot be averaged over two or more weeks, except in certain prescribed cases such as hospitals and nursing homes, when employers can use an 80-hour standard over a two-week period. Otherwise, even though overlapping work weeks may cause computational problems, the statutory 40 hours in a single work week prevails.

Employees classified as executive, administrative, professional, computer, or outside sales staff, however, are exempt from the overtime provisions of the FLSA and these form a growing proportion of the workforce in the United States.

The FLSA, which provides a base on which individual states are free to build, has no limitation on the number of hours an employee may work in a given work week. In contrast, the European Union's (EU's) Working Time directive sets a 48-hour limit to the working week (although certain exemptions and averaging are permitted by national laws). This is because the EU wishes to discourage overtime: It considers that workers are more likely to suffer adverse health problems and/or be more prone to accidents if they work long hours. Accordingly, unlike the United States, the EU does not prescribe any payments for working beyond normal hours and practice in member states varies. In the United Kingdom, for instance, manual workers traditionally receive premia for working beyond 40 hours per week.

Arguably, the provision of overtime pay has perverse consequences. It encourages workers to carry out their work slowly, as they will be rewarded at a premium rate if they are required/permitted to work over and above their normal hours. Also, absence procedures can be abused where employees deliberately take "sick leave" so that their colleagues can cover for them and earn overtime payments. Furthermore, researchers have found that manufacturing plants that use paid overtime are not more efficient than those that do not.

Conversely, overtime pay gives the employer flexibility to deal with peaks and troughs in the demand for goods and/or services; it enables the employer to increase the number of hours worked of permanent employees quickly and easily, without resorting to temporary employees. Furthermore, overtime payments at a premium deter the employer from using overtime unnecessarily and at the same time prevent employees from being exploited. The employer will, however, need accurate management information systems to ensure that overtime is awarded equitably. If some employees perceive they are not being given the opportunity to earn overtime pay unlike their colleagues, grievances can result.

There is a gender issue to overtime payments. Statistics show that men are more likely to receive overtime payments than women. Also, both in the United States and the United Kingdom, it is usually implicit, if not explicit, that managers will work whatever hours are required to ensure the fulfilment of their responsibilities, and in some sectors, such as the financial services, there is a long hours culture. The British Trade Union Congress calculated that over a fifth of all employees put in an average of seven hours overtime a week in 2007. As the issue of work/life balance creeps up the agenda, the emphasis is shifting from debates about rewarding overtime to debates about curtailing overtime.

In 2007, over a fifth of workers in the United Kingdom put in an estimated average of seven hours overtime every week.

See Also: Internal Labor Market; Labor Standards; Management Information Systems; Variable Costs; Women in Business; Working Hours; Work/Personal Life Balance.

Bibliography. Monica Cherry, "Are Salaried Workers Compensated for Overtime Hours?" *Journal of Labor Research* (v.25/3, 2004); Suzanne M. Crampton, John W. Mishra, and M. Jitendra, "The FLSA and Overtime Pay," *Public Personnel Management* (v.32/3, 2003); Linda Doerksen and Brian Kleiner, "New Developments Concerning Overtime Policy in Organisations." *International Journal of Law and Management* (v.43, 2005); Linda Goldenhar, Steven Hecker, Susan Moir, and John Rosencrance, "The 'Goldilocks Model' of Overtime in Construction: Not Too Much, Not Too Little, But Just Right," *Journal of Safety Research* (v.34/2, 2003); Victoria Osuna and José-

Víctor Ríos-Rull, "Implementing the 35-Hour Workweek by Means of Overtime Taxation," *Review of Economic Dynamics* (v.6/1, 2003); Thorsten Schank, "Are Overtime Plants More Efficient Than Standard-time Plants? A Stochastic Production Frontier Analysis Using the IAB Establishment Panel," *Empirical Economics* (v.30/3, 2005); Mark B. Stewart and Joanna K. Swaffield, "The Other Margin: Do Minimum Wages Cause Working Hours Adjustment for Low-Wage Workers?" *Economica* (v.75/297, 2008).

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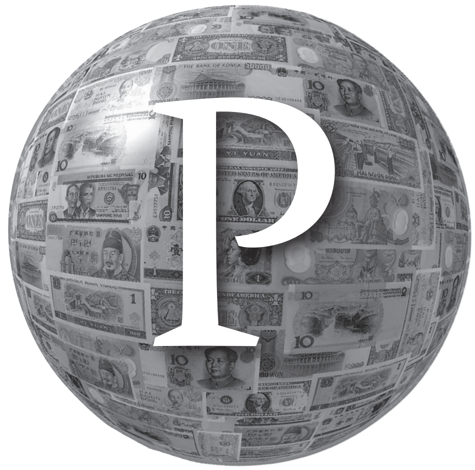

Pacific Rim

The Pacific Rim is the name given to the countries located on the edges of the Pacific Ocean, and is a term generally associated with economic interaction among these countries. Together, they account for some 42 percent of the world's population, and about 56 percent of the world's gross domestic product (GDP), as well as about half of the trade in the entire world. The term *Pacific Rim* was coined in the early 1980s and used by Anthony H. Chisholm and Rodney Tyers in their book, *Food Security: Theory, Policy, and Perspectives From Asia and the Pacific Rim*. Four years later, David Aikman followed up on the theme with *Pacific Rim: Area of Change, Area of Opportunity*.

Since ancient times, there were clearly interactions between the different parts of the Pacific as the Norwegian adventurer Thor Heyerdahl was able to show in his *Kon-Tiki* expedition of 1947. Gavin Menzies in his book *1421: The Year China Discovered the World* (2002) has also argued that the Chinese had managed to voyage to the Americas, an argument first propounded at length by John Ranking in *Historical Researches on the Conquest of Peru, Mexico, Bogota, Natchez and Talameco in the Thirteenth Century by the Mongols* (1827), although Ranking dates the contact as a century or so earlier than Menzies. From the 16th century, with the Spanish taking the Philippines and being involved in some of the Pacific islands, there were trade links across the Pacific with the Manila galleons and other ships regularly traversing the Pacific. Valparaiso in Chile was a port much concerned with this trans-Pacific trade for centuries. In World War II, there was much fighting in the Pacific, with the Southwest Pacific area being designated by the Allies. The mutual defense treaties, the Southeast Asia Treaty Organization (SEATO) and the Australia–New Zealand–United States Treaty (ANZUS), both encompassed the Pacific, with the Association of Southeast Asian Nations (ASEAN) being founded in 1967 and coming to represent first a political and then a largely trade organization.

It was in the 1970s, when some of the countries around the Pacific started booming economically, that moves were made to increase trade across the Pacific to allow other countries to benefit from the new Asian "tiger" economies of Hong Kong, Singapore, South Korea, and Taiwan (Republic of China). The emergence of China as a major economic power seeking close involvement in the Pacific and the end of communism in the Soviet Union (and indeed the end of the Soviet Union in 1991) helped encourage this sense of community in the Pacific Rim, which led to the formation of the Asia-Pacific Economic Cooperation (APEC) in 1989.

The idea of bringing together the countries of the Pacific Rim was that there were vast natural resources in some of the countries: Australia, Canada, Chile, Colombia, Mexico, Peru, the Pacific parts of Russia, and the United States. Australia, Chile, and the United States are also centers of agricultural production, as are New Zealand and Thailand; and the Philippines, South Korea, and Japan have great technological expertise, and China, Indonesia, and Mexico have vast human resources. Singapore, Taiwan, and Hong Kong (since 1997 a part of China) are centers of great entrepreneurial skills, and Japan and the United States have an aggressive capitalist outlook. Together, it was felt that these countries can contribute to their own prosperity and also the prosperity of other countries in the region.

Mention should also be made of the other countries in the region: Brunei and Malaysia, which have always been prosperous; the Central American countries of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama; and Cambodia, Vietnam, and North Korea, which have gone through periods of isolation. By nature of the definition, the Pacific islands are generally excluded from the Pacific Rim, although Papua New Guinea has been a member of APEC since 1993. India has also requested membership of APEC although it is not "on" the Pacific Rim.

There have been a number of studies of the Pacific Rim and how trade alliances have helped cement business relationships in these countries. Many of these countries are heavily involved in export trade, and curiously, most—even those in Latin America—have significant Chinese communities that have fostered contact for over a century. Indeed, that became the subject of the book *Lords of the Rim: The Invisible Empire of the Overseas Chinese* by the well-known U.S. writer Sterling Seagrave.

U.S. businesses also proliferate in the Pacific Rim, with the major cities in the Pacific Rim being seen as Auckland (New Zealand), Busan (formerly Pusan, South Korea), Brisbane (Australia), Ho Chi Minh City (Vietnam), Lima (Peru), Los Angeles, Manila (the Philippines), Melbourne (Australia), Panama City (Panama), Portland, San Diego, San Francisco, Santiago (Chile), Seattle, Seoul (South Korea), Shanghai (China), Singapore, Sydney (Australia), Taipei (Taiwan), Tokyo (Japan), Vancouver (Canada), and Yokohama (Japan). Most of these cities are ports and shipping remains the key to the Pacific Rim. Honolulu, Hawaii, has become the headquarters of some trans-Pacific operations such as the East-West Center and the Institute of Asian Research, with the regular Rim of the Pacific Exercise (RIMPAC) controlled by the U.S. Pacific Command, also coming from there. Manila, the former headquarters of SEATO, has been the headquarters of the Asian Development Bank; and Singapore is the location of the headquarters of APEC. The headquarters of the ASEAN secretariat is currently in Jakarta, Indonesia.

See Also: Asia; Asian Tigers; Asia-Pacific Economic Cooperation; Association of Southeast Asian Nations.

Bibliography. Peter F. Bell, "Capitalist Restructuring and the Pacific Rim," *Critical Asian Studies* (v.40/2, 2008); Xiangming Chen, *As Borders Bend: Transnational Spaces on the Pacific Rim* (Rowman & Littlefield, 2005); Anthony H. Chisholm and Rodney Tyers, *Food Security: Theory, Policy, and Perspectives From Asia and the Pacific Rim* (Lexington Books, 1982); A. W. Clausen, *The Pacific Asian Countries: A Force for Growth in the Global Economy* (World Affairs Council, 1984); Harlan Cleveland, *The Future of the Pacific Basin: A Keynote Address* (Conference on New Zealand's Prospects in the Pacific Region, 1983); Claudia Cragg, *The New Taipans: A Vital Source Book on the People and Business of the Pacific Rim* (Century, 1995); Randall J. Doyle, *America and China: Asia-Pacific Rim Hegemony in the Twenty-First Century* (Lexington Books, 2007); Hiro Ito, "Monetary Policy With Very Low Inflation in the Pacific Rim," *International Review of Economics and Finance* (v.17/3, 2008); Steven McShane and Tony Travaglione, *Organisational Behaviour on the Pacific Rim* (McGraw-Hill, 2005); Sterling Seagrave, *Lords of the Rim: The Invisible Empire of the Overseas Chinese* (Putnam's, 1995); Philip West and Thomas Jackson, *The Pacific Rim and the Bottom Line* (Indiana University Press, 1987).

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Pakistan

Pakistan is on the northwest border of India and also shares borders with Iran, Afghanistan, and China.

The country emerged in 1947 from the partition of India when the British left. Pakistan is an active member of the United Nations. With a population of 169.3 million, it is the sixth-most-populous country and the second-most-populous Muslim country in the world.

The coastal region of modern-day Pakistan has been a center of extensive trade since ancient times, as archaeological work on the Indus Valley civilization has revealed. Goods from around the Indian Ocean, and even farther afield, were brought in and traded for many centuries. Following the collapse of the civilization, northern Pakistan found itself astride the Silk Road, which facilitated trade between Europe and China. As a result, that region enjoyed increased wealth, and its people developed close familial ties with people in Afghanistan.

During the period of British colonial rule, from the mid-19th century to 1947, Britain stationed many soldiers in the region, with Quetta emerging as a major garrison town. Many Pakistanis also enlisted in the British Indian Army during the World War I and World War II periods; as a result, many villages survived on army remittances. After independence in 1947, Pakistan found itself in a difficult position both politically and economically. Its first aim was ensuring a stronger economic position, which it achieved by developing Karachi into a major port. Karachi remains the largest city in the country, with a population of 9.34 million (2007), which is nearly twice that of the next-largest city, Lahore. The Pakistani government was eager to encourage a sense of national identity, however, so it moved the capital first to Rawalpindi and then to Islamabad.

Some 42 percent of the workforce is employed in the agricultural sector, which provides some 22 percent of Pakistan's gross domestic product (GDP); services make up 38 percent of the workforce and 53 percent of the GDP. In industry—coal, iron, steel production, scrap metal, and oil—some 20 percent of the workforce accounts for 25 percent of the GDP.

In terms of international trade, the country runs up a large balance-of-payments deficit, exporting textiles, rice, and some other agricultural produce, and importing machinery, petroleum, petroleum

Schoolchildren throng a fruit vendor in Karachi, Pakistan's largest city, which is home to more than 9 million people. Per capita GDP in Pakistan is only $830, though its cities fare better economically than rural areas.

products, transport equipment, chemicals, edible oils, grains, and flour. Some 21 percent of the nation's exports go to the United States, and 11 percent of its imports are from China.

Pakistan experienced rapid economic growth in the 1960s, with West Pakistan becoming the powerhouse of the country's economy. East Pakistan (modern-day Bangladesh) continued to have a largely agricultural economy. To protect Pakistan's new industries, the government introduced several exchange rates to make it harder for imports to compete with locally produced products.

The country has had a variety of governments, with a military coup d'état overthrowing the elected government of Zulfikar Ali Bhutto in 1977; Bhutto was executed two years later. Great political instability followed. General Pervez Musharraf staged a coup in 1999 and ruled the country until his resignation in August 2008 and replacement by President Asif Ali Zardari, who was elected the next month. This instability has led to many foreign companies being nervous about investing in the country.

After the attacks on the World Trade Center and the Pentagon on September 11, 2001, the U.S. military took a great deal of interest in the radical Muslim movements in Pakistan, leading to tensions between the pro-Western Musharraf government and many Pakistanis on both the left and the right, leading to further instability and frightening many would-be investors. Despite Pakistan's political problems, the economy of the cities generally has held up, with inflation reaching 7.9 percent in 2006. By contrast, poverty is widespread in the countryside. The country's per capita GDP is $830 (128th in the world).

See Also: Bangladesh; Company Profiles: Central Asia; India.

Bibliography. Viqar Ahmed and Rashid Amjad, *The Management of Pakistan's Economy 1947–82* (Oxford University Press, 1984); J. Russell Andrus and Azizali F. Mohammed, *Trade, Finance and Development in Pakistan* (Oxford University Press, 1966); Mumtaz Anwar and Katharina Michaelowa, "The Political Economy of US Aid to Pakistan," *Review of Development Economics* (v.10/2, 2006); Irfan-ul-Haque, *A Compendium of Pakistan's Economy* (Royal Book Co., 1987); Shahid Kardar, *The Political Economy of Pakistan* (Progressive Publishers, 1987); Alain Lefebre, *Kinship, Honour, and Money in Rural Pakistan* (RoutledgeCurzon, 1999); S. A. Meenai, *Money and Banking in Pakistan* (Oxford University Press, 1984); Gustav F. Papanek, *Pakistan's Development: Social Goals and Private Incentives* (Harvard University Press, 1967).

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Panama

This Central American country was occupied by the Spanish from the 1510s and gained its independence as part of Gran Colombia in 1821, becoming an independent republic in 1903. The move to independence centered on Panama's position, which eventually led to the building of the Panama Canal.

Under the Spanish, Panama was ruled initially by a violent conquistador, Pedro Arias de Avila. Panama City was established in 1519 on the Pacific Ocean. Because all goods from Europe going to South America had to be routed through Peru, and because many traders did not want to go past Cape Horn, goods were unloaded in Panama at the port of Colon in the Caribbean and then taken by land to Panama City. Trade to Europe also went through Panama, with much gold from Peru transported in Panama. Consequently, the Welsh pirate and buccaneer Sir Henry Morgan arrived from the Caribbean, sailing up the Chagres River and then going by land to attack and sack Panama City in 1671. In 1739, in the War of Jenkins' Ear, British admiral Edward Vernon also attacked Panama. As a result of this newfound vulnerability, it was regarded as safer to send goods via Cape Horn.

In 1821 Gran Colombia, of which modern-day Panama was the northern part, became independent. The economy of the region was transformed in 1849 by the California gold rush; many people sought to go from Europe to the West Coast of America by crossing Panama. This traffic led to the building of the Trans-Panama Railway, which rapidly became, mile for mile, the most expensive railway in the world for passengers, with the overwhelming majority of passengers and goods going from the east coast to the west coast.

In 1883, following the French success with the Suez Canal, Ferdinand de Lesseps drew up plans to build the Panama Canal. Despite raising large amounts of money from investors and speculators, he ran into many problems; parts of the building work were delayed, and the plan collapsed. It was left to George Washington Goethals (1858–1928) to use U.S. funds to build the canal, which finally opened in 1914. During both the French and the U.S. construction work, many migrant laborers were brought to Panama from Barbados, Trinidad, and other parts of the Caribbean. The canal became U.S. territory (and remained such until 1979), and the United States purchased the Danish West Indies from Denmark in 1917 to help control and supply the canal.

When the United States started its interest in the Panama Canal, independence movements arose, with the elite in Panama City agitating for full independence. A civil war in Colombia in 1903 provided the opportunity for a revolutionary junta to declare independence on November 3, 1903. Under the 1903 Panama Canal treaty, the United States was able to maintain its rights; initially, it had "sovereign rights in perpetuity over the Canal Zone." But after several interventions, in 1936 the United States revoked its right to intervene militarily, and in 1955 it signed a new treaty providing a higher payment to the Panamanian government for continued use of the canal.

After a 1968 coup d'état, a military dictatorship under Gen. Omar Torrijos (1929–81) was established in Panama, leading to a renegotiation of the canal treaty. In 1979 Torrijos and U.S. president Jimmy Carter signed a new treaty that phased out all U.S. ownership and control by 1999. In return, the Panamanians, in another treaty, undertook that the canal would remain open and neutral during times of peace and war.

A U.S. government dispute with Panamanian general Manuel Noriega led to the U.S. invasion of Panama in December 1989, after more than a year of economic sanctions. The U.S. government claimed that the country was being heavily used by drug syndicates, and the invasion led to the deaths of some 1,000 people. The U.S.-installed Endara government rapidly collapsed. In 1999, however, the United States relinquished control of the Panama Canal.

During some periods of its history, Panama has used the U.S. dollar, and its currency, the balboa (named after the Spanish explorer who was the first European to see the Pacific Ocean), is heavily tied to the U.S. dollar.

Panama's main exports are bananas (heavily controlled in the past by United Fruit Co.), shrimp, sugar, coffee, and clothing—the Panama hat becoming famous around the world. Imports include capital items, oil, food, and consumer goods. Some 20 percent of exports go to the United States, and Japan provides 37 percent of the country's imports.

See Also: Central America; Colombia; Company Profiles: Central America and the Caribbean; Spain.

Bibliography. Miles P. Du Val, *And the Mountains Will Move: The Story of the Building of the Panama Canal* (Greenwood Press, 1968); Peter Earle, *The Sack of Panamá: Captain Morgan and the Battle for the Caribbean* (Thomas Dunne Books/St. Martin's Press, 2007); Luis I. Fitzgerald, *Historia de las relaciones entre Panamá y los Estados Unidos* [History of the Relations Between Panama and the United States] (Editorial Universitaria [EUPAN], 2007); George Fry and Associates, *Industry in Panama: Survey and Action Report* (International Cooperation Administration, 1961); Julie Greene, *The Canal Builders: Making America's Empire at the Panama Canal* (Penguin Press, 2009); J. F. Hornbeck, *The Proposed U.S.-Panama Free Trade Agreement* (Congressional Information Service, Library of Congress, 2007); Charles D. Kepner, *The Banana Empire: A Case Study of Economic Imperialism* (Vanguard Press, 1935); Gerstle Mack, *The Land Divided: A History of the Panama Canal and Other Isthmian Canal Projects* (Octagon Books, 1974); Aims McGuinness, *Path of Empire: Panama and the California Gold Rush* (Cornell University Press, 2008); Peter Michael Sánchez, *Panama Lost? U.S. Hegemony, Democracy, and the Canal* (University Press of Florida, 2007).

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Parent Country National

Parent country nationals (PCNs) are employees who are citizens of and are hired from the nation where an organization has its original and current headquarters (the parent country). PCNs are distinct from host country nationals (HCNs), who are staff hired from the country where the international subsidiary is operating (the host country). Third country nationals (TCNs) are citizens of neither the parent nor the host country. The role and function of a PCN depends on the organization's approach to international human resource management and the needs of the overseas subsidiary where the PCN is assigned. PCNs use different adaptation strategies to cope with their overseas assignments, and there are both advantages and disadvantages in using PCNs to staff international subsidiaries.

The term *parent country national* usually is used only to identify an employee who is posted to an overseas country as an expatriate (overseas assignment of more than one year), as a worker on a short-term assignment (less than one year), or as a flexpatriate (several short-term overseas postings, sometimes referred to as commuter assignments). The term became widespread in the business world in the 1960s and 1970s, when it became apparent that the traditional employment dichotomy of expatriates and nationals could not accommodate employees who were citizens of neither the host nor the parent country (TCNs). Researchers and organizations replaced the dichotomy by distinguishing employees by parent, host, and third country citizenship.

Global businesses now categorize employees by using frameworks that include length of assignment (expatriate, short-term, and flexpatriate), direction of assignment (expatriate vs. inpatriate), and nature of assignment (expatriation vs. virtual assignment). Virtual assignments are job assignments focused on projects within a particular country that rely on electronic communications such as videoconferencing rather than require the assignee to travel to the country itself. Inpatriates are transfers of HCNs or TCNs to corporate headquarters for developmental purposes.

The role of PCNs in an international organization depends on the organization's approach to international human resource management. Those management approaches can be categorized as (1) exportive/ethnocentric, (2) integrative/regiocentric and geocentric, and (3) adaptive/polycentric. In the exportive/ethnocentric approach, PCN expatriates function in a control position, as this approach is characterized by a transfer of the parent company's human resource management system to the host country. PCNs also benefit from international developmental experience while they are on expatriate assignment. The integrative approach also allows for the employment of PCN expatriates; however, human resource management policies and managerial practices are transfused and adapted from host country to parent country, and vice versa. PCNs are learners in the adaptive approach, in which organizations focus on adopting and localizing the practices and policies of the international organization to the host country.

PCNs are used for overseas assignments for several other reasons, including filling an existing overseas position, developing managers in terms of global awareness and experience, fulfilling the role of organizational development, and problem solving. Researchers have found differences in the importance of the reasons for employing PCNs in subsidiaries, depending on the organization's headquarters country, demonstrating that national culture can influence organizational reasons for expatriation. Japanese and European companies are more likely to use PCNs, whereas U.S. companies are more likely to use HCNs.

PCNs tend to use different adaptation strategies when on overseas assignment. Researchers have categorized PCN expatriates according to their degree of allegiance to the parent or host country as being outcomes of adaptation. The categories are (1) free agents, who have low allegiance to both home and host countries; (2) "going native" expatriates, who have high allegiance to the host country and little to the home country; (3) "hearts at the parent" expatriates, who have high allegiance to the home country and little to the host country; and (4) dual citizens, who have high allegiance to both countries. The choice of adaptation strategy appears to be linked to the personality of the PCN.

Advantages and Disadvantages

Several advantages result from employing PCNs who have experience in the organization rather than HCNs or TCNs. PCNs usually are considered by headquarters as being familiar with the organization's goals, products, services, technology, policies, and procedures. This familiarity may help facilitate coordination, control, and development of organizational strategy.

The use of PCNs also has several disadvantages. Among them: (1) PCNs may impose a culturally inappropriate management style on the host country subsidiary; (2) using PCNs may limit the promotional opportunities of HCNs; and (3) the compensation for PCNs usually is greater than that received by HCN staff, which may cause a degree of resentment among HCN staff. PCNs also may take a long time to adapt to the host country, which is likely to affect their work performance.

Some researchers have questioned whether HCNs, TCNs, and inpatriates may be better equipped to deal with the cultural challenges of international management than are PCN expatriates. The use of PCNs in global organizations appears to continue to develop rather than diminish, however.

See Also: Ethnocentrism; Ethnocentric Human Resource Policy; Expatriate; Home Country; Host Country; Local/National; Third Country National.

Bibliography. René A. Belderbos and Mariëlle G. Heijltjes, "The Determinants of Expatriate Staffing by Japanese Multinationals in Asia: Control, Learning and Vertical Business Groups," *Journal of International Business Studies* (v.36/3, 2005); David G. Collings and Hugh Scullion, "Global Staffing," in *Handbook of Research in International Human Resource Management,* Günter K. Stahl and Ingmar Bjorkman, eds. (Edward Elgar, 2006); John D. Daniels, "The Non-American Manager, Especially as Third Country National, in U. S. Multinationals: A Separate but Equal Doctrine?" *Journal of International Business Studies* (v.5/2, 1974); Paul Evans, Vladimir Pucik, and Jean-Louis Barsoux, *The Global Challenge: Frameworks for International Human Resource Management* (McGraw-Hill Irwin, 2002); Michael G. Harvey, Milorad M. Novecevic, and Cheri Speier, "Strategic Global Human Resource Management: The Role of Inpatriate Managers," *Human Resource Management Review* (v.10/2, 2000); Michael G. Harvey, Cheri Speier, and Milorad N. Novecevic, "A Theory-Based Framework for Strategic Global Human Resource Staffing Policies and Practices," *International Journal of Human Resource Management* (v.12/6, 2001); Ann-Wil Harzing, "An Analysis of the Functions of International Transfer of Managers in MNCs," *Employee Relations* (v.23/6, 2001); Ann-Wil Harzing, "Who's in Charge: An Empirical Study of Executive Staffing Practices in Foreign Subsidiaries," *Human Resource Management* (v.40/2, 2001); Helene Mayerhofer, Linley C. Hartmann, Gabriela Michelitsch-Riedl, and Iris Kollinger, "Flexpatriate Assignments: A Neglected Issue in Global Staffing," *International Journal of Human Resource Management* (v.15/8, 2004); Jan Pieter van Oudenhoven, Karen I. van der Zee, and Mariska van Kooten, "Successful Adaptation Strategies According to Expatriates," *International Journal of Intercultural Relations* (v.25/5, 2001); Jan Selmer, "Psychological Barriers to Adjustment and How They Affect Coping Strategies: Western Business Expatriates in China," *International Journal of Human Resource Management* (v.12/2, 2001).

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Patents

A patent is a contract between society as a whole and an individual inventor. The objective of a patent is to provide the holder a temporary monopoly on his or her innovation and thus to encourage the creation and disclosure of new ideas and innovations in the marketplace. A patent provides the owner exclusive rights to hold, transfer, and license the production and sale of the product or process. Patents are part of the area of intellectual property law that covers copyright and related rights, trademarks and service marks, appellations of origin, industrial designs, layout designs of integrated circuits, and undisclosed information such as trade secrets.

Patents are provided for products or processes that are new and/or involve new steps and that can have industrial application. A patent is the result of a unique discovery, and patent holders are provided protection against infringement by others. In general, machines, products, plants, compositions of elements (chemical compounds), and improvements on existing items can qualify for patent protection.

Patents go back as far as ancient Greece and Rome. Pliny wrote that one day, an inventor came before Emperor Tiberius to show him his invention of unbreakable window glass and to beseech him for an inventor's fee. Tiberius asked whether anyone else knew the formula. The man assured him that the invention was absolutely secret, whereupon the emperor immediately cut his head off "lest gold be reduced to the value of mud."

In 1623 England enacted the Statute of Monopolies under King James I, which declared that patents could be granted only for "projects of new invention." In the 18th century, the English judicial systems developed the prerequisite that a written description of the invention must be submitted. These developments led to modern United Kingdom and U.S. patent law. Now all member countries of the World Trade Organization (WTO) are duty bound to enforce minimum standards of patent protection. Any noncompliance is liable to attract legal action.

International and National Provisions

The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) provides the international standards for patents. TRIPs requires country signatories to allow the patenting of product or process inventions subject to the normal tests of novelty and inventiveness. Three exceptions to patentability exist: (1) inventions contrary to morality; (2) innovations dangerous to life, health, or the environment, or to treatment of humans or animals; and (3) plants and animals (other than microorganisms) used for the production of plants or animals.

TRIPs confers an exclusive patent on making, using, offering for sale, selling, and importing for these purposes. Process patent protection must give rights not only over use of the process, but also over products obtained directly by the process. Patent owners also have the right to assign, or transfer by succession, the patent and to conclude licensing contracts. The term of protection is 20 years, counted from the filing date. Under all patent systems, after this period has expired, people are free to use the invention as they wish.

Although all WTO members are subject to the patent provisions in the TRIPs agreement, patents are actually granted under national laws, so the rights are also national in scope. An Australian patent, for example, can be defended only against infringements in Australia. But the Patent Cooperation Treaty (PCT), concluded in 1970, allows inventors to patent an innovation simultaneously in other countries. A patent application filed under PCT is called a PCT application. After an inventor makes an application under PCT, the International Searching Authority (ISA) carries out a thorough search and provides a written opinion on the patentability of the invention. Again, granting procedures are handled by the relevant national authorities. No such thing as an international patent exists.

One new form of patent deserves special mention. Business method patents claim new methods of doing business. This type of patent emerged in the late 1990s, with Amazon.com's famous one-click-shopping patent. IBM owns a patent on a process for paying software developers. Such business process patents may actually hold back innovation.

As important as patent protection is, numerous controversies have arisen, such as the excessive prices of patented human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) medicines in South Africa. TRIPs unwittingly has caused a problem in that pharmaceutical companies can charge excessive prices for patented antiretroviral medicines. In this case, U.S.-patented triple therapies for HIV/AIDS could cost more than $10,000 per person per year—far beyond the ability of sick South Africans to pay. Meanwhile, competitors launched generic equivalents of these patented drugs, forcing large pharmaceutical companies to cut their prices to around $1,000 per person per year. As dramatic as this cut was, the cost was still three times higher than the cheapest offer from the Indian generic company, Aurobindo: $295 per person per year. The pressure from generic-drug firms has played a pivotal role in decreasing the prices of patented drugs.

Planning, Application, and Use

Because quite often the patent process is complex, typically taking three years, careful planning is required. Experts recommend the following basic rules:

1. Pursue patents that are broad, are commercially significant, and offer a strong position.
2. Prepare a patent plan in detail.
3. Have your actions relate to your original patent plan.
4. Establish an infringement budget.
5. Evaluate the patent plan strategically.

Patent applications must include detailed specifications of the innovation that any skilled person in the specific area can understand. A patent application has two parts: specification and claims. The specification is the text of a patent and may include any accompanying illustrations. Its purpose is to teach those fluent in this area of technology all they need to understand, duplicate, and use the invention. The specification may be quite long. Claims are a series of short paragraphs, each of which identifies a particular feature or combination of features that is protected by the patent. The entire claims section, at the end of the patent, typically is one page long or less. After the application is filed, an examiner will determine whether the innovation qualifies for patentability by researching technical data in journals as well as previously issued patents. Based on those findings, the application will be rejected or accepted.

Although intellectual property may represent a significant share of some firms' market value, only a small percentage of issued patents is commercially valuable. Also, many patents go unimplemented, and so firms may want to sell unused or underused patents to monetize intellectual property assets for other purposes.

A survey of 150 technology firms and research universities in the United States, western Europe, and Japan found that only 15 percent had no unused patents. Although patent holders may have many legitimate reasons not to exploit their patented inventions, the situation led to the creation of patent exchanges or patent licensing markets, which set a fair market value on a patent and facilitate its sale.

Value of Innovation Versus Cost of Patent

Any inventor must weigh the value of the innovation against the time and money spent to obtain the patent. Also, it is important to remember that many patents are declared invalid after being challenged in court. One reason is that the patent holder waited an unreasonable length of time before asserting his or her rights. A second reason is that those bringing suit against the patent holder are able to prove that the individual misused the patent rights. A third reason is that other parties are able to prove that the patent fails to meet tests of patentability and therefore is invalid.

Truth be told, the entrepreneur might waste a lot of money on protecting intellectual property that could have funded marketing and product development. Another factor is whether the invention will be obsolete before the patent is issued, especially in a fast-moving market. Neither is there any guarantee that a patent is valid. Many cases have been lost by showing that the patent examiner was mistaken and missed an important precedent. A good example is the Toyota RAV4, which was copied perfectly as the Chinese-built Jonway UFO. Toyota has not been able to stop UFO sales because it did not get proper patent protection for the car's design in Europe. The UFO is identical to the RAV4 down to the body panels and doors, which are interchangeable with the original Toyota model parts. BMW and Daimler have started lawsuits to try to prevent the launch of Chinese clones of their own cars. The brands argue that the look-alikes could hurt their brand images.

If, after careful review, an entrepreneur concludes that the innovation will withstand any legal challenge and is commercially worthwhile, a patent should be pursued. If a challenge is mounted, legal fees may be sizable, but a successful defense can result in damages sufficient to compensate for the infringement plus court costs and interest. In fact, the court may award damages of up to three times the actual amount. In addition, a patent infringer can be liable for all profits resulting from the infringement as well as for legal fees.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Copyright Infringement; Intellectual Property Theft; Research and Development; Toyota Motor; Trademark Infringement; World Trade Organization.

Bibliography. A. Arora, A. Fosfuri, and A. Gambardella, *Markets for Technology: The Economics of Innovation and Corporate Strategy* (MIT Press, 2001); Martin A. Bader, "Managing Intellectual Property in the Financial Services Industry Sector: Learning From Swiss Re," *Technovation* (v.28/4, 2008); Robert A. Choate and William H. Francis, *Patent Law: Trade Secrets—Copyright—Trademarks* (West, 1981); Moses I. Finley, "Technical Innovation and Economic Progress in the Ancient World," *Economic History Review* (v.18, 1965); Andrea Fosfuri, Marco S. Giarratana, and Alessandra Luzzi, "The Penguin Has Entered the Building: The Commercialization of Open Source Software Products," *Organization Science* (v.19/2, 2008); David E. Gumpert, *Burn Your Business Plan!: What Investors Really Want From Entrepreneurs* (Lauson Publishing, 2002); Dietmar Harhoff, *Patent Validation at the Country Level: The Role of Fees and Translation Costs* (Centre for Economic Policy Research, 2007); Justin Malbon and Charles Lawson, *Interpreting and Implementing the TRIPS Agreement: Is It Fair?* (Edward Elgar, 2008); Roger LeRoy Miller and Gaylord A. Jentz, *Business Law Today* (West, 1997); Nuno Pires de Carvalho, *The TRIPS Regime of Antitrust and Undisclosed Information* (Kluwer Law

International, 2008); Al H. Ringleb, Roger E. Meiners, and Frances L. Edwards, *Managing in the Legal Environment* (West, 1996); Ronald D. Rothchild, "Making Patents Work for Small Companies," *Harvard Business Review* (July/August 1987); Carl Shapiro, *Patent Reform: Aligning Reward and Contribution* (National Bureau of Economic Research, 2007); Ronald P. Taylor and Paul Germeraad, "Visualize Your Intellectual Property," *Research-Technology Management* (v.51/4, 2008).

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Payroll Taxes

Payroll taxes are of two types: they are either taxes that must be paid by an employer (employer payroll taxes) or they are taxes employees must pay (employee payroll taxes). The requirement to withhold taxes from the wages or salaries paid to employees forces employers to deduct the taxes that are owed by each employee before wages or salaries are paid. This practice makes the employer the government's tax collector. Both employer and employee payroll taxes are usually simply lumped together and called payroll taxes because they are all handled as a part of the calculations needed by an employer to meet payday obligations.

United States

Employer payroll tax obligations are usually generated with a formula directly related to the amount of money an employee has earned. For example, employer payroll taxes in the United States require paying a matching portion of the employee's Social Security taxes (6.2 percent up to the annual maximum), Medicare taxes (1.45 percent of wages or salary), federal unemployment taxes (FUTA), and state unemployment taxes (SUTA).

The FUTA tax rate for employers is 6.2 percent of gross compensation for all employees on the first $7,000 of income. However, because a business must also pay SUTA taxes, it is allowed to take a 5.4-percent SUTA credit on its FUTA obligation. This reduces the net tax owed for FUTA to 0.8 percent; however, because SUTA rates vary between states, the amount owed as an employer payroll tax varies. In addition, employers usually have to pay an unemployment compensation tax.

Employers may also be liable for local taxes calculated on the basis of their employment activities. Sometimes, employers may have taxes levied upon them based on the number of workers they employ on a fixed or variable formula. Additional tax burdens such as business income taxes, inventory taxes, or property taxes may be owed, but these are not payroll taxes.

Taxes that are withheld from wages (hourly earnings) or salaries (payments on a nonhourly basis) are paid on either a pay-as-you-earn (PAYE) or pay-as-you-go (PAYG) basis. Employers in the United States are usually responsible for withholding the following taxes: federal income taxes, Social Security taxes (6.2 percent up to the annual maximum), Medicare taxes (1.45 percent), state income taxes (if applicable), and local taxes (such as city, county, school district, state disability, or unemployment insurance), if applicable.

Payroll taxes on the wages or salaries of individual workers or employees are calculated on their gross earnings unless there are tax provisions that allow for pretax exclusions. Contributions to 401(k) and 403(b) plans may be paid with pretax dollars. These exclusions are part of a policy goal that seeks to promote personal savings for retirement. Employers may allow employees to deduct a wide variety of deductions for union dues, stock plans, life insurance premiums, health plans, uniforms, meals, and other items. These last deductions are voluntary payroll deductions and are not payroll taxes.

Generally, an employer reports total payroll taxes by calculating the gross earnings and then deducting the various payroll deductions to arrive at the employee's net pay. The biggest portion of payroll taxes are the Federal Insurance Contributions Act (FICA) taxes. The FICA tax is a combination of Social Security taxes and Medicare taxes. Both the employer and the employee pay these taxes with each paying half of the amount due. The total for both combined is 15.3 percent.

Other Countries

Payroll taxes vary across the world. In Australia, the employer payroll tax is a specific tax paid by the employer for each worker. The tax is paid to the states and territories. The only employee payroll tax deduction is for Australian medical care. Mexico also has a similar state focus for its payroll tax collections. Canada has both Canadian federal payroll employee tax deductions as well as provincial deductions. A common Canadian payroll employer tax is for health insurance for employees.

In Great Britain the HM Revenue & Customs (HMRC) system is a PAYE system that requires employers to deduct income taxes and National Health Insurance contributions (NIC) from employees' wages. In addition, employers pay taxes as contribution to NIC for sick leave, maternity leave, and other types of family leave. Historically, payroll taxes in Europe have been much higher than in the United States. While producing a successful social safety net, high tax rates have interfered with job creation. Since 2000, payroll tax rates in Europe have declined, allowing payroll taxes to be invested in new enterprises.

The new Russian civil code mandates a number of payroll taxes. Employer payroll taxes must be paid to the Pension Fund, the Social Insurance Fund, the State Employment Fund, and the Compulsory Medical Insurance Fund, plus a transportation tax and an education tax that are also based on wages. Unlike in the United States where individual taxpayers are responsible for taxes on dividends paid to stockholders, in Russia employers are required to withhold taxes on dividends and on other forms of compensation.

Payroll taxes are relatively new and relatively low in Africa. They are often called an enterprise tax, which is levied to fund training of workers. South Africa collects a uniform levy for employee training activities. However, its payroll tax burden is greater in its six metro areas than elsewhere because the system is still in development. In Latin America the social insurance program is paid for with payroll taxes. In addition, other taxes such as income taxes may be collected. In Brazil, a payroll tax is collected to finance education with a tax burden for employers of about 40 percent and only 15 percent for employees. In Asia, social security programs are financed with payroll taxes. In addition, unemployment insurance and injury compensation payroll taxes are collected.

See Also: Compensation; Family Leave; Healthcare Benefits/Systems; Maternity Leave; Salaries and Wages; Taxes; Value Added Tax.

Bibliography. Steven M. Bragg, *Accounting for Payroll: A Comprehensive Guide* (Wiley, 2004); *CCH State Payroll Law Handbook* (CCH Inc., 2001); Peter B. Dixon, Mark R. Picton, and Maureen T. Rimmer, "Payroll Taxes: Thresholds, Firm Sizes, Dead-Weight Losses and Commonwealth Grants Commission Funding," *Economic Record* (v.80/250, 2004); Adriana Kugler and Maurice Kugler, *Labor Market Effects of Payroll Taxes in Developing Countries: Evidence From Colombia* (National Bureau of Economic Research, 2008); Dennis Lassila, *Bender's Payroll Tax Guide 2008* (Lexis Nexis Matthew Bender, 2008); Joanne Mitchell-George, *American Payroll Association Basic Guide to Payroll* (Wolters Kluwer Law & Business, 2004); Joel Slemrod and Jon M. Bakija, *Taxing Ourselves: A Citizen's Guide to the Debate Over Taxes* (MIT Press, 2008); Mark Stabile, "Payroll Taxes and the Decision to Be Self-Employed," *International Tax and Public Finance* (v.11/1, 2004); *Taxing Wages 2006–2007* (Oced Publishing, 2007).

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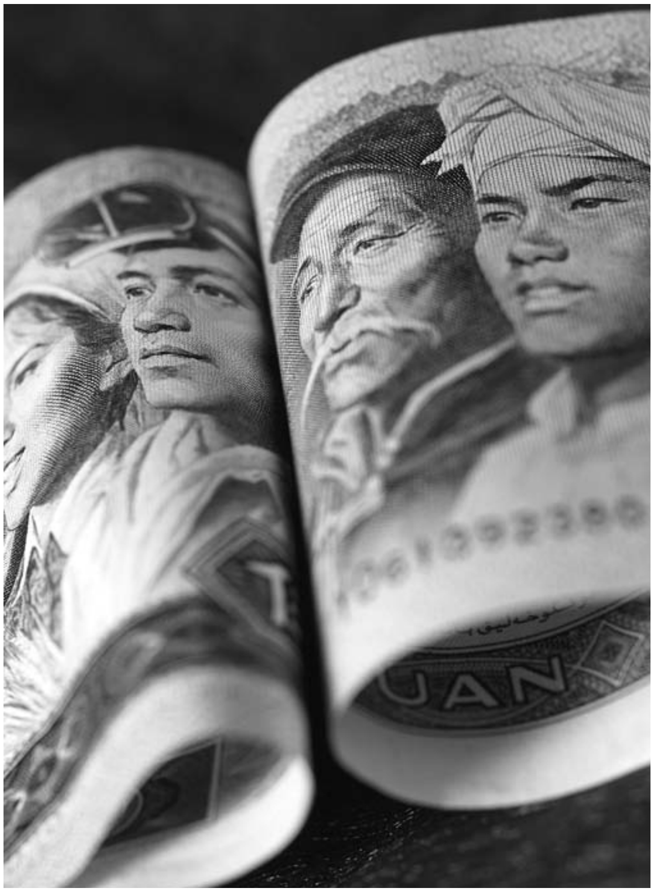
Pegged Exchange Rate

A pegged exchange rate exists when a government fixes the value of its country's currency to that of another country or group of countries (the reference currency/currencies). As a result, when the value of the reference currency/currencies rises, so does the value of the pegged currency, and when the value of the reference currency/currencies falls, so does that of the pegged currency. Pegged exchange rates can be seen as an attempt to create a fixed exchange rate zone in the midst of a floating exchange rate system and are most often implemented by developing country governments as a way of creating currency stability and reducing inflationary pressures.

A recent example of a successful currency peg is that of the Chinese yuan. From 1994 to 2005, the Chinese government pegged the value of the yuan to the U.S. dollar at a rate of $1 = 8.28 yuan. In essence, this created a fixed exchange rate zone between the U.S. dollar and Chinese yuan, reducing currency exposure for companies doing business between the two countries. However, many outside China, including some members of the U.S. government, suggested the peg



With its foreign currency reserves and controls on convertibility, China successfully pegged the yuan to the dollar 1994–2005.

was increasingly keeping the yuan at an artificially low exchange rate and was fueling a boom of Chinese exports that was hurting not only producers in China's export markets (like the United States) but also those in countries attempting to compete with Chinese exports (like other Asian producer nations).

To keep the yuan from rising above its pegged value, the Chinese government was forced to buy U.S. dollars (increasing the demand for them, and therefore supporting their value) through issuing more yuan (increasing the supply of them, and therefore suppressing a rise in their value, but risking inflationary pressure as the domestic money supply expands). Amid much international discussion, the Chinese government announced, in July 2005, that they were releasing the peg to the U.S. dollar in favor of a more flexible link to multiple currencies, including the euro, the yen, and the U.S. dollar. They also announced an immediate increase in the value of the yuan against the U.S. dollar of 2.1 percent, as well as greater day-to-day flexibility of the yuan rate versus the dollar and other currencies. As of August 2008, three years after this announcement, the yuan/dollar exchange rate had moved from 8.28 yuan/dollar to 6.86 yuan/dollar.

The unpegging of an exchange rate is not always so orderly. In 1978 the Thai government pegged that country's currency to the U.S. dollar at a rate of $1 = 25 baht. Through several decades of rapid economic growth, the peg provided reassurance to foreign investors in Thailand, who felt confident in pursuing the higher returns available there, because the peg allowed them to convert both their profits and, if desired, their capital, back into U.S. dollars at the "fixed" exchange rate. Thus, if an investment in the United States yielded a 5 percent return, and one in Thailand a 10 percent return, there seemed to be no risk in accepting the 10 percent return, because, as long as the peg held, there was no potential for the return to be eroded by a dropping Thai baht.

This dynamic of high returns and no perceived currency exposure drew increasing investment into Thailand. Despite concerns that growth was overheated and, in some cases, misdirected, the Thai government maintained its commitment to the peg. On June 30, 1997, the Thai prime minister announced that the Thai baht would not be devalued, but two days later, after intense speculative attack, the peg was released, and the baht became a floating currency. The Thai economy was in distress, and six months later, the Thai baht traded at 56 to the U.S. dollar.

What makes one currency peg succeed and another fail? For one thing, the Chinese government had huge foreign currency reserves and was accumulating more every day because of its large trade surpluses, while the Thai government had more limited reserves to address the problem. Second, the Chinese government maintained controls on the convertibility of its currency, therefore controlling the amounts investors or currency speculators could buy or sell, while Thailand did not have these controls. Finally, the widely held perception was that the Chinese yuan was undervalued and should rise, while the perception with regard to the Thai baht was the opposite, spurring speculative action and withdrawals of invested funds. However, even successful currency pegs, like China's, can lead to negative consequences, such as domestic inflation and international pressure, as they are seen as thwarting market forces in a world of floating exchange rates.

See Also: Asian Financial Crisis; China; Currency Exposure; Currency Speculators; Exchange Rate; Fixed Exchange Rate; Floating Exchange Rate; Thailand.

Bibliography. Paul R. Bergin and Robert C. Feenstra, *Pass-Through of Exchange Rates and Competition Between Floaters and Fixers* (National Bureau of Economic Research, 2007); Lorenzo Cappiello and Gianluigi Ferrucci, *The Sustainability of China's Exchange Rate Policy and Capital Account Liberalisation* (European Central Bank, 2008); A. Eernisse and T. Meehan. "The Great Currency Debate," *The China Business Review* (v.35/3, 2008); Morris Goldstein and Nicholas R. Lardy, *Debating China's Exchange Rate Policy* (Peterson Institute for International Economics, 2008); Robert Lafrance, *China's Exchange Rate Policy: A Survey of the Literature* (Bank of Canada, 2008); Maurice Obstfeld, *The Renminbi's Dollar Peg at the Crossroads* (Institute for Monetary and Economic Studies, Bank of Japan, 2007); Inci Ötker-Robe and David Vávra, *Moving to Greater Exchange Rate Flexibility: Operational Aspects Based on Lessons From Detailed Country Experiences* (International Monetary Fund, 2007).

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Pemex

Pemex is a Mexican state-owned oil company that operates throughout Mexico. The company is so large that its revenues account for as much as one-third of the Mexican government's entire revenue, and for about 7 percent of Mexico's export earnings. The company is involved in exploration, production, refining, petrochemicals, and more. Pemex has estimated reserves of 15.5 billion barrels of oil equivalent.

In the early years of the Mexican oil industry, the Mexican engineer Ezekiel Ordóñez discovered an oil reserve in San Luis Potosí, Mexico, in 1901. In the same year, President Porfirio Díaz issued the Petroleum Act to boost oil activity, giving advantages to foreign investors and foreign companies. Later, with the fall of Porfirio Díaz, the revolutionary government of President Francisco I. Madero issued on June 3, 1912, a decree to establish a special tax stamp on the production of oil, and subsequently, he ordered a register of companies operating in the country. Three years later President Venustiano Carranza established the Petroleum Technical Commission. By 1917 the Constitution of Mexico had dictated national control of all the riches of the subsoil, and the Carranza government soon imposed a tax on land and oil contracts to exert control over the industry.

In 1920 there were 80 oil companies in Mexico producing and exporting; 17 of these companies received 90 percent of their capital from Anglo-Americans. The company Petroleos de Mexico, A. C., was founded later, in 1934, and was responsible for encouraging more domestic investment in the oil industry.

Other important events in the history of the Mexican oil industry include the establishment of a union of Petroleum Workers in Mexico in 1935. Just two years later, following a series of events that damaged the relationship between employees and employers, a strike broke out against foreign oil companies and paralyzed the country. The Conciliation and Arbitration Board ruled in favor of the workers, but oil companies sought protection before the Supreme Court of Justice. In 1938, President Lázaro Cárdenas sided with oil workers striking against foreign-owned oil companies for an increase in pay and social services. On March 18, citing the 27th article of the 1917 constitution, President Cárdenas embarked on the state's expropriation of all oil resources and facilities, nationalizing the U.S. and Anglo-Dutch operating oil companies and creating Pemex.

In 1992 the Mexican government issued a new Organic Law of Petroleos Mexicanos (Pemex) and subsidiary bodies where the government set up basic guidelines to define the powers of Pemex as a decentralized body of the Federal Public Administration, and as a company responsible for leading the national oil production. This new law establishes the creation of a corporate body and four subsidiary bodies for Pemex and its future operations. These subsidiary bodies are Pemex Exploration and Production (PEP), Pemex Refining (PXR), Pemex Gas and Basic Petrochemical (PGPB), and Pemex Petrochemical (PPQ).

Despite its current $77 billion in revenue, Pemex pays high taxes to contribute to the federal budget. In recent years the company has only been able to meet its demands through massive borrowing, so that it owes a staggering $42.5 billion, including $24 billion in off-balance-sheet debt because the Mexican government treats the company as a major source of revenue. The state-run company pays out over 60 percent of its revenue in royalties and taxes, with those funds paying for about a third of the federal government's budget.

In 2005, with record-breaking oil prices (due to the Iraq war, economic expansion of the United States and the People's Republic of China) the company saw an unexpected excess of funds. This tendency continued in 2006 and 2007. However, the excess funds were used to pay salaries of bureaucrats and current government expenses, instead of being invested in projects for exploration and production. During President Vicente Fox's administration, these funds amounted to about $70 billion, yet the administration said that there was not enough money to pay debts. To help capitalize the company, President Felipe Calderón then made clear at the beginning of his presidency that he would respect the constitutional mandate to keep Pemex in the government's hands, but that he would try his best to open up the sector to private investment.

See Also: Chevron; ExxonMobil; Mexico; Nationalization; Petrobras; State-Owned Enterprises; Total.

Bibliography. José Antonio Almazán González, *El debate constitucional sobre la reforma de Pemex: conclusiones y propuestas* [The Debate on the Constitutional Reform of Pemex: Conclusions and Proposals] (Grupo Parlamentario de PRD, 2008); Luis Pazos, *Los dueños de PEMEX: del saqueo a la reforma* [The Owners of PEMEX: The Pillaging of Reform] (Diana, 2008); Pemex, www.pemex.com (cited March 2009); Simone Pulver, "Importing Environmentalism: Explaining Petroleos Mexicanos' Cooperative Climate Policy," *Studies in Comparative International Development* (v.42/3–4, 2007).

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Pension Systems

A pension is an income given to an individual after retirement. Different systems exist to provide and fund this pension, both private (generally employer-provided) and public (provided by the government). In the United States, Social Security is the closest analogue to a public pension system, though it is not traditionally referred to that way (notably, Social Security pays out at a given age instead of upon retirement, and as a social welfare program, it includes disability benefits).

Pensions typically work like annuities, in that money is paid in during the deferral phase and paid out in periodic checks during the annuity phase. In the United States, employer-provided pension plans became more common during World War II, when scarcity of funds led to wage freezes and an increase in benefits such as pensions became the alternative to giving an employee a raise. Pension plans also encourage employee loyalty, since the eventual benefits increase the longer the employee works for the company, such that career moves that are lateral in salary and current benefits will generally be a step down in terms of overall benefits. The longer an employee has worked for a company, the more he or she has to lose by leaving for another position, which thus gives the greatest motivation to the most experienced workers.

Defined Benefit and Defined Contribution

In addition to the question of whether they are private or public, pension plans can be defined benefit or defined contribution, or a hybrid of the two. In the United States, it is typical to refer only to the defined benefit plan as a pension, but defined contribution plans have become the most common type of privately funded retirement plan in the country.

Defined contribution plans accrue from contributions paid into the plan over time, which are invested in stocks or mutual funds, with the returns of those investments affecting the individual's account balance. When the market as a whole takes a significant dip, part of the resulting panic is because of the number of people whose retirement plans are thus so influenced by market performance. Common defined contribution plans include the 401(k) and the Individual Retirement Account (IRA). The 401(k) is an employer-sponsored salary reduction plan: employees define a percentage of their paycheck to be diverted into the 401(k) account instead of disbursed to them, and any such earnings are tax deferred (taxed not in the year they were earned, but in the year they are disbursed as benefits, further down the line). Some employers will match the employee's contribution, in whole or in part, the specifics of which are agreed-upon when the plan is set up and signed. Defined contribution plans have the benefit of protecting employees from employer bankruptcy, a protection not offered by employer-sponsored defined benefit plans, which may be used to pay off an employer's debts in case of bankruptcy; while the Pension Benefit Guaranty Corporation, a federal agency created by the 1974 Employee Retirement Income Security Act (ERISA), ensures defined benefit pension plans, it does so with a cap on the maximum benefits, especially for benefits paid to early retirees (a great number of which can be expected when an employer goes bankrupt) and benefits paid to survivors of deceased employees.

A 401(k) plan remains active for the rest of the employee's life, but must begin paying out by April 1 of the calendar year after the employee turns 70 1/2, unless the employee is still working. Similar plans are the 403(b) for employees of public schools, self-employed ministers, and employees of 501(c)(3) non-profits; and the 457 plan, for government employees.

IRAs are another creation of ERISA and come in various types. The most common are the traditional IRA, which is funded by "before-tax" money like the 401(k), and the Roth IRA, which is funded with after-tax money and is therefore tax-exempt when it pays out. IRAs are protected from bankruptcy by both state and federal laws; some states protect IRAs from seizure to satisfy lawsuits, but they are usually not protected from IRS fines for failure to pay taxes, or divorce settlements.

Defined benefit plans are what most Americans mean by pension plans. Instead of paying out according to investment earnings, like a defined contribution plan, a defined benefit pays out a specific monthly amount determined by a particular formula. Sometimes this is a flat amount multiplied by the employee's length of employment with the company (another demotivator for changing jobs later in life). Other times, the benefit is determined according to the employee's salary in the years leading up to retirement, without consideration of the length of his employment; because this approach benefits recently hired executives more than it does lower-wage workers of lengthy service, it is not favored by labor unions.

Retiring early leads to a reduced payment from the defined benefit plan, on the assumption that it will be paid out for a long period of time. Despite this, because companies can hire young employees for less money, there are often incentives built into the pension plan to encourage early retirement. Unlike defined contribution plans, defined benefit plans are bound to an employer—if you leave the job before you are old enough to draw on your pension fund, you do not receive the pension. This is one reason defined contribution plans have risen in popularity in the last 30 years.

Social Security

Social Security is essentially a defined benefit plan. All workers and self-employed individuals pay into the Social Security system; employers further pay a payroll tax. These taxes are paid into the Social Security Trust Fund maintained by the U.S. Treasury. Unlike individual plans, current Social Security outgo is paid out by current Social Security income; the current generations of employees are funding the benefits of the current generation of retirees. The money that is left over is then invested in government bonds, funding the federal government's deficit spending. Congress grants the trust fund the authority to pay out Social Security payments only to the extent of the revenue collected and its holdings in bonds—in other words, should the total of payments owed exceed the total of revenues collected, the trust fund would be unable to issue its payments in full, rather than borrowing from some other source in the federal government. (Depending on the circumstance, a bailout seems likely, followed by a longer-term legislative solution.)

Social Security comes under criticism for a number of reasons. It was introduced as part of President Franklin Roosevelt's New Deal legislation, and the circumstance in which it was introduced—an economic crisis coupled with a rarity of employer-provided retirement benefits—no longer obtains, though it is true that a new economic crisis has arisen in the 21st century, and that not every American's employer provides a pension. Social Security is also criticized for being inefficient; excess revenue is stored in bonds instead of enjoying greater growth through low-risk investments. Social Security is not guaranteed to the degree that private plans are, insofar as the trust fund is limited. Further, the Social Security number has been adopted as a sort of identification number by many public and private agencies, though this is frowned upon by the Social Security Administration and theoretically restricted by the 1974 Privacy Act. Perhaps the biggest problem is that the tax to fund Social Security is regressive—only wages below $102,000 are taxed, such that upper-class earners pay a substantially lower percentage of their wages.

See Also: Benefits; Compensation; Corporate Social Responsibility; Perquisites; Salaries and Wages; Social Pact.

Bibliography. Franco Modigliani, *Rethinking Pension Reform* (Cambridge, 2004); Robert J. Myers, *Social Security* (University of Pennsylvania Press, 1993).

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PepsiCo

One of the major manufacturers in the world of carbonated and noncarbonated drinks, and also many other foods, the Pepsi-Cola Company was established in 1898 and only became PepsiCo after its merger with Frito-Lay in 1965.

The original founder of Pepsi-Cola was Caleb Bradham (1867–1934), who lived in New Bern, North Carolina. A pharmacist, he operated a soda fountain in his drugstore and made a variety of drinks including what was originally known as Brad's Drink, first created in the summer of 1893, and five years later named Pepsi-Cola, probably because of the use of pepsin and cola nuts, although there are a number of other theories including the purchase by Bradham of the trade name Pep Kola, and also Pepsi-Cola was an anagram for Episcopal, Bradham's drugstore being located opposite a large church.

Bradham gained the trademark in 1903 and ran the company successfully, expanding it greatly. In 1903 Bradham had to rent a nearby warehouse to produce the 7,968 gallons of syrup he sold that year. However, he had expected that after World War I, the price of sugar would rise. Instead, it fell and Bradham was forced out of business in 1923. The trademark was sold to Roy C. Megargel, but in 1931, it was again approaching bankruptcy. In that year, the company was bought by the Loft Candy Company. Its president, Charles G. Guth, was unable to make much of a success of it and offered to sell the company to Coca-Cola, but they turned him down. Gradually, the company was turned around and started to sell well, especially during the latter period of the Great Depression, with its price cut to $0.05. In 1938 the profits were double those only two years earlier.

In the 1940s, Pepsi expanded, but there were complaints that it had ignored the African American market in its advertising. The company responded by hiring an African American sales team and it was able to criticize Coca-Cola for its company chairman's support for segregationist politicians. Gradually, Pepsi expanded and in 1963, the company used the slogan "Come Alive—You're in the Pepsi Generation." Richard Nixon was a supporter of Pepsi's expansion, and during his presidency, Pepsi started marketing in the Soviet Union. However, it remained banned in India from 1970 for refusing to hand over a list of the ingredients. Pepsi was also involved in a major sales campaign against Coca-Cola and in 2004 the market share for Pepsi was 31.7 percent, as against 43.1 percent for Coca-Cola. Around the world, Coca-Cola outsells Pepsi. During the 1980s and early 1990s, with major marketing campaigns launched by Coca-Cola and PepsiCo, the "Cola Wars" were waged, with Pepsi promoting itself as "The Choice of a New Generation" and featuring the "Pepsi Challenge."

As well as producing Pepsi-Cola, its most well-known product, PepsiCo also produced Diet Pepsi, some flavored Pepsi drinks, Mountain Dew, 7UP, and a range of other carbonated drinks. It also produces products under the Quaker Oats brand (especially breakfast cereals), having bought that brand in 2001; the Frito-Lay brand (potato chips and other snack foods); and is involved in partnerships with many other brands such as Lipton Iced Tea, which it markets. In 1977 PepsiCo bought Pizza Hut, followed by Taco Bell the following year, and a number of other restaurant chains. However, it sold all of these, most between May and October 1997—Pizza Hut and Taco Bell becoming a part of Tricon Global Restaurants. The company now has 185,000 employees, and it has net assets of $34.6 billion, with revenue of $29.5 billion, and net income of $5.7 billion (2007 figures). It has a market capitalization of $107 billion

(2008). Its CEO is Indra Nooyi from India, who was ranked as fifth in *Forbes Magazine*'s 100 Most Powerful Women in 2007. There is also a separate company, the Pepsi Bottling Group, which handles bottling and distribution.

See Also: Advertising; Branding; Company Profiles: North America; Market Audit; Marketing; Nestlé.

Bibliography. Katrina Brooker, "The Pepsi Machine," *Fortune* (v.153/2, 2006); Stephanie Capparell, *The Real Pepsi Challenge: How One Pioneering Company Broke Color Barriers in 1940s American Business* (Free Press, 2008); Robert Enrico, *The Other Guy Blinked: How Pepsi Won the Cola Wars* (Bantam, 1986); Betsy Morris, "What Makes Pepsi Great? *Fortune* (v.157/4, 2008); Packaged Facts, *Energy Drinks in the U.S.* (Packaged Facts, 2007); Bob Stoddard, *Pepsi-Cola 100 Years* (General Publishing, 1997).

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Periphery

The term *periphery* refers, collectively, to the poor, unindustrialized, and underdeveloped nations of the world that are not heavily involved in global economic activity. Prime examples of peripheral countries include poor, largely inwardly focused, agrarian African nations such as Burundi, the Democratic Republic of the Congo, Ethiopia, Mozambique, Niger, Rwanda, Tanzania, and Zambia. Understanding the nature of the periphery and how it interfaces with nonperipheral areas is a critical step in understanding economic development and the global economic system, particularly from the perspective of dependency theory.

From a practical standpoint, the notion of the periphery arose from a need to account for the fact that great heterogeneity exists among nations in terms of developmental status and the nature and level of involvement in the global economic system. Some countries are heavily and aggressively involved in global economic activity. Other nations are far more domestically/inwardly focused. In this regard, a peripheral nation's involvement in the global economic system may entail nothing more than relatively small-scale exportation of basic commodity goods produced in abundance there and/or importation of basic commodities not produced domestically.

Theoretically, the notion of the periphery originated in the context of—and holds a place of central importance in—dependency theory. This theory of economic development was formulated in the late 1950s and 1960s by Third World/poor-nation development scholars who felt that existing theories of economic development failed to account adequately for the fact that the uneven diffusion of technical progress had contributed heavily to the division of the global economy into two predominant types of countries: (1) affluent, heavily industrialized, and highly developed core nations, such as the United States and the United Kingdom, and (2) less affluent, relatively unindustrialized, and underdeveloped peripheral countries. These scholars also believed that existing concepts of economic development focused far too heavily on understanding core nations and also misguidedly laid much of the blame for the underdevelopment of poor countries on these nations and their disadvantaged peoples.

Dependency Theory

Dependency theory essentially holds that peripheral countries may suffer negative (economic, cultural, and developmental) consequences as a result of forming economic bonds with core nations heavily involved in the global economic system. Dependency proponents contend, in this regard, that the formation of economic ties with core nations may create a situation in which peripheral nations become highly dependent on the core, and self-serving core leaders may take advantage of this situation by exploiting key peripheral-nation resources.

This line of reasoning is diametrically opposed to the previously dominant modernization theory, which contends that poor-nation development is predicated first and foremost on the establishment of close economic bonds with the core as a result, for example, of (1) acceptance of foreign aid, (2) trade with foreign companies or governments, (3) foreign direct investment (i.e., allowing foreign companies to purchase or establish wholly owned production facilities in peripheral territory), and (4) taking out loans from foreign financiers.

The periphery's centrality in dependency theory is founded largely on the fact that although several forms of dependency theory exist, most are drawn from theories of imperialism—primarily late-19th and early- to mid-20th-century capitalist and economic imperialism—focused heavily on the colonistic desires of developed nations (often to the detriment of the colonized peripheral nations). As a result, regardless of their specific differences and perspectives, all variants of dependency theory have a common central theme: poor nations exist as peripheral countries whose development is dependent on (and perhaps jeopardized by) interactions with (and the actions of) global economic system leaders based in affluent core nations.

Theoretical Outcomes

It is worth noting, however, the different hypothesized outcomes of interaction with the core for peripheral countries in the two main forms of dependency theory. In the context of orthodox (or radical) dependency, increased linkage to core nations is viewed as necessarily leading to the development of underdevelopment (i.e., exploitation of resources and worsened economic conditions) in the periphery.

In the less extreme unorthodox version of dependency theory, development and underdevelopment can occur simultaneously in peripheral nations. Here, the level of meaningful development in the periphery is viewed as being a function of the manner in which the periphery interacts with the core. It is hypothesized, for example, that interactions with the core involving foreign direct investment, foreign debt, and export trade lead to a higher level of dependence and to less positive and slower peripheral development than interactions based on the acceptance of foreign aid and foreign trade.

See Also: Core; Dependency Theory; Economic Development; Modernization Theory; Underdevelopment.

Bibliography. Gabriel R. G. Benito and Rajneesh Narula, *Multinationals on the Periphery* (Palgrave Macmillan, 2007); Peter Evans and John D. Stephens, "Development and the World Economy," in *Handbook of Sociology,* N. J. Smelser, ed. (Sage, 1988); Susanna Fellman, *Creating Nordic Capitalism: The Business History of a Competitive Periphery* (Palgrave Macmillan, 2008); Gary Gereffi, "The International Economy and Economic Development," in *The Handbook of Economic Sociology,* N. J. Smelser and R. Swedberg, eds. (Princeton University Press, 1994); William G. Moseley and Leslie Gray, *Hanging by a Thread: Cotton, Globalization, and Poverty in Africa* (Ohio University Press, 2008); Erik S. Reinert, *Globalization, Economic Development and Inequality: An Alternative Perspective* (Edward Elgar, 2007).

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Perquisites

The *Revised and Updated Illustrated Oxford Dictionary* defines *perquisite* as "an extra profit or allowance additional to a main income" and also as "an incidental benefit attached to employment." A perquisite is informally called a *perk;* a company car is a common perk for mid- and upper-management positions. Other examples of perquisites range from legal services to employee assistance hotlines. Although common fringe benefits such as health insurance are provided for all employees irrespective of their positions in the managerial hierarchy, perquisites are not so common and are more preferred with increased income. A perquisite such as an in-town apartment, for example, will not be available for employees throughout the company—only for top-level executives.

Perquisites are benefits quantifiable in monetary terms, provided for executives for their personal use and not available to nonexecutive employees. Perquisites are parts of tangible managerial rewards, along with bonus, salary, stock awards, and promotions. Notwithstanding this tangible quality, perquisites are valued for an intangible aspect, too: as status symbols. A coveted perquisite such as a country club membership not only allows the employee access to that facility, but also provides some attributes of raised status. Thus, employees in all businesses in practically all locations prefer some perquisite or other.

Rationale

Perquisites have achieved popularity partly because of their ability to motivate senior executives. Although most executives long for increased pay, additional pay is often not a strong-enough motivator at upper levels of the firm, where executive compensation is already rather high. These executives do not have pronounced needs for food, shelter, or other basic amenities of life. They are generally at a stage in their lives where they crave more status or self-esteem. Thus, a psychology-based explanation exists for the presence of perquisites in organizations.

Cultural Aspects

Some perquisites are common around the world; others are specific to location, need, and firm. Among globally common and established perquisites are the use of company cars, corner offices, and the services of assistants. Although access to a company car for personal use usually is available at middle-management level and higher, personal assistants usually are available only to top-level executives.

Perquisites that are not universal are often rather location specific. Some perquisites that are widely popular in the Western world are not valued much on the other side of the globe. Examples include mortgage support, in-town apartments, and country club memberships. Cultural attributes and habitual preferences influence which perquisites are valued in any given part of the world. The aforementioned examples are preferred in the West because they fit well with the Western lifestyle and value system.

Similarly, in Asian or south Asian countries, especially the Indian subcontinent, one can find perquisites that entail additional services of other human beings. It is not uncommon in Asia for a top-level executive to have a chauffeur (in addition to the company car), a personal assistant at work, a cook (for his house), and even a gardener.

Some perquisites are heavily country specific, such as bodyguards for executives in Brazil. Affluent businesspeople and executives of big companies are frequent targets for kidnapping in Brazil; this vulnerability alone necessitates bodyguards for mid- and top-level executives in that country.

Tax Aspects and Problems

Another significant aspect that affects the desirability of perquisites is tax rates. Since 1978 the U.S. Securities and Exchange Commission has required U.S. companies to reveal the monetary worth of the perquisites that their executive officers enjoy. During the same year, the Internal Revenue Service decided to impose taxes on perquisites. In fact, the Internal Revenue Code of 1954 demanded that the value of perquisites and other benefits be reported as income to the extent that the executives consumed these benefits for personal use.

Despite the code, disclosing the monetary value of perquisites was not compulsory back then. It was not until 1978 that both the disclosure law and stronger enforcement of taxation simultaneously came into effect, resulting in the lower after-tax value—and, therefore, reduced attractiveness—of perquisites. U.S. executives shifted their desires from perquisites to monetary compensation in that year.

Greed is a key reason for problems with perquisites. Perquisites are expensive and have some adverse effect on the firm's bottom line. Managers who are more concerned about their own self-interest than their firm's interest will make decisions in such a way as to justify specific perquisites for themselves. During times of austerity, for example, it is quite logical for a firm to cease operating corporate jets. Even in the face of extreme financial crisis, however, Enron executives routinely flew corporate jets—clear evidence of perquisite greed causing problems.

See Also: Benefits; Compensation; Holidays; Motivation; Pension Systems; Salaries and Wages.

Bibliography. Bureau of National Affairs, *Executive Compensation: Disclosing Perquisites Under the New Proxy Disclosure Rules* (Bureau of National Affairs, 2007); Robert Halperin and Joseph Tzur, "Monetary Compensation and Nontaxable Employee Benefits: An Analytical Perspective," *The Accounting Review* (v.60/4, 1985); Jeffrey L. Kerr, "Diversification Strategies and Managerial Rewards: An Empirical Study," *The Academy of Management Journal* (v.28/1, 1985); Kathleen T. McGahran, "SEC Disclosure Regulation and Management Perquisites," *The Accounting Review* (v.63/1, 1988); David Yermack, "Flights of Fancy: Corporate Jets, CEO Perquisites, and Inferior Shareholder Returns," *Journal of Financial Economics* (v.80/1, 2006).

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Persuasion

Persuasion, by definition, involves changing the opinion of another person. However, the process is significantly more complicated than mere manipulation. Effective persuasion involves a thorough understanding of the other person's interests and needs, detailed preparation and planning, and a carefully structured communication strategy. There are also several psychological triggers that can be applied throughout the process.

The art of persuasion has become extremely important in the business environment today because of two key factors. First, the globalization of industries has rendered traditional hierarchies obsolete. Second, the changing attitude of employees and the increasing reliance on electronic communication means that ideas move quickly throughout an organization. These two factors mean that employees are equally invested in the "why" of their actions and the "what." For managers to create a sense of intrinsic motivation within the company, they must be able to lead through persuasion and not simply dictation.

Persuasion is often confused with sales and negotiations, when, in reality, it is a much broader form of communication and interaction. Conventional wisdom assumes that successful persuasion consists of one person trying to convince the other that his or her viewpoint is more rational. The crux of the debate is centered solely on the validity of each participant's opinion, with little focus on relationship building.

The danger of this approach is twofold. First, it is highly ineffective. People find their own perceptions the most convincing and rational and are unlikely to spontaneously change their mind. As humans, we have a tendency to accept our view of reality as the only true reality. As such, it is virtually impossible to sway another person using one's own views. Instead, examining and understanding the other person's perceptions is at the core of successful persuasion. Second, this approach ignores the benefit of shared values. By identifying these shared benefits, a manager can build a highly cohesive consensus—not simply a winning or losing side. This is particularly important in large global corporations today, as warring internal factions can drastically affect efficiency and productivity.

Process

The initial stages of persuasion involve discovery, preparation, and dialogue. This process of learning is slow, but essential. Testing and revising ideas based on feedback from colleagues allows persuaders to incorporate multiple viewpoints into their final strategy. This also helps identify weaknesses and any alternative positions/solutions that need consideration. On a personal level, listening and learning gives the persuader a positive image. A good manager appears open-minded and genuinely concerned about others' concerns and beliefs through this dialogue. Remember, it is crucial not only to understand the views of others, but also to fully understand why they believe the way they do. By doing so, the speaker can align his or her needs with those of the audience. Another important benefit of preparation is the formation of an early coalition within the company or audience, helping lend credibility to any future discussions.

Once this initial discovery phase has taken place, the formal planning can begin. Establishing credibility along two aspects is the first challenge. To overcome the hurdle of instinctive trustworthiness, managers must build credibility in both expertise and relationships. It is not enough to have a thorough understanding of the issue—a person must also be perceived to have strong character and integrity. There are several ways to address gaps in credibility, including working with experts, launching pilot projects, and involving others who already maintain strong relationships with your target audience. The second step in planning involves the proper framing of the position. Effective persuaders must be able to describe their position in terms that identify shared benefits and highlight the advantages. This does not mean simply trying to convince the audience of the validity of the argument based on its merits alone. Instead, a manager must frame the issue in a way that aligns his or her needs with those of the audience. Effective persuaders use framing to talk about the audience's interests and create common ground.

Next, crafting a successful communication strategy requires several structural steps. First and foremost, a speaker must define the desired outcome of the conversation or debate. In other words, they must tell the audience why they should care and why it is important to them. Structuring this message in a well-organized manner, and with limited information, allows the audience to focus on the crux of the issue. It is also important to tie the information in to what the audience already knows. By working with existing beliefs and level of expertise, the speaker builds on the familiar and links the new information/opinion to the old. Last, persuasion requires more than data. By including vivid evidence—both anecdotal and emotional—the speaker can create a powerful psychological connection and feeling of mutuality. While many managers are afraid of using emotional language, the fact is that audiences absorb and retain information in proportion to its vividness.

Principles

Within this persuasion process, there are six established principles that communicators can use to effectively and efficiently shape the behavior of others. The principles include reciprocation, consistency and commitment, social proof, liking, authority, and scarcity. These principles create a form of psychological trigger that greatly increases the compliance or agreement of others. By learning how to use these innate triggers in communication, a person can subtly influence the way another person behaves—without outright manipulation or deception.

A classic academic example of these persuasion principles is found in Tupperware sales parties. All visitors receive gifts of some sort, triggering their instinct to reciprocate with a purchase of their own. Guests are encouraged to discuss Tupperware products they already own and use, which serves to remind them of their existing psychological commitment to the product, and thus leads them to purchase more in pursuit of consistency. The group environment is ideal for the social proof principle, which states that people behave in accordance with a group's perceived acceptance. The informal party atmosphere makes it easy for the salesperson to create a personal bond, because people are much more likely to say yes to the requests of someone they know and like. The salesperson's expertise on the product also factors into the sale, as it is human inclination to defer to an authority figure or expert. Most important, visitors leave these events feeling as if they have had some important individual need met, not as if they were the victims of a manipulative hard sell. While this example takes place in a social setting, these principles can be clearly applied in the business world as well.

The end goal of persuasion is to create agreement within the audience based on their own beliefs, not based on the beliefs of the speaker. By using the beliefs of the audience as leverage, persuasion becomes a win-win situation.

See Also: Communication Challenges; Communication Styles; Concession (in Negotiation); Employer–Employee Relations; Management; Motivation; Negotiation and Negotiating Styles; Sales.

Bibliography. Gene Bedell, "Tactical Tips for Persuading Effectively," *Manage Magazine* (v.52/4, 2001); Robert Cialdini, "The Language of Persuasion," *Harvard Management Update* (Harvard Business School Publishing, 2004); Jay Alden Conger, *The Necessary Art of Persuasion* (Harvard Business Press, 2008); James P. T. Fatt, "The Anatomy of Persuasion," *Communication World* (v.15/1, 1997); Amna Kirmani and Rui (Juliet) Zhu, "Vigilant Against Manipulation: The Effect of Regulatory Focus on the Use of Persuasion Knowledge," *Journal of Marketing Research* (v.44/4, 2007); Virginia Percy and Margaret Mullen, "Getting Your Message Across," *Training & Development* (September 1993); David Stiebel, "Getting Them to See Things Your Way," *Canadian Manager* (v.22/4, 1997); Leigh L. Thompson, *The Mind and Heart of the Negotiator* (Prentice Hall, 2009); Mei-Ling Wei, Eileen Fischer, and Kelley J. Main, "An Examination of the Effects of Activating Persuasion Knowledge on Consumer Response to Brands Engaging in Covert Marketing," *Journal of Public Policy & Marketing* (v.27/1, 2008).

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Peru

Peru is a liberal economy enjoying six consecutive years of growth as of 2008. The rate of growth for 2008 was 9.2 percent, which is one of the highest in the world. The country is the third-largest in South America, and almost all the world's climates are represented within its territory. It is the world's largest producer of asparagus, paprika, flour, fish oil, argent, and alpaca and vicuña cloth. The estimated gross domestic product (GDP) in 2007 was $109.069 billion.

Public debt as a percentage of GDP decreased from 28 percent in 2005 to 18.4 percent in 2007, and net international reserves were $35.603 billion in April 2008. These figures reflect a stable economy, and global financial institutions classify Peru as one of the best investment options in the region, due partly to the country's overall investment risk, which falls below the regional average. Private investment is more than $20 billion each year.

The rising disposable income of citizens and improved employment figures have boosted local demand. In turn, this demand has given rise to such dynamic sectors as manufacturing, services, and construction. The government and the private sector have recently focused on investing in construction; roads, offices, shopping centers, hotels, and new transportation terminals have been built. The spread of infrastructure has not reached many parts of the population, however.

Peruvian exports are estimated to be $27.588 billion per year. Growth stabilized at 16.3 percent in 2007 after three years of a growth rate in excess of 35 percent. Agricultural exports had an annual growth rate of 18.6 percent, with coffee, asparagus, paprika, artichokes, mangoes, grapes, and onions representing major export items. Fishing is regulated by a law that promotes aquaculture development and grants income tax reductions and other benefits. As a result, Peruvian fisheries export to 104 countries.

Mining activities put the country in first place in the region in terms of production of gold, zinc, lead, and tellurium. Important mining companies operate in Peru, including Barrick Gold Corp. (Canada), Newmont Gold (United States), Doe Run (United States), and Vale do Rio Doce (Brazil).

Foreign Investment

Peru's Proinversion is a special governmental agency that promotes foreign direct investment. No restrictions or controls exist on payments, transactions, transfers, or repatriation of profits. Foreign investment in Peru was $15.373 billion in June 2007. Spain represented 31.5 percent of this investment, followed by the United States (18.3 percent) and the United Kingdom (17.4 percent). Foreign investors have holdings in communications (31.6 percent), mining (18.8 percent), industry (15 percent), finance (12.5 percent), and energy (10.7 percent), making sectors such as mining, textiles, fibers, and infrastructure promising avenues for investment.

According to world competitiveness scoreboards for 2008, Peru is in 35th position. Moreover, 98.3 percent of Peruvian companies are small, family-owned enterprises, most of them (77 percent) in the services and commerce sectors. These companies account for 45 percent of GDP and 88 percent of employment. Nearly 3,500 of the country's small enterprises are involved in foreign trade; they are dynamic agents of the economy.

The special government agency that promotes Peru as a tourist destination is called Promperu. Peru is well known as a destination, thanks to Machu Picchu, the city of the Incas; the mysterious Nazca lines; and many other attractions. The diversity of the country's geography and gastronomy attract almost 1.8 million tourists per year, and tourism provides 5.9 percent of GDP.

Peru used to have a largely centralized economy, concentrated in Lima. Lately, economic growth has expanded to cities on the coast, along with Andean cities such as Cajamarca, Huaraz, and Huancayo (mining activities), as well as Cuco (tourism). Nevertheless, the country's rugged and varied geography presents many challenges and limits the possibility of growth for most cities in the southern Andean region. In such areas, 70 percent of the population live in poverty. As a result, two major problems need attention: (1) many Peruvians are employed in the black market by unregistered businesses with low productivity and salaries; and (2) Peru's education level ranks among the worst in international tests such as LLECE and PISA.

A notable issue is the emerging privatization process, which has encouraged the entry of foreign banks and the introduction of new technologies. Peru has a modern banking system, with 37 percent foreign capital, 61 percent private capital, and 2 percent state capital. There is less dollarization of loans and deposits, and residents and nonresidents may hold foreign exchange accounts. The structure of banking products is changing gradually from 84.5 percent of commercial credits and 14 percent of consumer and mortgage loans (1999) to 71.5 percent and 24.3 percent (2005), respectively. Moreover, deposits show a positive trend (the highest level ever recorded), whereas past-due loans diminished from 9 percent to 2.1 percent, the lowest ratio in the past 25 years.

The Peruvian securities market is small, centered on the small stock market and the pension sys-

A farmer tending to artichokes in Peru, where agricultural exports have recently grown as much as 18.6 percent a year.

tem. In 2006 the stock exchange was the developing world's best-performing equities market, increasing by 188 percent. In 2007 a new financial product, the Exchange Traded Fund (ETF), was created. This basket of shares includes the most representative securities in the Peruvian stock market.

See Also: Company Profiles: South America; Latin America; Privatization.

Bibliography. Lydia Arbaiza Fermini, *Economía informal y capital humano en el Perú* [Informal Economy and Human Capital in Peru] (ESAN Ediciones, 2008); Marcelo Giugale, Vicente Fretes Cibils, and John L. Newman, *An Opportunity for a Different Peru: Prosperous, Equitable, and Governable* (World Bank, 2007); Catherine Guirkinger, "Understanding the Coexistence of Formal and Informal Credit Markets in Piura, Peru," *World Development* (v.36/8, 2008); Stephan Klasen and Felicitas Nowak-Lehmann, *Poverty, Inequality, and Policy in Latin America* (MIT Press, 2009); Blanca Moreno-Dodson and Quentin Wodon, *Public Finance for Poverty Reduction: Concepts and Case Studies from Africa and Latin America* (World Bank, 2008).

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Petrobras

Petrobras (Petroleo Brasileiro) is a state-controlled integrated energy company. Headquartered in Rio de Janeiro, Petrobras, along with its subsidiaries, engages in the exploration, production, refining, and transportation of oil from reservoir wells, shale oil, and other rocks. It owns and operates thermoelectric, petrochemical, and fertilizer plants, and is involved in the purchase, production, transportation, and distribution of liquefied natural gas and natural gas. Most recently, Petrobras formed a joint venture with Mitsui Group of Japan to produce biofuels.

Petrobras's creation and early history are intimately related to Brazilian economic nationalism and its import-substituting industrialization strategy. Public distrust of international oil companies and their geologists, who claimed that Brazil had very limited oil wealth, encouraged the nationalization of undiscovered oilfields under the aegis of the National Petroleum Council in 1939.

The combination of wartime trade disruptions in the 1940s with modest domestic exploratory efforts led to a severe shortage of petroleum, which, along with a surge in national security concerns, fueled a popular state-backed campaign for the development of the Brazilian oil industry. Under the banner "The Oil Is Ours" and with the twin objectives of supplying the nation hydrocarbons and saving on scarce foreign exchange, Petrobras was founded in 1953 under the presidency of Getulio Vargas. Despite regular and intense politicization at the top, Petrobras delivered on its mission and stood up to the formidable challenge of building an oil industry from scratch, without previous knowledge, lacking a skilled labor force, and having practically nonexistent reserves to start with.

This achievement was a two-stage process, as historian Laura Randall suggests. First, Petrobras concentrated on building refining capacity to substitute imported hydrocarbon products for those refined domestically; subsequently, it increased crude oil production. Brazil's foreign dependence on oil dropped from around 90 percent in the mid-1950s to less than 50 percent in the 1990s and keeps decreasing. Yet this is unlikely to be Petrobras's biggest accomplishment. World technological leadership in the exploration and production of oil in deep water (300–1,500 m) and ultradeep water (1,500 m and more) has proven profitable and is most promising.

Exploration and Production

Petrobras's offshore explorations in the Campos Basin first paid off in 1974 with the discovery of the Garoupa field in shallow waters (120 m). Production started in 1977. Since then, more than 40 oilfields have been found off the Brazilian coast, among which Roncador, Marlim, and more recently Tupi were so-called elephant fields—those containing proven reserves over 1 billion barrels. These deep- and ultradeep-water reservoirs now account for more than 80 percent of Brazil's oil production and proven reserves.

The challenges in economically exploiting oil at these depths are remarkable and have catapulted Petrobras to the technological frontier, via horizontal drilling, few and high-productivity wells, high-resolution stratigraphic analysis, and 3D visualization techniques. Petrobras's deep- and ultradeep-water discoveries are not only meeting Brazil's desire for self-sufficiency in oil, but also challenging the oldest myth in the industry, the peak oil theory—the idea that the rate of global oil production had reached a maximum.

As of 2007 Petrobras had 69,000 employees, ran and/or owned more than 8,000 service stations, operated 77 fixed and 32 floating production platforms, refined some 2 billion barrels per day (bpd) from 15 refineries, produced another 2 billion bpd from around 13,000 productive wells, boasted proven oil reserves of 11.7 billion barrels, and relied on a fleet of more than 150 tankers to transport its products.

Market Position

Petrobras is a player in world energy markets. Its sheer size and technological leadership have made it one of the "new seven sisters" (the industry's name for the dominant companies in the production/distribution of oil). On the financial side, Petrobras's net earnings were $102.9 billion, with net income of $12.9 billion and $27.3 billion worth of investments. Its market value exceeded $100 billion, making it the most profitable public company in South America—as well as the most valuable of all, private and public—and ranking it 50th among the world's largest firms.

The company has ventured outside Brazil and is particularly strong in Argentina, Bolivia, Colombia, Ecuador, Peru, Uruguay, and Venezuela. It also does business in countries including Angola, China, England, Iran, Mexico, Nigeria, Norway, Turkey, and the United States. Its shares are traded in the world's main stock exchanges, and its bonds are among the best rated in Brazil's capital markets.

See Also: Brazil; Company Profiles: South America; Import Substitution; Latin America; Mitsui.

Bibliography. Carlos Bruhn et al., *Campos Basin Characterization and Management: Historical Overview and Future Challenges* (Offshore Technology Conference, 2003); Petrobras, "Petrobras in Numbers," www2.petrobras.com.br (cited March 2009); Laura Randall, *The Political Economy of Brazilian Oil* (Praeger, 1993); Joshua Schneyer, "Brazil, the New Oil Superpower," *BusinessWeek Online* (November 20, 2007); Peter Smith, "Petrobras: The Politicizing of a State Company, 1953–64," *The Business History Review* (v.46/2, 1972); Daniel Yergin, *The Prize: An Epic Quest for Oil, Money and Power* (Free Press, 1991).

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Petronas

PETRONAS is an acronym for "Petroleum Nasional or National Petroleum" and the company is registered as Petroliam Nasional Berhad. It is located in the Petronas Twin Towers in Kuala Lumpur, Malaysia. Petronas is ranked 95th by *Fortune* for 2008. The CEO of the organization is Mohamed Hassan Marican and he leads 37,430 employees. The company Web site is www.petronas.com.my. In the fiscal year ending on March 31, 2008, Petronas had $66,218.2 million in revenue resulting in $18,118.4 million in profit.

Petronas was incorporated on August 17, 1974, under the Companies Act of 1965. The company made its first export of crude the next year. In 1981 Petronas set up the first petrol station in Taman Tun Dr Ismail, Kuala Lumpur. In 1983 its first refinery with 30,000 barrels per day capacity in Kertih, Terengganu, came online. In 1985 Petronas made its first liquefied petroleum gas (LPG) export. In 1993 Petronas first issued bonds and signed its first deep water contract with Mobil. In 1994 the marketing arm, Petronas Dagangan Bhd., became the first Petronas subsidiary listed on the Kuala Lumpur Stock Exchange (KLSE). That same year, the first of Petronas's five LNG tankers, *Puteri Intan*, was delivered. 1994 was truly a milestone year as it saw Petronas open its first overseas retail station in Cambodia and begin overseas oil production from Dai Hung field in Vietnam. In 1995 Petronas began to sponsor the Red Bull–Sauber-Petronas Formula One Racing Team. In 1996 it issued its first US$1.9 billion global bond.

The company is wholly owned by the Malaysian government and is vested with the entire ownership and control of the petroleum resources in Malaysia through the Petroleum Development Act of 1974. Petronas has operations in over 31 countries including China, Sudan, Algeria, Vietnam and Iran, and has four subsidiaries. In 1998 it launched the first oil production of the Sirri field in Iran and in 1999 it had its first oil production export from Sudan.

In 2000 the company signed agreements for two oil and gas exploration blocks in Pakistan, the East Kadanwari Block and Mehar Block, and commenced construction of the 1,070-km pipeline for the Chad-Cameroon Integrated Oil Development and Pipeline Project. In 2001 the company rolled out its high-performance prototype "GP1" motorcycle engine at the Sepang F1 Circuit. In 2002, Petronas raised US$2.675 billion equivalent from a global bond issue, the largest corporate bond issue to have ever been concluded by an Asian corporation. That same year, the company received the delivery of its first natural gas from West Natuna, Indonesia.

In 2003 Petronas opened its first service station in Sudan, officially marking its entry into the retail marketing business in the country following its acquisition of the entire retail assets of Mobil Oil Sudan Ltd. Additionally, it signed a Letter of Intent with Petroplus International NV (Petroplus) to acquire 30 percent equity in Dragon LNG, a special purpose outfit established by Petroplus to develop a proposed LNG terminal and related facilities in Milford Haven, Wales, United Kingdom. Furthermore, Petronas launched its range of premium grade automotive engine oils in Indonesia, officially entering the country's lubricants market. In 2005, Petronas commemorated 10 years of involvement in F1 racing.

In 1997 the company moved its headquarters to what were then the tallest buildings in the world: the 88-story Petronas Towers in Kuala Lumpur. Its business activities can be divided into three categories: International Operations, Downstream Activities, and Upstream Activities. Upstream activities consist of exploration, development and production of crude oil and natural gas. Downstream activities consist of refining, marketing, petrochemical business, and logistics and maritime business. Petronas has had indirect or direct business relationships with the following organizations at one time or another: BP Chemicals/BPCM Assets, Esso, Shell, and Mobil. As of January 2004, Malaysia had approximately 4.84 billion barrels of crude oil reserves and about 87.0 trillion standard cubic feet of gas reserves.

Currently, Petronas has 51 producing oil fields in Malaysia. These oil fields produce five different blends of crude: Tapis, Labuan, Miri, Bintulu, and Dulang. These blends are of high quality and generally command a premium price over benchmark Brent crudes on the world market. Petronas produces three types of automotive fuels, one type of aviation fuel, two types of gas fuels, and four types of industrial fuels. Furthermore, the company produces 11 types of gasoline engine oil, nine types of diesel engine oil, and a selection of other oils for a variety of uses.

In 2007 *Financial Times* dubbed Petronas one of the new "Seven Sisters," the oil and gas giants that now dwarf their Western rivals.

See Also: Company Profiles: East Asia; Malaysia; Nationalization; State-Owned Enterprises.

Bibliography. Carola Hoyos, "The New Seven Sisters: Oil and Gas Giants Dwarf Western Rivals," *Financial Times* (March 11, 2007); Cesar Pelli and Michael J. Crosbie, *Petronas Twin Towers: The Architecture of High Construction* (Academy Press, 2001); "Petronas," Global 500 2008, *Fortune/CNN Money* (July 21, 2008); "Petronas," Petronas Corporate Web site, www.petronas.com.my (cited March 2009); Daniel Yergin, *The Prize: An Epic Quest for Oil, Money and Power* (Free Press, 1991).

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Peugeot

Peugeot is a major car manufacturer originating and headquartered in France. The company's industrial origins trace back to a steel foundry set up in a converted flour mill in the early 19th century. Since then, the company has gone through various transformations, manufacturing and selling a diversified range of groundbreaking products (cold rolling, saws, watch and clock mechanisms, coffee mills, sewing machines, bicycles, irons, washing machines, food processors, radio sets, and so on). The era of car manufacturing, which is the firm's core business activity, could be said to have begun in the late 19th century after a landmark agreement with Gottlieb Daimler and the company Panhard et Levassor.

Armand Peugeot, a dominant figure in the company's history, separated the automobile business unit from the firm's other manufacturing divisions (tools, two-wheeled vehicles, tricycles, and quadricycles with a saddle), and in 1896, he founded the company called Société des Automobiles Peugeot. After some strife between cousins who inherited the original company at the beginning of the 20th century, the company reached a point at which it accounted for almost half of French car production (just before World War I). The postwar era, however, raised the threat of financial difficulties for Peugeot, which led to the separation and independence of the automobile and cycling units again.

Peugeot has been expanding internationally to take advantage of new markets. Above, a Peugeot on display in Poland.

In the following years, Peugeot's strategy included various decisions such as concentrating mass production in one site, launching popular brands (such as the 201), and minimizing product offering (such as the single-model policy with the 203). Later, Peugeot created a holding company that could control all the group companies, and more production sites were built. A major feature of this era was the commencement of collaboration with other major car manufacturers, such as Renault (late 1960s), Volvo (early 1970s), Fiat (early 1980s for the production of utility vehicles and people carriers), Ford (late 1990s for the development of diesel engines), and Toyota and BMW (2000s for small engine models and petrol engines).

International Expansion

In addition to these decisions, some of the firm's most notable strategic decisions lay in its policy for mergers and acquisitions and its international expansion. Taking control of Citroën in 1976 and taking over Chrysler's European subsidiaries two years afterward provided growth for the firm, but this growth often was hard to handle. The company expanded to major developing countries such as China in 1985 and Brazil in 2001, and countries such as Russia are now major target markets. The firm proactively seeks to expand operations in developing markets that feature attractive segments for medium-size cars and can sustain international growth.

Currently, Peugeot sells some of the most popular brands in the global automobile market. Part of this success can be attributed to the cars' design and engineering. The firm proactively enhances its design capacity for the Peugeot and Citroën brands through a dedicated design center named Automotive Design Network (AND). Located on the outskirts of Paris, the center incorporates the firm's styling, vehicle architecture, and innovation teams, consisting of skilled individuals from more than 20 countries.

What was originally a family business is now a multinational giant with 24 production sites delivering 34 families of products and 160 models. The newly formed PSA Peugeot Citroën strives to diversify in more spheres of related business activity and develop existing strengths even further. Feasibility studies are also under way with firms such as Mitsubishi Motors to examine the possibility of extending operations in such fields as manufacturing electric power trains. In line with its Strategy and Ambition Plan for 2010–2015, the firm seeks to exploit synergies with leading car manufacturers and maintain its leadership in the manufacturing of environmentally friendly cars.

See Also: BMW; Company Profiles: Western Europe; Fiat; Ford Motor; France; General Motors; Renault; Toyota Motor; Volvo.

Bibliography. David S. Landes, *Dynasties: Fortunes and Misfortunes of the World's Great Family Businesses* (Viking, 2006); Peugeot, www.peugeot.com (cited March 2009).

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Pfizer

Pfizer, Inc., is a global pharmaceutical company based in New York City. It was ranked the biggest pharmaceutical company in terms of sales in 2007 and has been a component of the Dow Jones Industrial Average since 2004. As of February 2008, it had an approximate market capitalization of $155 billion. With $7.5 billion invested in research and development (R&D) every year, it is one of the top R&D companies in the world. Despite an enviable market position, Pfizer faces challenges including a dwindling pipeline, an unprecedented number of patent expirations, increasing generic competition, and pricing pressure.

Pfizer was founded in 1849 by Charles Pfizer and Charles Erhart in New York State. At the time, it was named Charles Pfizer & Co. The company's first pharmaceutical product was an edible form of santonin, which was used to treat intestinal worms in the mid-19th century. By combining blended santonin with almond toffee, they created a product that consumers enjoyed. It was a commercial success that helped launch the company.

Through most of the 19th century, the company focused on producing chemicals, manufacturing such products as tartaric acid (which can be used as a laxative), cream of tartar (which can be used as a cleansing agent), and citric acid (useful in caffeinated soft drinks, such as colas). It also produced many generic products, such as iodine, morphine, and chloroform. In 1950 Pfizer started to sell the first product it developed internally, a broad-spectrum antibiotic called Terramycin. With the launch of this product, Pfizer demonstrated its growing focus on pharmaceuticals and developed a strong presence in animal health products, which continues today.

Acquisitions and Divestitures

Before 2000, Pfizer completed only two major acquisitions. The first acquisition of note was of a company called J. B. Roerig in 1953, which served to prop up Pfizer's fledgling agricultural and nutritional division. Pfizer also acquired full ownership of Taito in 1983; that company contributed to Pfizer's antibiotic manufacturing and distribution activities.

After 2000, Pfizer embarked on a series of mergers and acquisitions. It merged in 2000 with Warner-Lambert and acquired Pharmacia in 2003. These mergers gave birth to the world's largest pharmaceutical company and gave Pfizer access to many blockbuster drugs. In the case of Warner-Lambert, Pfizer acquired the rights to Lipitor; the Pharmacia merger gave Pfizer access to Celebrex. Pfizer has since acquired many smaller companies, including Meridica (2004), Esperion Therapeutics (2004), Vicuron (2005), PowerMed (2006), Embrex (2007), and Encysive Pharmaceutical (2008). It is estimated that Pfizer acquires more than a half-dozen companies every year to replenish its slowing pipeline.

Pfizer has also divested major divisions in the past few years. It sold its consumer healthcare department to Johnson & Johnson in 2006 and Dorom, its Italian generic pharmaceutical marketing company, to Teva Pharmaceutical in 2004. It has also sold manufacturing plants around the globe in an effort to reduce costs.

Products

Pfizer and the companies it has acquired have developed many important drugs and innovations. In the 1940s, for example, using a proprietary fermentation process, Pfizer successfully mass-produced penicillin. Other notable innovations include Zoloft (an antidepressant), Lipitor (a cholesterol reducer), and Celebrex (a Cox-2 inhibitor for pain relief). The top pharmaceutical products produced by Pfizer include Lipitor, Zoloft, Celebrex, Diflucan (an antifungal drug), and Viagra (a drug used to treat male erectile dysfunction and arguably Pfizer's most popular product). Pfizer also provides drug-delivery products. Exubera, for example, is the first diabetes treatment for adults that can be inhaled rather than injected.

Like all big pharmaceutical companies, Pfizer is subject to scrutiny by the press and stakeholders and currently faces several controversies. It is being sued by the government of Nigeria, for example, for allegedly running a clinical test of an experimental meningitis drug without proper authorization. It was also accused in the 1990s of overpricing its AIDS treatment drug, Diflucan, in Thailand, which led to the Thai government's removing its local patent.

See Also: GlaxoSmithKline; Novartis; Patents; Sanofi Aventis.

Bibliography. Arnold Engel, *The Pfizer-Pharmacia Merger and Multimarket Contact in the Pharmaceutical Industry* (Dartmouth College, Department of Economics, 2007); Pfizer, www.pfizer.com (cited March 2009); Jeffrey L. Rodengen, "The Legend of Pfizer" (Write Stuff Syndicate, 1999); Peter Rost, *The Whistleblower: Confessions of a Healthcare Hitman* (Soft Skull Press, 2006); Joe Stephens, "Pfizer Faces Criminal Charges in Nigeria," *Washington Post* (May 30, 2007).

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Philippines

The Philippines, located in the western Pacific Ocean east of mainland southeast Asia, is made up of 7,100 islands and islets, 3,144 of which are named and 1,000 of which are inhabited. Its land area is about equal to Italy and a little larger than the American state of Arizona. The 11 major islands are Luzon (which makes up more than a third of the total land area), Mindoro, Palawan, Masbate, Panay, Negros, Cebu, Bohol, Leyte, Samar, and Mindanao (which makes up another third of the land area and was given to the Muslim insurgency in the 1996 peace deal).

The tropical climate is dominated by the monsoon cycle. From June to October, the southwest monsoon carries torrential rains through most of the country; from November to February, the northeast monsoon brings warm, dry weather; and from March to May, the easterly North Pacific trade winds bring extreme heat and drought. Usually, 20 to 30 typhoons cause extensive damage to parts of the country every year.

The Philippines has a population of almost 93 million (July 2008 estimate). Its per capita gross domestic product (GDP) is $3,300. In 2007 industry made up an estimated 31.3 percent of GDP; agriculture made up 14.1 percent, and services made up 54.6 percent. Elementary education in the Philippines begins at age 7 and lasts for six years; it is compulsory.

The constitution, which was approved by a national referendum on February 2, 1987, provides for a bicameral congress. The president is head of state, chief executive of the republic, and commander-in-chief of the armed forces. The president is elected by the people for a six-year term and is not eligible for reelection. The Philippines is a member of the United Nations (UN), World Trade Organization (WTO), Asian Development Bank, Asia-Pacific Economic Cooperation (APEC), Association of Southeast Asian Nations (ASEAN; member as of 1954), and the Colombo Plan.

The first pottery was made in the Philippines from at least 3000 B.C.E., and metals were worked on by the first millennium B.C.E. Most islanders lived in barangays, which are communities of 30–100 households based largely on kinship. By the end of the 16th century, the Philippines had become a major trading center with China, the East Indies, and India. The Dutch took over the islands from around 1600.

Despite strong economic growth, the Filipino population continues to suffer from an unequal distribution of income. This situation is alleviated somewhat by remittances sent back by millions of expatriates working in other countries.

Following the Spanish-American War in 1898, the Philippines were ceded to the United States. Shortly thereafter, it received partial autonomy. In 1941 the islands were invaded by Japanese troops, who occupied them fully by 1942. Manuel Roxas became president on July 4, 1946, which is when independence was achieved. The United States had historically close ties with the Philippines after its acquisition of the islands in the late 19th century. After World War II, the United States provided aid to the islands in return for 99-year leases on several naval and air bases.

In 1996 a peace agreement between the Moro National Liberation Front (a Muslim group) and the Filipino government ended more than 20 years of insurgency that had left over 120,000 people dead. This peace was short-lived; violence broke out again in 2001. It peaked in 2005, when fighting on the island of Jolo left 90 dead and led 12,000 people to flee. In 2006 and 2007, however, the Filipino government had success in capturing or killing key wanted terrorists.

In the past two decades, market-oriented reforms have been implemented in the Philippines; as a result, foreign investment and trade barriers have been overcome, and many industries have been deregulated. Even though privatization is incomplete, most state industrial assets were privatized between 1992 and 1995, and the monopolies in the oil, civil aviation, telecommunications, power, shipping, and water industries were dismantled.

A significant challenge to the Filipino economy is high public debt. The Filipino GDP grew at its fastest pace in more than three decades in 2007—7 percent. Remittances from Filipinos abroad and a strong services portfolio have contributed to healthy economic growth. Even though its macroeconomic outlook has improved, the Philippines needs to become more competitive to catch up with the rest of the region.

See Also: Asia; Asian Development Bank; Association of Southeast Asian Nations; Pacific Rim.

Bibliography. Asian Development Bank, *Philippines: Critical Development Constraints: Highlights* (Asian Development Bank, 2008); Teresita Audea, Stephen T. T. Teo, and John Crawford, "HRM Professionals and Their Perceptions of HRM and Firm Performance in the Philippines," *International Journal of Human Resource Management* (v.16/4, 2005); Reza Baqir, *Philippines: Selected Issues* (International Monetary Fund, 2008); CIA, "Philippines," *World Factbook*, www.cia.gov (cited March 2009); Pamposh Dhar, *Asian Development Fund: Helping the Poorest, Changing Lives, Working for Results* (Asian Development Bank, 2008); Barry Turner, ed., *The Statesman's Yearbook 2008* (Palgrave Macmillan, 2008); James A. Tyner, *The Philippines: Mobilities, Identities, Globalization* (Routledge, 2009); Ragayah Haji Mat Zin and Medhi Krongkaew, *Income Distribution & Sustainable Economic Development in East Asia: A Comparative Analysis* (Penerbit Universiti Kebangsaan Malaysia, 2008).

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Plagiarism

Plagiarism is defined as using the idea or work of someone else, claiming it as your own, and deriving an academic, material, or other benefit from having used it. In some cases, plagiarism is unintentional and involves a lack of knowledge or skill in drawing information from a source in a manner that is appropriate or legal, or that correctly attributes the creative effort of the author(s). This can take place with students or untrained employees who at times struggle with fair use of material in educational or commercial settings. In other cases, however, plagiarism is intentional and involves laziness, fear of improper interpretation, unethical behavior, a total lack of respect for the work of the author, or a complete disregard for the legal rights and protections afforded the author by U.S. and international copyright and other laws. These kinds of actions can take place when competitive pressures are high, such as in academic or business settings.

Students face regular assignments in their educational careers, and sometimes they succumb to cheating, "lifting" parts of a paper written by someone else, or even buying an entire, ready-made paper from a "paper mill" and presenting it as their own. Commercial interests often struggle to be first to reach the market with a product, and at times they can be lured by the temptation of "cutting corners" in the process and may plagiarize specific words, phrases, or entire texts to achieve their desired outcomes.

Much information lies in the public domain and is available to anyone; an example is some material printed or published many years ago, such as certain great works of literature. Some information is not in the public domain but often is made available to the public if an individual or company simply includes a specific statement or formally requests permission to use copyrighted material—documents produced by certain government entities are an example. Other information, though, is not in the public domain and is not available to anyone except authorized users. It may be extremely valuable intellectual property at the center of an organization's structure, profit, or competitive edge. An example is the original formula or logo text for a specific cola soft drink. In any case, it is important to provide acknowledgment for the source.

Techniques that can prevent a problem with plagiarism include direct quotation with citation, changed quotation with notation (e.g., square brackets) and attribution, and correct paraphrasing. These techniques require precise application; consequently, they can be misapplied or misused quite easily. Resources for avoiding plagiarism are available from the U.S. government (e.g., the U.S. Copyright Office), libraries (e.g., the American Library Association), and most educational institutions.

Today, advances in information technology have made plagiarism detection much simpler and faster than before. Basic searches of databases (e.g., ProQuest), specific computer programs (e.g., Turnitin), internet search engines (e.g., Google), and other means have made it easy to find text that has been plagiarized.

Consequences of plagiarizing vary. They can range from a student never actually learning a subject, failing a course, being expelled, or having a degree withheld or withdrawn for academic misconduct to an employee being reprimanded or dismissed from a job for lying or dishonesty to a businessperson or firm facing a lawsuit for alleged copyright or trademark violations. In the world of high-stakes business, such violations can turn into legal battles that quickly soar into the millions of dollars. The media often report some of the more extreme or sensational instances of plagiarism. This is especially true when the work in question has been published in a major newspaper, magazine, or refereed journal, or the author has been given a major award, such as a Pulitzer Prize.

Plagiarism diminishes the integrity and image of all involved in it—be it an individual, an institution, a business, or a society. Plagiarism can and should be avoided to encourage original thought, increase learning, enhance business effectiveness, and promote public integrity.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Copyright Infringement; General Agreement on Tariffs and Trade; Industrial Espionage; Intellectual Property Theft; Patents; Trademark Infringement; World Trade Organization.

Bibliography. Vibiana Bowman, *The Plagiarism Plague: A Resource Guide and CD-ROM Tutorial for Educators* (Neal-Schuman Publishers, 2004); Caroline Eisner and Martha Vicinus, eds., *Originality, Imitation, and Plagiarism: Teaching Writing in the Digital Age* (University of Michigan Press, 2007); Ann Gaines, *Don't Steal Copyrighted Stuff! Avoiding Plagiarism and Illegal Internet Downloading* (Enslow Publishers, 2008); Georgetown University Honor Council, *What is Plagiarism?* (Georgetown University Honor Council, 2006); Carol Peterson Haviland and Joan A. Mullin, *Who Owns This Text? Plagiarism, Authorship, and Disciplinary Cultures* (Utah State University Press, 2009); Rebecca Moore Howard and Amy E. Robillard, *Pluralizing Plagiarism: Identities, Contexts, Pedagogies* (Boynton/Cook Publishers, 2008); Legal Writing Institute, *Law School Plagiarism v. Proper Attribution* (Legal Writing Institute, 2003); John P. Lesko, ed., *Plagiary: Cross-Disciplinary Studies in Plagiarism, Fabrication, and Falsification* (Scholarly Publishing Office, University of Michigan Library, 2006); Purdue Online Writing Lab, *Avoiding Plagiarism,* owl.english.purdue.edu (cited March 2009); Wendy Sutherland-Smith, *Plagiarism, the Internet, and Student Learning: Improving Academic Integrity* (Routledge, 2008); WPA, *Defining and Avoiding Plagiarism: The WPA Statement on Best Practices* (Council of Writing Program Administrators, January 2003).

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Poland

Poland traditionally has been a major center of agriculture in eastern Europe, and in the late Middle Ages, it was one of the largest political entities in the region. In the early modern period, it started to develop some industrial potential with the location of coal and iron ore in Silesia, at that time a part of Austria. However, in 1740, Frederick II "The Great" of Prussia invaded and annexed Silesia, holding it through the War of the Austrian Succession that resulted. By that time, Poland was waning as a power, and with the three partitions (in 1772, 1792, and 1793), Poland ceased to exist as an independent entity, being divided between Russia, Prussia, and Austria. During the 19th century, Poland prospered and Warsaw became a major city in the Russian Empire, although it was devastated in World War I.

In November 1918 Poland emerged again as an independent country, bringing together lands previously held by Prussia, Russia, and Austria. It started to build up its economic base, with emphasis on heavy industry, and also a shipbuilding industry—the latter partly to secure the employment of people in the northern part of the "Polish Corridor." This helped sustain Poland in the 1920s and 1930s, with the country exporting much agricultural produce and also building up a significant shipping industry and merchant navy. In addition, Poland, for strategic reasons, had also established its own munitions industry. The German invasion of Poland in September 1939 and the subsequent Soviet attack wrecked the country, and by the end of World War II, most of the country was in ruins. The boundaries of the country also changed dramatically.

From 1945, the economy of Poland was under the control of Communists who introduced a system of central planning, and also placed a great reliance on heavy industry, exploiting the coal fields and iron, with the shipyards at Gdansk helping build up Poland's industrial base. Although the economic situation was relatively bleak, Poland was able to rebuild after the devastation in war, with full employment, although foreign observers claimed there was large-scale underemployment. It remained a part of the Council for Mutual Economic Assistance (COMECON) until 1991 when there were major changes in the Polish economy.

It had been labor demonstrations at the Gdansk shipyards that resulted in problems in 1970, and Edward Girek, who came to power during this period, started embarking on a policy of borrowing from foreign banks. This was partially successful, but there were still many underlying problems. In 1980 a new wave of protests at the Gdansk shipyards led to the emergence of Lech Walesa and the Solidarity Trade Union movement. Initially, the Polish government reacted harshly against Solidarity, but it was gradually forced to make concessions.

After the end of Communism in Poland in 1989, the new government introduced free market reforms and this resulted in large-scale unemployment, and in a surprise twist, the closing of many of the shipyards where the workers had forced concessions from the Communists in the 1980s. The new Polish government has seen its future as lying in closer relations with the West, and Poland joined the North Atlantic Treaty Organization (NATO) in 1999 and the European Union on May 1, 2004.

After a process of economic liberalization in the country during the 1990s and early 2000s, Poland has experienced one of the fastest rates of growth of any of the economies in central Europe, with an extensive private sector. There have been problems in the agricultural sector with the maintenance of many inefficient small farms, which have also been hurt by a lack of investment. However, for industry, with extensive industrial retooling, and beneficial export agreements, including the Generalized System of Preferences program helping Polish exports to the United States, Poland has significantly increased its export sector.

Poland has also been important for investors as it is part of the major road network, has a significant local economy of its own, and has some 250 million consumers within 1,000 km. of the country. Machinery and transport equipment make up 30 percent of the country's exports, with the remainder largely from intermediate manufactured goods, food (especially jams), and live animals. Some 30 percent of Poland's exports go to Germany, with German goods making up 24 percent of imports, which are largely made up of manufactured toys, and also chemicals.

See Also: Communism; Eastern Europe; European Union; Export; Generalized System of Preferences; Germany; Import.

Bibliography. Céline Allard and Anthony Annett, *Republic of Poland: Selected Issues* (International Monetary Fund, 2008); Gavin Rae Anglo, *Poland's Return to Capitalism: From the Socialist Bloc to the European Union* (Tauris Academic Studies, 2008); Frank Bönker, *The Political Economy of Fiscal Reform in Central-Eastern Europe: Hungary, Poland, and the Czech Republic From 1989 to EU Accession* (Edward Elgar, 2006); John S. Garland, *Industrial Co-operation Between Poland and the West* (University Microfilms International, 1985); Andrzej Korbonski, *Politics of Socialist Agriculture in Poland 1945–60* (Columbia University Press, 1965); A. T. Lane and Marian Wolanski, *Poland and European Unity: Ideas and Reality* (Wydawn Uniwersytetu Wrocławskiego, 2007); M. R. Myant and Terry Cox, *Reinventing Poland: Economic and Political Transformation and Evolving National Identity* (Routledge, 2008); Agnieszka Paczynska, *State, Labor, and the Transition to a Market Economy: Egypt, Poland, Mexico, and the Czech Republic* (Pennsylvania State University Press, 2009); Janusz G. Zielinski, *Economic Reforms in Polish Industry* (Oxford University Press, 1973).

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Polycentric

The term *polycentric* defines a decentralized organizational orientation having many centers of authority or control. This term usually refers to the assumptions and mind-sets of top managers and applies to firms with affiliates (or subsidiaries) in several different countries. Polycentric implies that the firm's conciseness has shifted from a single to a multiple country entity. In international management literature, the concept is attributed to Howard Perlmutter, whose work identifies three distinctive managerial orientations of internationalizing companies: the ethnocentric, polycentric, and geocentric. The three phases are generally considered to be progressive, whereby a firm begins from its original, ethnocentric home country orientation by which the focus and major commitment is to the domestic market and the typical structuring of any international operations is via an international division to the polycentric orientation and possibly to a geocentric world orientation whereby the firm seeks and deploys resources resulting in an integrated system around the world that rises above and beyond any national orientation to be truly global.

The polycentric is very much a host country orientation, dominated by the notion that the firm is substantially based in several different countries. According to Perlmutter, the key difference (or, perhaps, point of transition) between ethnocentric and polycentric phases is that in the latter the firm begins to identify with the foreign markets in which it now operates. It assumes that host country cultures are distinctive, making the ethnocentric, centralized, one-size-fits-all approach unfeasible. The polycentric mind-set assumes that local people know what is best for their markets and endeavors to delegate sufficient autonomy so that subsidiaries are managed as independent units and country management teams have the freedom to run their affairs largely as they see fit.

For example, local managers are more likely to understand the tastes of their customers, the realities of the local legal environment, and the availability of raw materials—so they should be responsible for customizing the marketing mix (product design, price, promotion, and distribution), negotiating their own contracts, and managing supplier relations at the local level. Also, local managers rather than home country expatriates are more likely to be given key management positions. This view alleviates the chance of cultural myopia and is often less expensive to implement than ethnocentricity, because it needs a lesser reliance on expatriate managers and less investment in centralized systems. There are, of course, several drawbacks to the polycentric approach. It can limit opportunities for local managers to gain overseas experience and thus limit career mobility for both local and foreign nationals. This can also result in headquarters managers (and staff in general) being isolated from foreign subsidiaries and reduces opportunities for sharing of ideas and resources across the multinational enterprises.

As an example of a polycentric firm, Charles Hill describes the evolution of Unilever's foreign subsidiaries into quasi-autonomous operations, or "little kingdoms," with strong national identities that resist interference from corporate headquarters. In their study of globalizing law firms, David Brock, Tal Yaffe, and Mark Dembovsky describe how European firms need to develop polycentric mind-sets in order to take advantage of potential benefits of scale and scope—like reputation, host country support, extension of product life cycles, and overseas know-how. Successful transition to polycentricism is crucial for the effective implementation of international diversification strategies in these contexts.

The choices of adopting these different world views are shaped by a number of factors such as the circumstances during which the company was formed, stage of development of international markets, the leadership style, administrative processes, and the organizational culture, myths and traditions. Perlmutter stated that these cultural orientations determine the way strategic decisions are made and how the relationship between headquarters and its subsidiaries is shaped. To continue successfully implementing the firm's internationalization strategy with a polycentric worldview, the overseas subsidiaries need to repay the corporation (and its shareholders) for the trust and autonomy. The multinational corporation looks for a return on investment in its foreign subsidiaries, as well as generally good use of the firm's brands and other intangible assets (like reputation). Pressures for a more geocentric approach will mount if the firm sees the benefit in reducing subsidiary autonomy in favor of a more global strategy involving more integration of subsidiary activities and systems.

See Also: Ethnocentrism; Geocentric; Globalization; Global Product Divisions; Home Country; Host Country; International Division Structure; Multidomestic Structure; Polycentric Human Resource Policy; Subsidiary; Unilever.

Bibliography. "Autonomy of Individuals and Organizations: Towards a Strategy Research Agenda," *International Journal of Business and Economics* (v.2/1, 2003); David M. Brock, Tal Yaffe, and Mark Dembovsky, "International Diversification Strategies and Effectiveness: A Study of Global Law Firms," *Journal of International Management* (v.12/4, 2006); Beth Fisher-Yoshida and Kathy Dee Geller, *Transnational Leadership Development: Preparing the Next Generation for the Borderless Business World* (American Management Association, 2009); Charles W. L. Hill, *International Business: Competing in the Global Marketplace* (McGraw-Hill Irwin, 2009); Stuart Paterson and David M. Brock, "The Development of Subsidiary Management Research: Review and Theoretical Analysis," *International Business Review* (v.11/2, 2002); Howard V. Perlmutter, "The Tortuous Evolution of the Multinational Corporation," *Columbia Journal of World Business* (v.4, 1969); Lowell Turner and Daniel B. Cornfield, *Labor in the New Urban Battlegrounds: Local Solidarity in a Global Economy* (ILR Press/Cornell University Press, 2007); Stephen Young and Ana Teresa Tavares, "Centralization and Autonomy: Back to the Future," *International Business Review* (v.13/2, 2004).

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Polycentric Human Resource Policy

The term *polycentric* is derived from the Hellenic (Greek) word *πολυκεντρικός*, a composite word that consists of the term *πολύ*, which means multi, and the term *κέντρο*, which means center. Hence, the term suggests an attitude that adopts multiple points of view. Multinational corporations that adopt a polycentric approach tend to respect and take into account the host culture in their operations abroad, including their human resource policies.

Under a polycentric human resource approach, policies and systems that are used in the home country are reconsidered to take into account the work culture and traditions of the host countries. Alternatively, popular human resource systems in use in the host countries are kept with some adaptation to the principles and philosophy of the headquarters. The idea is that particular systems and policies have been developed within particular cultures because they fit these cultures best. Hence, to achieve maximization in the added value of human resources in the host operations, local systems have to be respected and preserved. Therefore, the polycentric approach to human resource management pays maximal attention to local factors. The approach is in line with evidence suggesting that cultural factors limit the transferability of human resource systems across national boundaries.

A trademark characteristic of the polycentric human resource approach is the employment of host country nationals in key positions in operations abroad. Reasons for adopting a polycentric approach in the staffing of operations include the following:

1. Host country expectations and regulations. In many cases host country governments impose strict regulations on multinational corporations, including regulations regarding the percentage of the workforce that should be host country nationals.
2. Insufficient numbers of qualified home country nationals (expatriates) to fill professional and managerial positions in host countries. As internationalization and globalization become more potent, multinational corporations further expand their operations outside their home countries, which means that they need increasing numbers of qualified staff. However, the home country is unable to meet this demand, and, therefore, they have to consider local nationals for their staffing needs.
3. The high cost of expatriates. An expatriate may cost up to five times more than the respective incumbent in the home country, which renders the use of expatriates very expensive. Because of increasing demands of multinational corporations for qualified managers and professionals, exclusive use of expatriates for key positions in operations abroad becomes unduly expensive or not feasible. The alternative route is the employment of host country nationals, who normally cost a fraction of the cost of expatriates.
4. Host country nationals' knowledge of local culture and language as well as connections with key institutions and individuals in the host country. Knowledge of local language and culture, including how to deal with institutions, government agencies, and officials, are critical issues for the success of operations abroad. In most cases locals are able to assist in this domain.
5. Public relations exercises and the need, in certain cases, for multinational corporations to promote the image of offering opportunities to local nationals and promoting local talent.
6. The increasing levels of education in the workforces of most developing countries, where many multinational corporations choose to establish operations. This increases the pool of

qualified managers and professionals from the host country.

Although the polycentric approach has certain advantages, including greater fit of human resource policies with the local culture, increased cost efficiency, and greater potential access to local institutions and officials, it also has disadvantages. A disadvantage ensues when multinationals pay excessive attention to local cultural factors and ignore common elements between home and host cultures. This may lead to unnecessary duplication of effort (e.g., the development of different human resource systems for each host operation in cases where single centrally developed systems may be sufficient). This is illustrated by the case of American Express, which at some point was experiencing problems with the performance appraisal forms in its operations abroad. American Express initially attributed the problems to cultural differences between the home (United States) and the host countries and was set to redesign the appraisal forms it was using in its operations abroad. However, further consideration indicated that the U.S. operation also experienced similar problems with the appraisal forms. Hence, the cause of the problem did not lie in cultural factors but in the initial design of the forms.

See Also: Ethnocentric Human Resource Policy; Expatriate; Geocentric Human Resource Policy; Multinational Corporation; Polycentric.

Bibliography. Paul W. Beamish and Andrew C. Inkpen, "Japanese Firms and the Decline of the Japanese Expatriate," *Journal of World Business* (v.33, 1998); Nikos Bozionelos, "Mentoring and Expressive Network Resources: Their Relationship With Career Success and Emotional Exhaustion Among Hellenes Employees Involved in Emotion Work," *International Journal of Human Resource Management* (v.17/2, 2006); Nikos Bozionelos and L. Wang, "An Investigation on the Attitudes of Chinese Workers Toward Individually Based Performance-Related Reward Systems," *International Journal of Human Resource Management* (v.18/2, 2007); Randi Lunnan et al., "Global Transfer of Management Practices Across Nations and MNC Subcultures," *Academy of Management Executive* (v.19/2, 2005); Arvind V. Phatak, *International Dimensions of Management* (Dame, 1994); Oded Shenkar and Mary Ann von Glinow, "Paradoxes of Organizational Theory and Research: Using the Case of China to Illustrate National Contingency," *Management Science* (v.40/1, 1994).

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Portugal

Civilization can be traced in Portugal back to neolithic times, through the settlements of the Phoenicians, Carthaginians, and Romans. Later, the Christian "reconquista" halted the Muslim advance and colonization of the country and gave rise to the maritime empire that provided for economic growth in the 15th and 16th centuries. This, in turn, was followed by a period of Spanish domination and occupation during the Napoleonic wars. By this stage, Portugal had lost much of its power and influence.

It was not until the end of the 19th century that poor living standards and inept government precipitated a republican backlash. The monarchy was finally overthrown on October 5, 1910, replaced by a republic. However, the political scene was far from stable. From 1910 to 1946, military intervention became the normal means of governmental change in Portugal. A Catholic monarchist, General António Óscar Carmona, emerged as president and remained in office until 1951. During this period, Portugal had many of the trappings of a fascist state, including secret police and tacit support for Franco during the Spanish Civil War.

It was also during this period that Antonio de Oliveira Salazar first served as prime minister in 1932. Salazar is often credited as being the guiding hand of Portuguese development and its progress to a modern economy. Indeed, from 1950 until Salazar's death, it is estimated that gross domestic product (GDP) per capita in Portugal rose at an average rate of 5.66 percent per year, well ahead of European counterparts. Salazar remained in power until 1968, when he suffered a stroke. He died in 1970.

The continuing economic and political problems of the right-wing government caused tensions to grow and resulted in an almost bloodless left-wing coup, led by disenchanted army officers on April 25, 1974. However, until November 1975, the situation remained precarious, with various factions vying for power. The summer of 1975 saw elections and victory for the socialist party under the leadership of Mario Soares. This signalled the beginning of a period that has seen gradual strengthening of democratic processes and further integration of Portugal into the European economy. In 1986 Portugal joined the European Community (EC), giving it access to funding and the potential for much-needed economic growth.

For administrative purposes, Portugal is divided into 18 districts and 2 autonomous regions (the Azores and Madeira), and in 2008 the population of Portugal is estimated to be approximately 10.5 million. The president is the head of state, elected by popular vote, with a five-year term. The leader of the majority party or the majority coalition is appointed prime minister and head of government by the president and leads the unicameral Assembly of the Republic. The assembly comprises 230 seats, with members elected to serve a four-year term. In the elections of February 20, 2005, the Portuguese Socialist Party was the biggest winner, with 121 seats.

The Portuguese economy has developed gradually over the last 20 years, and like many Western economies, it has diversified and become increasingly service based. The basis of this change has been policies, similar to the Thatcherite policies dominant in the United Kingdom in the 1980s, which have seen privatization of public sector organizations and liberalization of key markets.

At the turn of the millennium, the economy appeared to falter, with a widening gap in GDP per capita and a corresponding fall in living standards. The budget deficit increased from 4 percent of GDP in 2004 to 6 percent in 2005. In 2005 growth was also a major problem, running at only 0.5 percent of GDP. By 2007 GDP per capita was around two-thirds of the European Union (EU) average. One of the reasons for this could be increased competition for Portuguese business following the accession of lower-cost east European states into the EU. It is also interesting to note that in 1998 Portugal, along with 11 EU partners, joined the European Monetary Union (EMU), and the euro began circulating in January 2002.

A number of problem areas have been identified. These include poor standards of attainment at upper-secondary and tertiary education levels; regulatory restraints creating barriers to competition; an inefficient and protected public sector; a complicated tax system; and employment protection legislation that provides too much protection and causes inflexibility in labor markets. The new government of José Sócrates agreed in 2005 with the European Commission to reduce the budget deficit to below the threshold of 3 percent of GDP stipulated by the criteria for EMU by 2009. It recognized that solving these problems was central, and the government endeavored to tackle each one, although the latter one appears to be more problematic.

By 2007 statistics showed that the economy was growing at a higher and sustainable pace of 1.9 percent, driven wholly by the private sector. Export growth in traditional goods, business services, and technology was improving and also moving beyond traditional markets, and unemployment started to decrease in the second quarter of 2007. The budget deficit was reduced to under 3 percent of GDP in 2007, and public spending as a percentage of the GDP had also decreased. While there is more work to do, the government has placed Portugal in a more secure position to withstand the swings in the global economy.

See Also: Euro; European Monetary Union; European Union; Newly Industrialized Countries; Privatization.

Bibliography. Rui Baptista, Vitor Escaria, and Paulo Madruga, "Entrepreneurship, Regional Development and Job Creation: The Case of Portugal," *Small Business Economics* (v.30/1, 2008); Herman Z. Bennett, *Competitiveness in the Southern Euro Area: France, Greece, Italy, Portugal and Spain* (International Monetary Fund, 2008); Annette Bongardt and Celeste Amorim Varum, *Competitiveness Factors: A Portuguese Perspective* (Instituto Nacional de Administração, 2007); CIA, "Portugal," *World Factbook*, www.cia.gov (cited March 2009); Michael Derrick, *The Portugal of Salazar* (Gates of Vienna Books, 2009); A. R. Disney, *A History of Portugal and the Portuguese Empire* (Cambridge University Press, 2009); Keiko Honjo, Andréa Lemgruber Viol, and Yuan Xiao, *Portugal: Selected Issues* (International Monetary Fund, 2007); J. M. Magone, "Portugal," *European Journal of Political Research* (v.45, 2005); Organisation for Economic Co-operation and Development, "Progress in Responding to the 2007 Policy Priorities: Country Notes" (OECD, 2008).

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Positioning

A marketing term, positioning is the act of memorably and positively anchoring a product, service, idea, individual, or experience in the minds of customers (including prospective customers). A product that is well positioned is widely perceived by the target audience as possessing distinctive, unique, and appealing features. As a result, it is not easily confused with other products, even those that occupy a similar category. Effective positioning, therefore, is critical to a product's success, because this marketing tool helps a product stand out from competitors' offerings.

While the concept of product positioning has a long history, rooted in the packaged goods industry, the perceived importance of positioning, along with a broadened understanding of the term, gained notable ground in the late 1960s and early 1970s largely because of the work of advertising executives Al Ries and Jack Trout. Ries and Trout claimed that in the modern age of heightened marketing noise and prolific advertising messages assaulting people's senses, it was more crucial than ever for a firm to pay attention to developing a solid positioning strategy for its product, one that would cut through the clutter. They also contended that anything could be positioned—not just products, for instance, but also individuals and ideas.

In 1972, in the influential trade magazine *Advertising Age*, Ries and Trout proclaimed that the "Positioning Era" had arrived, and they coauthored a series of articles exploring that topic. These articles eventually became the basis of their bestselling book, *Positioning: The Battle for Your Mind*. A critical, and controversial, tenet of their book was that positioning was not so much what a marketer does with a product, but what a marketer does to the mind of the prospect. In other words, the process of effective positioning requires marketers to get inside people's heads to understand which messages, or combination of messages, are most likely to resonate and break through the barrage of competing messages. While Ries and Trout were firm advocates of positioning and encouraged its practice, positioning, seen in this light, could be negatively perceived as a form of mind manipulation. Adroit marketers who understood how to tap into consumer psychology purportedly might be able to entice people to buy an item not necessarily because it was truly the best product but because it was packaged, promoted, and positioned in such a way as to trigger a purchase decision that was more emotional than rational. Effective positioning and ethical positioning are not, therefore, necessarily always synonymous.

In their quest to garner consumers' attention to their products, marketers often use a variety of positioning tactics and tools, such as perceptual positioning maps. The purpose of positioning maps is to illustrate how consumers perceive a certain product with regard to specific buying criteria (like price and performance) in relation to how they perceive competitors' products on those same criteria. As Philip Kotler and Gary Armstrong have explained, marketers often use positioning maps to help them design a strong positioning strategy that emphasizes the points of distinction that consumers will find most important.

Another positioning tactic is crafting a message that dovetails with people's preexisting ideas and preferences. Ries and Trout contended that this is often easier and more effective than trying to convince people to change their minds. As they also emphasized, thoughtfully naming a product is also crucial, as is disseminating an overly simplified message. With regard to the latter tactic, the theory is that short and simple messages are necessary in order to capture the attention of the masses who are being bombarded with thousands of other claims for their attention.

There may be some truth underlying this theory that simple is better. In a recent study conducted by digital video recorder maker TiVo, the television advertisements that viewers were least inclined to skip were not particularly creative or complex; they were low-budget advertisements that contained basic messages that were well tailored to their audiences. Nevertheless, marketers who propound such simple positioning messages sometimes have been accused of taking a pessimistic view of the average person's intelligence as well as the average person's willingness to expend the time and energy necessary to work through more complicated and nuanced messages.

Although much of the literature on positioning in the 1970s and 1980s focused on teaching marketers how to get the masses to pay attention to their messages, it would be a mistake to view positioning as an action always directed toward a mass audience. In fact, the rise of positioning also led a renewed focus on target markets and segmentation. As many marketers have discovered, in a crowded, noisy marketplace, it often is easier to craft a positioning statement that resonates if marketers narrow the size of their intended audience and then fine-tune their message to that specific group.

Positioning also reinforces the importance of not just target marketing, but also branding, as both positioning and branding emphasize the need for product differentiation. In addition, marketers' emphasis on positioning fosters attention on the importance of an organization developing a sustainable long-term strategy and a distinctive, inspiring mission.

With consumers today being bombarded with increasingly large numbers of marketing messages and a stunning array of products from which to choose, effective positioning remains a challenge. The louder the marketing noise in society, the more difficult it is for organizations to break through the clutter, and hence the more important it is for them to hone a well-defined, clear position for their products that will transcend that noise. Ironically, though, the difficulty of creating a memorable spot generally increases in such a competitive and loud environment.

Of course, an organization has an advantage on the positioning front if it is the first to introduce a product or service. If the whole point of positioning is to create a memorable anchor in consumers' minds, it helps to get there first. Yet, even an innovative firm with a new product may fail to position itself effectively, committing such errors as focusing its advertising on product features that consumers do not perceive as important or that consumers simply do not understand. For various reasons, many firms find it necessary to engage in repositioning. The original message may have been flawed, not resonating with consumers at the time it was introduced. Or, perhaps the entrance of new competitors into the field may necessitate a firm redefining its message and articulating more clearly its points of distinction.

Positioning therefore is an ongoing process, not just something that is done at the inception stage of marketing a product, service, or idea. Organizations and marketers today widely hail the importance of not just achieving but also retaining an effective position in a crowded, noisy, and constantly changing marketplace.

See Also: Advertising, Branding, Marketing.

Bibliography. Ronald T. Cenfetelli, Izak Benbasat, and Sameh Al-Natour, "Addressing the What and How of Online Services: Positioning Supporting-Services Functionality and Service Quality for Business-to-Consumer Success," *Information Systems Research* (v.19/2, 2008); Allison Enright, "The Art of Reis," *Marketing News* (March 1, 2006); Giep Franzen and Sandra E. Moriarty, *The Science and Art of Branding* (M. E. Sharpe, 2008); Burt Helm, "Which Ads Don't Get Skipped?" *BusinessWeek* (September 3, 2007); Graham J. Hooley, *Marketing Strategy and Competitive Positioning* (Financial Times Prentice Hall, 2007); Philip Kotler and Gary Armstrong, *Principles of Marketing* (Prentice Hall, 2009); Esko Penttinen and Jonathan Palmer, "Improving Firm Positioning Through Enhanced Offerings and Buyer-Seller Relationships," *Industrial Marketing Management* (v.36/5, 2007); Al Ries and Jack Trout, *Positioning: The Battle for Your Mind* (McGraw, 1981); Jing Wang, *Brand New China: Advertising, Media, and Commercial Culture* (Harvard University Press, 2008).

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Power Distance

Geert Hofstede identifies five cultural dimensions that assign mathematical scores designating a particular country's beliefs about each of the dimensions. The five cultural dimensions are Power Distance (PDI), Individualism (IDV), Masculinity (MAS), Uncertainty Avoidance Index (UAI), and Long-Term Orientation (LTO). Hofstede defines the PDI by stating, "the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally." Today, Hofstede's studies and PDI have had several implications for the U.S. business world and have been the basis for countless additional academic studies on varying cultural indicators.

Power distance is shown as a representation of inequality; however, it needs to be defined from below, not from above. Power distance "focuses on the nature of human relationship in terms of hierarchy." It is said that there are specific traits that can be linked to high and low power distance. For high power distance, these traits are that "power is a fact of life, everyone has a specific place, those in power emphasize position, respect for authority, and centralized authority." On the other hand, the traits for low power distance are "class structures, no set hierarchy, those in power minimize position, respect for individuality, and decentralized authority." As you can see, the characteristics for high and low power distance seem to be complete opposites.

When stating that power distance should be defined from below, it means that "a society's level of inequality is endorsed by the followers as much as the leaders." The concepts of power and inequality are common to any society. Any person who has some international experience should be conscious that not all societies are equal; some tend to be even more unequal than others. In Hofstede's original study with IBM, the scores for the first four dimensions were obtained for 50 countries and three regions. Scores on the fifth dimension were derived from 23 countries from student data. The "power distance scores are high for Latin, Asian and African countries and smaller for Germanic countries." When focusing on the United States, they score "a 40 on the cultural scale." This is because they have a more imbalanced allocation of wealth compared to other societies. "As the years go by it seems that the distance between the 'have' and 'have-nots' grows larger and larger."

Some research studies have suggested that you can predict power distance by factors such as climate, population size, and wealth. The degree of power distance a country has leads to various consequences for its population. When referring to cultures with high power distance, you may see that "their language is filled with power of hierarchy indicators." Specific behaviors may also be expected. For instance, people must comply with authority. It does not matter if it is to a boss, parent, or official; it is still expected. In cultures that have low power distance, there is an apparent "emphasis on challenging decisions, expecting autonomy and independence."

The PDI, like the other cultural dimensions, is calculated through a questionnaire using business employees from each individual country. Scores range from 1 to 100 where >70 is generally considered high and <40 is considered low. As of right now, over 70 countries have been included in Hofstede's study, which took place between 1967 and 1973. The United States received a score of 40 on its PDI, which is low when compared to the world average of 55. Countries possessing high PDIs include China (80), Panama (95), Guatemala (95), and India (77). Therefore, U.S. employees view themselves more on a level playing field with their bosses, placing less emphasis on the variance in power associated with different levels within a hierarchy.

Managers must be aware of power distance and the corresponding scores of the employees they work with both abroad and domestically. For example, a U.S. manager working in a factory in Guatemala should exhibit a more authoritarian style of leadership as the domestic employees expect their managers to instruct and guide them in their work processes. This again can be contributed to the Guatemalan employees ranking high on power distance. Since the introduction of Hofstede's study in the 1970s, the results have come a long way from being used only in a business and managerial context.

Other Applications

The PDI has other applications and has been the basis for several other studies. These studies have consisted of topics, such as ethical management, student/faculty communication, women in political positions, teamwork, suicide rates, health risks, and safety in relation to national cultures. One thing to keep in mind is that these studies have not only impacted the United States, but a large number of countries worldwide have also bought into Hofstede's findings.

A study came out in 2007 that took samples from 10 regions in the United States, Canada, and Mexico that examined the relation of culture and the propensity for internal reporting and whistle-blowing. Results showed that countries with a high PDI and authoritarian environments discouraged the use of an internal reporting system. In addition, it was found that countries possessing a high PDI demonstrated a "positive propensity to whistle-blow." Therefore, in this case, managers who are more familiar with PDI and the cultural links to ethics management will be better able to generate more effective ethics strategies.

Additional studies using PDI include a study that looked at 53 different regions investigating if Hofstede's cultural dimensions can indicate whether enrollment rates can affect the career and income of women in the regions studied. Studies found that PDI "has an influence on the positions held by women in the government." As a result, a higher PDI indicates that women will hold a lower percentage of government/political positions. Another study looked at the impact of power distance on culturally diverse teams. The study focused on two teams, Alpha and Beta, which each consisted of four members from different countries. Alpha contained members from countries with a low PDI, whereas Beta contained members from countries with a high PDI. Researchers found that in regard to team Alpha, "low power distance was one factor that enabled team Alpha to avoid potential conflicts due to miscommunication." Team Alpha also used a decentralized decision-making process of consensus versus a revolutionary power struggle for determining leadership. Other studies concluded that countries with a high PDI showed a positive correlation with safety in relation to national culture, more formal communications between students and faculty, and a lower probability of cardiac death over the next 20 years of employment.

Hofstede's studies and PDI have caused U.S. managers to reconsider their methods of management and have been used to support countless additional academic studies on varying cultural indicators.

See Also: Cross-Cultural Research; Cultural Norms and Scripts; Hoftstede's Five Dimensions of Culture; Leadership Management; Management Development; Management Education; Management Research; Management Science.

Bibliography. Anne Kari Bjorge, "Power Distance in English Lingua Franca Email Communication," *International Journal of Applied Linguistics* (v.17, 2007); Hoi Yan Cheung, "How Culture Affects Female Inequality Across Countries: An Empirical Study," *Journal of Studies in International Education* (v.11, 2007); Edward Conduit, "Submissiveness and Risk of Heart Disease," *Cross-Cultural Research* (v.35, 2001); Rian Drogendijk and Arien Slangen, "Hofstede, Schwartz, or Managerial Perceptions? The Effects of Different Cultural Distance Measures on Establishment Mode Choices by Multinational Enterprises," *International Business Review* (v.15/4, 2006); Jon Ivar Havold, "National Cultures and Safety Orientation: A Study of Seafarers Working for Norwegian Shipping Companies," *Work & Stress* (v.21, 2007); Geert Hofstede, "Geert Hofstede Cultural Dimensions," www.geert-hofstede.com (cited March 2009); Bradley L. Kirkman, Kevin B. Lowe, and Cristina B. Gibson, "A Quarter Century of Culture's Consequences: A Review of Empirical Research Incorporating Hofstede's Cultural Values Framework," *Journal of International Business Studies* (v.37/3, 2006); Brent MacNab et al., "Culture and Ethics Management: Whistle-Blowing and Internal Reporting Within a NAFTA Country Context," *International Journal of Cross Cultural Management* (v.7, 2007); Trena M. Paulus, "Power Distance and Group Dynamics of an International Project Team: A Case Study," *Teaching in Higher Education* (v.10, 2005); Floyd Webster Rudmin et al., "Questions of Culture, Age and Gender in the Epidemiology of Suicide," *Scandinavian Journal of Psychology* (v.44, 2003).

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Pricing

A company engages in a pricing activity when it attempts to determine the best price at which it can sell its product. This is one of the basic elements of the marketing mix. Typically, the company will aspire to find the optimal price to maximize revenues. This might imply having a high price per unit or a low price and selling many units, making profits through volume. Companies choose pricing strategy (such as premium pricing, skimming, economy, and penetration) they believe will generate the most profit, and they will choose the final price according to a price model such as cost-plus pricing, target-return pricing, value-based pricing, and psychological pricing. Some companies employ price cuts to encourage sales or to liquidate stocks.

A company that wants to determine its pricing will need to estimate market demand for the product, current cost structure of the product, and competitor pricing as well as the positioning of the product. The last item is crucial, because positioning will often determine if a product will be priced high or low. For example, if a company decides that the product will be sold as a luxury item, the pricing will be high. But if they decide to make money through volume, the price will be very low. Cost structure is also very important to ensure the company does not sell its products below production cost. Cost structures include production, promotion, and distribution. Once all the elements have been determined, and the company objective has been decided, the company can determine the pricing model.

Other concerns that can affect product pricing include perishability (perishable products have less shelf life, hence must be priced to maximize sales) and life cycle (new products can use multiple pricing strategies, whereas older products are usually limited to economy pricing).

Pricing Strategies

When determining pricing, the company must choose whether the product will be priced at a cost-plus or value-based structure. As such, four main pricing strategies exist: premium pricing, skimming, economy, and penetration.

A premium price implies that the product is of high quality and can justify an elevated price. The company will be able to demand a high price (or command premium pricing) because of the perceived uniqueness of the product. For example, companies selling products for which they have market exclusivity (because of a patent or a trademark) usually employ premium pricing. A good example is Rolex watches, which are perceived as status symbols and command a higher price than products of similar quality.

Skimming pricing is used when a new product enters a market for which a competitive advantage exists but for which the advantage is not sustainable. The advantage is not prestige, but rather technological in nature. As such, the company targets early technology adopters. For example, when the iPod was first sold in U.S. markets, Apple was able to sell its product at an elevated price; as technologically equivalent competitors entered the market, Apple was unable to justify the high price and had to drop it to compete with new competitors.

Economy pricing is used to price goods that have low cost and low differentiation. Basic commodities usually use economy pricing. Hence, the company tries to increase margins with volume sales rather than a high per-unit profit. Private labels that are developed by retail outlets are an example of economically priced goods.

Finally, penetration pricing is usually employed by a company that seeks to gain quick market share to establish a foothold in a market. For example, if a company wanted to develop a new geographic segment, they might be willing to sell their goods at a lower rate than usual to gain market recognition. Prices would be adjusted in time accordingly.

When pricing, businesses have to take into account such factors as competition, market conditions, and even perishability.

Complex Pricing Strategies

Pricing is often much more complex than the simple strategies discussed previously. As such, various complex models are used by companies. For example, some companies use captive pricing, wherein the initial purchase is low (penetration strategy) and subsequent purchases are elevated (premium pricing). Printers are a very good example of this hybrid strategy; whereas the initial purchase will be quite inexpensive (the printer), the following purchases (the ink cartridges) will usually be quite expensive. Other hybrid strategies include product bundling pricing (selling a premium item with economy items to move slow-moving items) or optional pricing (selling an economy product with premium options, which is often found in products such as cars). As such, the pricing strategy is limited only by the company's creativity.

Pricing Models

Once a pricing strategy is chosen, a pricing model must be determined. The four main pricing models are cost-plus pricing, target-return pricing, value-based pricing, and psychological pricing. Cost-plus pricing occurs when a company decides that the price of the item it wants to sell should be set at a fixed amount higher than the cost to produce. So, for example, a company for which a product costs $10 to produce could decide to apply a cost-plus pricing of 50 percent; hence it would sell its products for $15. Although cost pricing is simpler to implement, it does not take into account market demands and competition.

A company that chooses target-return pricing determines the sales objective it wants to reach. For example, a company that wants to achieve $1 million in net sales for its product may estimate it can sell 100,000 units this year, and the product costs $10 to produce. Hence, the final pricing of the product will be $10 (cost) and $10 (return per product unit) for a total cost of $20 per unit. Nonetheless, there is circular reasoning in target pricing; because the number of sales affects pricing, which, in turn, affects the number of sold units, it is mostly used in "stable" competitive environments.

Value-based pricing is commonly used when the company is in a very competitive market and needs to price its product relative to competitors. Hence, the product is priced according to competing products. For example, if competitors are selling a similar product at around $12, the product will have to be priced around the same price range (depending on market elasticity).

Finally, some companies use psychological pricing models when selling their products. Hence the price of their product will be a mix of popularity, perceived quality, and what the customer is willing to accept. Luxury items are the most often priced this way. For example, some running shoes are often priced upward of $150 per pair, even though costs to manufacture are relatively negligible and competing products of similar quality can be found much cheaper. In this case, customer willingness to pay $150 justifies the pricing model. This pricing model requires the most market knowledge, because it is quite easy for a company to overestimate consumer willingness to pay a premium and to price itself out of the market.

Although companies usually set a fixed price, there are a number of situations where they will engage in pricing discount. These techniques include quantity discounts (where prices are lowered when items are purchased in bulk), seasonal discounts (where prices are lowered depending on the season goods are purchased), cash discounts (where a rebate is offered to companies who pay their bills early), and promotional discounts (short-term discounts given to stimulate sales, often to clear out inventory or to regain market shares).

See Also: Brand Loyalty; Distribution; Market Audit; Market Development; Marketing; Market Research.

Bibliography. Chenghuan Sean Chu, Phillip Leslie, and Alan T. Sorensen, *Nearly Optimal Pricing for Multiproduct Firms* (National Bureau of Economic Research, 2008); Pascal Courty and Mario Pagliero, *Price Variation Antagonism and Firm Pricing Policies* (Centre for Economic Policy Research, 2008); Oded Koenigsberg, Eitan Muller, and Naufel J. Vilcassim, "EasyJet Pricing Strategy: Should Low-Fare Airlines Offer Last-Minute Deals?" *QME-Quantitative Marketing and Economics* (v.6/3, 2008); J. Paul Peter and James H. Donnelly, Jr., *A Preface to Marketing Management* (McGraw-Hill Irwin, 2000); Akshay R. Rao, Mark E. Bergen, and Scott Davis, "How to Fight a Price War," *Harvard Business Review* (March 2000); Oz Shy, *How to Price: A Guide to Pricing Techniques and Yield Management* (Cambridge University Press, 2008).

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PRINCE Analysis

The PRINCE model was designed in 1969 by William D. Coplin and Michael K. O'Leary as an analytical system for forecasting decision outcomes. Initially built as a Programmed International Computer Environment (PRINCE), it was first used in an American foreign policy simulation run on mainframe computers. In their book *Everyman's PRINCE*, Coplin and O'Leary demonstrated applications in family decisions, neighborhood policy development, city politics, national economics, and international business. In *Power Per-*

suasion, they describe how to use the system to achieve personal and business goals in corporate settings. Beginning in 1979, the PRINCE forecasting method has been used as a basis for projecting 18-month and 5-year political risk as a part of the Political Risk Services (PRS) risk model. PRINCE is used to project the probabilities of primary, secondary, and tertiary "regimes" (governments) for which risk is forecast for 12 political variables in the PRS system.

Beginning with a theoretical projection by the chief analyst of the likely outcome of the decision, PRINCE analysis involves the systematic use of expert data to build a projection matrix. Experts providing the basic data input are generally expected to have language capability, roughly 20 years experience in the country or region, 5 years of residence in the country, and to be giving continuous attention to the country. Academic analysts, former foreign service and intelligence officers, corporate executives, reporters, and others with this experience are generally the experts being used. They are asked to provide data for five variables that make up the PRINCE matrix (see example below).

1. Actors or players involved in the decision in some way. These actors may be individuals, groups, or ministries within the government, or opponents of the government, as well as individuals or groups within the society as a whole, such as businesses, unions, or ethnic organizations. Actors may also include foreign individuals or institutions, such as the International Monetary Fund or foreign governments. The number of actors may vary from country to country and may vary between 18-month and 5-year forecasts. The actors are simply listed down the left column of the matrix. Determining who the actors are is a research project in and of itself and involves a thorough understanding of the society and how it works.
2. Orientation or position on the issue. This indicates whether, in the expert's view, each actor supports or opposes the outcome being forecast. Support for the outcome is indicated by a + (plus) sign, opposition by a – (minus) sign. This is a simple dichotomous declaration. If an actor is neutral, there is no point in including the actor in the matrix configuration.
3. Certainty of the position. For group players, certainty is a function of the extent to which there is consensus of support or opposition among the membership. Certainty is measured on a scale ranging from 1 (little certainty) to 5 (extremely high certainty). Individuals likewise can be uncertain in varying degrees on a decision, but this is more difficult for the expert to determine. Where a group vote or poll can determine group uncertainty, for individuals, competing or even contradictory statements might be the indicator. The expert will have had to read the actor's views carefully.
4. Power. This indicates the degree to which each player can exert influence, directly or indirectly, to support or oppose a particular outcome relative to all other players. A player's power can have a variety of bases, and the exercising of power takes many forms. Power may be based on such factors as group size, monetary contributions, physical resources, institutional or personal authority, prestige, political skill, or dedication to the cause ("little old ladies in tennis shoes" as in the 1960 Kennedy election). Power is measured on the same scale as Certainty, ranging from 1 (little power) to 5 (extremely high power).
5. Priority or salience on the issue. This indicates the importance attached to supporting or opposing a particular position, relative to all other concerns facing that player. For example, while a group may want to have President Evans reelected, it may be more important to them to gain a majority in the country's parliament, and they may choose to use their resources there instead of in the presidential race. Salience is measured on a scale ranging from 1 (little importance) to 5 (extremely high importance).

The variable scores are multiplied and totaled in positive and negative columns, and the positive scores are weighed against the absolute total on decision strength to determine the probability of the outcome initially theorized. PRS rounds the probabilities to the nearest 5 percent (so, the figure of 61 percent in the example would be rounded to 60 percent).

The PRINCE model for the 18-month projection is a relatively simple multiplicative model, which weighs certainty, power, and salience equally. The five-year forecast involves building on the 18-month forecast, adding national and global forces as actors. One of the strengths of the model is that it can be easily modified by changing the scales or adding variables according to an alternative theory. However, over the last 40 years, the PRINCE model as it stands has proven to be consistent and useful in the PRS political risk forecasting process.

See Also: Country Screening; Decision Making; Forecasting; Management Science; Risk; Risk Management.

Bibliography. William D. Coplin and Michael Kent O'Leary, *Everyman's PRINCE: A Guide to Understanding Your Political Problems* (Duxbury Press, 1976); William D. Coplin and Michael Kent O'Leary, with Carole Gould, *Power Persuasion: A Surefire System to Get Ahead in Business* (Addison-Wesley, 1985); Llewellyn D. Howell and Brad Chaddick, "Models of Political Risk for Foreign Investment and Trade: An Assessment of Three Approaches," *Columbia Journal of World Business* (v.29/4, 1994); Political Risk Services, "The Prince Model," in *The Handbook of Country and Political Risk Analysis,* Llewellyn D. Howell, ed. (PRS Group, 2001); PRS Group, www.prsgroup.com (cited March 2009).

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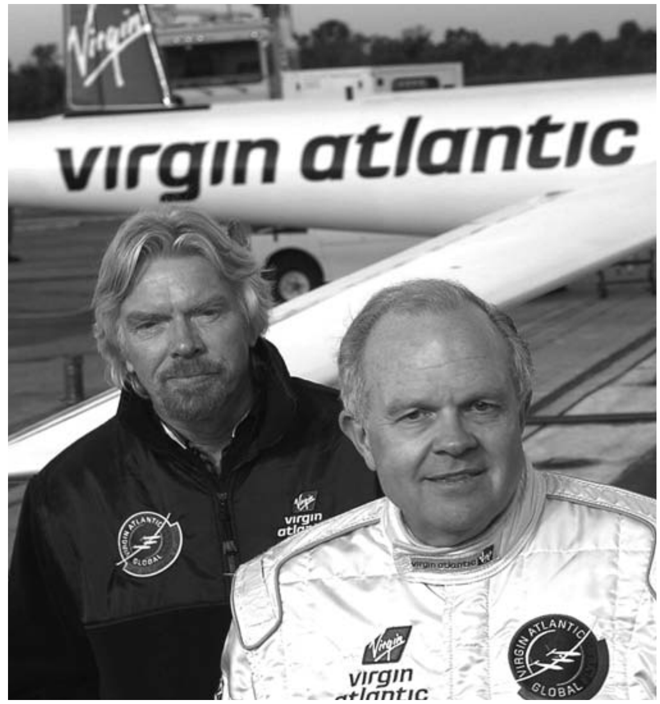
Private Spaceflight Industry

Although nothing about spaceflight inherently demands government involvement, in the first generations of successful spaceflight only national governments had the resources necessary to pursue it; even the first commercial satellites were launched with government-owned rockets. Even now, more than 50 years after the launch of Sputnik, the only profitable commercial use of space is in satellites (and manufacturing and other contracting on behalf of government clients). But the long-term success and safety of reusable spacecraft like NASA's space shuttle, combined with the reduced cost of computing power and other advanced technology, has led to a still-developing private spaceflight industry.



Sir Richard Branson (left) of Virgin Galactic and pilot Steve Fossett with a test aircraft at Kennedy Space Center in 2006.

Europe led the way in spaceflight deregulation, creating Arianespace in 1980 as a commercial space transport agency. American deregulation began in 1984 with the Commercial Space Launch Act, which legalized the private operation of expendable launch systems. But throughout the 20th century, private spaceflight remained unmanned—expendable rockets used to launch satellites into space, but no reusable or passenger flights. That has lately begun to change.

Toward the end of the century, the Russian space program began taking private citizens—paying tourists—into space as a way to offset their operating expenses; the trips were arranged by various private corporations, beginning with MirCorp. Currently the Virginia-based company Space Adventures arranges trips on Russian spacecraft to the International Space Station for fees in the millions of dollars.

The first privately funded spacecraft was launched in 2004: SpaceShipOne was a spaceplane (a concept often proposed within the aerospace industry but never explored in the public sector due to the popularity of the shuttle), launched to suborbital altitudes. It was developed by Mojave Aerospace, a joint venture between Microsoft cofounder Paul Allen and the aviation company Scaled Composites. Months later, Virgin signed a deal with Mojave to develop the spacecraft for Virgin Galactic, the first passenger space travel company. While ventures like MirCorp charged fees in the neighborhood of $20 million, Virgin's tickets sell for only one percent of that—with prices expected to drop after the company recoups expenses. The SpaceShipTwo is being designed for this purpose, with seats for two pilots and six passengers, for flights that will include six minutes of weightlessness.

Though Virgin will likely be the first major venture to begin flights, it is not alone in the field. There are now dozens of companies developing suborbital or orbital commercial flights, while Space Adventures now offers space walks on its International Space Station trips.

See Also: Barriers to Entry; Commercialization of Space.

Bibliography. Jonathan Goodrich, *The Commercialization of Outer Space: Opportunities and Obstacles for American Business* (Quorum Books, 1989); Edward Hudgins, *Space: The Free-Market Frontier* (Cato Institute, 2003); F. Shahrokhi, J. S. Greenberg, and T. Al-Saud, *Space Commercialization* (American Institute of Aeronautics and Astronautics, 1990).

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Privatization

Privatization is a transfer of management, ownership, and/or control of any aspect of an enterprise from the public (governmental) sector to the private (nongovernmental) sector. The term (spelled *privatisation* in the United Kingdom and most Commonwealth countries) is very broad, encompassing a wide range of activities and/or assets and methods of transferring those activities from public to private entities.

Privatization runs a gamut from large scale to small scale and from full public transfer to the private sector to more limited partial transfer. The purest example of privatization is the outright sale of a governmental asset or operation to a private corporate entity. Infrastructure assets such as roads and power-generating facilities are often in this category, having in many cases been built, owned, and operated by the government, which then decides, perhaps many years later, to sell the asset to a private operator. The asset may be directly sold, in which case the method of transfer is referred to as an asset sale; alternatively, the shares of an incorporated entity that holds the asset for the government may be floated on public share markets, or those shares may be sold to selected private entities, in which case the method of transfer is referred to as a trade sale.

An alternative method of public-to-private transfer is the concession or lease arrangement. For example, suppose a government decides to transfer a public commuter rail to a private entity. As noted above, the government could sell the rail line directly (an asset sale) or sell the shares of a governmental corporate entity that owns the rail line (a trade sale). A third alternative is for the government to retain ownership of the rail line but lease the line to a private entity for some period of time, after which the line reverts back to public ownership. This arrangement would constitute a lease or concession agreement. If the lease term is long enough (20 years or more; 75- or 99-year leases are quite common in the infrastructure field), the government has de facto (i.e., in fact), though not de jure (i.e., by law) transferred ownership because of the long-term control exercised over the asset by the private entity through the lease. Leases and concession agreements can have many different legal provisions, and through these provisions, the degree of privatization can be modified. For example, shorter or more-limited lease terms can allow the governmental owner to retain more management control over the privately managed asset.

Leasing is an example of a widely used method of privatization known as *contracting out*. In contracting out, a service or activity (as opposed to an asset) is paid for by the government but is provided, by means of a service agreement, through a private entity. Almost any conceivable example of public service has been provided in this way, though some, such as garbage collection and information technology services, are more widely contracted out by governments than others, such as police protection. *Outsourcing* is another label often used to designate contracting out, though the former term is broader in that it is used for both public-to-private transfers of responsibility as well as private-to-private transfers. If the service is outsourced to a provider in another country, then it is sometimes referred to as *offshoring*.

This continuum of privatization has led to development of the term *public-private partnership* (PPP), which is often used synonymously. A broad definition of PPP refers to working arrangements based on a mutual commitment between a public sector organization with any organization outside the public sector. The common theme between privatization and a PPP is some sort of blending of private and public institutions and missions. However, privatization refers to some definite transfer of activity or authority from the public to the private sector, whereas a PPP can also include joint public-private efforts that do not involve such a transfer.

Privatization can be completed in one step or completed through a series of intermediate steps. Corporatization, in which a public operation is first transferred to a new corporate entity that is governmental but is typically run outside governmental budget and policy frameworks, is often a framework used for ultimate privatization. For example, when the Australian central government decided to privatize a number of airports that it owned and operated, it first transferred ownership of and responsibility for those airports to the Federal Airports Corporation (FAC). The FAC operated these airports for a few years before putting them up for sale, mostly using trade sales. Even if corporatization is a final outcome, the final effect may be much the same as privatizing if that corporation operates much like a private company, even though technically a governmental entity retains ownership and control.

Privatization has become widespread throughout the world with, however, a wide variation across industry sectors and countries. One study of transfers of state-owned enterprises (SOEs) to private corporations from 1977 to 1999 counted 2,459 deals in 121 countries, worth approximately US$1.11 trillion. (An SOE is a governmental corporation that is nominally operated as a company but that is typically majority-owned and usually controlled by a central government.) Surveys of government managers in the United States have found large numbers of respondents, indicating outsourcing of a wide range of programs in areas as diverse as wastewater to health services.

Rationales

Governments choose to privatize for numerous reasons, the major stated rationales being that the private sector operates more efficiently and cost-effectively than the public sector in many instances, that government can achieve better overall outcomes by focusing on its core missions and core competencies while giving peripheral activities and programs outside its skill set to capable private operators, that privatization allows access to private capital that would otherwise be unavailable, that the method shifts risk to market-based entities better able to handle them, and that greater flexibility in operations is achieved.

Maintenance of the public interest is a prime concern with any privatization, and this constitutes one of the main counterarguments against its use. It is not a given that the public interest will be maintained when private parties with perhaps countervailing interests take over. A related issue is that of equity. Private operators are generally return driven and may be inclined to charge market rates and/or cut costs to maximize returns. This may be inequitable if service cuts or charges fall on groups deemed to be disadvantaged.

In general, economists note that there is a difference between an actual gain in resources and a mere transfer of resources from one party to another in which case government budgets may see a gain but other parties, such as labor unions or consumers, might see a loss. This is especially a problem where a natural or other monopoly exists (e.g., an electrical or telecommunications utility) and in which price and quality is not subject to much competition. Privatization can be said to enhance efficiency only if the gains are above and beyond any shifts of resources across different groups.

There is no a priori case for or against privatization that prevails, so the matter rests on evidence and this is mixed. There are examples of very successful privatizations that have delivered superior incomes for both public and private sectors (e.g., Japan Rail, mostly completed by the 1960s), those that did poorly on both counts (e.g., the initial privatization of British Rail), and many much more ambiguous cases. Probably the most overall successful set of privatizations has been the transfer of SOEs to private enterprises. Many privatized SOEs were running large losses, and being corporate in organization, there seemed to be little economic reason to keep them in public hands. Even here, however, there have been failures, even transfers back to the public sector in a few cases.

In general, it is clear that privatizations, being negotiated arrangements between governmental and nongovernmental entities, will be successful only if the agreements are sound and well implemented and, in some cases, regulated afterward. Some transfers, such as an SOE, will be relatively straightforward to sell to the private sector, while others, such as complex public services, will be more difficult to arrange successfully. Privatizations certainly have wide applicability and do offer one of many alternatives for governments to use in providing services, but to work they need to be designed properly and may not always be the best available method of reform.

See Also: Infrastructure; Internationalization; Nationalization; Off-Shoring; Outsourcing; Regulation; State-Owned Enterprises.

Bibliography. Daniel Berkowitz and Jonathan Holland, "Does Privatization Enhance or Deter Small Enterprise Formation?" *Economic Letters* (v.74/1, 2001); Bernardo Bortolotti, Marcella Fantini, and Domenico Siniscalco, "Privatization Around the World: Evidence From Panel Data," *Journal of Public Economics* (v.88, 2003); Ingrid J. Hagen and Thea S. Halvorsen, *Global Privatization and Its Impact* (Nova Science Publishers, 2009); Graeme A. Hodge, *Privatization: An International Review of Performance* (Westview Press, 2000); Sunita Kikeri and John Nellis, *Privatization in Competitive Sectors: The Record to Date* (World Bank, 2002); Ira W. Lieberman and Daniel J. Kopf, *Privatization in Transition Economies: The Ongoing Story* (Elsevier JAI, 2008); William L. Megginson, *The Financial Economics of Privatization* (Oxford University Press, 2005); Gérard Roland, *Privatization: Successes and Failures* (Columbia University Press, 2008); Andrei Shleifer, "State Versus Private Ownership," *Journal of Economic Perspectives* (v.12/4, 1998); J. Vickers and G. Yarrow, "Economic Perspectives on Privatization," *Journal of Economic Perspectives* (1991).

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Procter & Gamble

Procter & Gamble (P&G) is an American consumer packaged goods corporation headquartered in Cincinnati, Ohio. It manufactures a wide range of consumer goods such as Ivory soap, Crisco oil, Tide detergent, Crest toothpaste, and Gillette razors. In 2007 it was the 25th largest U.S. company in terms of revenues, with $76.5 billion in sales and close to $10.3 billion in total revenues. P&G was created in 1837; its products are present in more than 180 countries. These products are sold primarily through mass merchandisers, grocery stores, membership club stores, drug stores, and, soon, e-retailing. P&G is credited with many business innovations, including brand management, sponsoring television shows, and profit-sharing with its employees, and it is constantly ranked as one of the world's most admired companies.

Procter & Gamble was founded in Cincinnati in 1837 by William Procter (a candle maker) and James Gamble (a soap maker). The company produced both candles and soap for the better part of the 19th century, but it moved away from producing and selling candles with the advent of electricity in the 1920s. Soap continued to be an important revenue stream for P&G. At one point, the company sold over 30 different brands of soap; Ivory, one of P&G's most recognized brands, made its appearance during the late 19th century.

P&G continued expanding its operations into other consumer products such as cooking oil (Crisco), health products, cleaning products (Tide), and toothpaste (Crest). Simultaneously, P&G expanded international operations, opening manufacturing offices in Canada (1915), Mexico (1948), France (1954), and Saudi Arabia (1961).

The company has had a long tradition of organic growth for its product line, but it shifted its strategy to complete a series of acquisitions in the second half of the 20th century to broaden its product line. These acquisitions included Folgers Coffee, Old Spice, Richardson-Vicks, and Iams Company. The latest acquisition was the Gillette Company, which made P&G the biggest consumer goods company in the world. It also added many household name products to P&G's product line such as Gillette razor, Duracell batteries, and Oral-B toothbrushes. In 2007, 23 of P&G's brands had more than a billion dollars in net annual sales, and another 18 products had sales that ranged between $500 million and $1 billion.

Since 2007 the company has been structured into three global business units (GBUs). Each of these GBUs is responsible for its own business segments. The first is the Beauty GBU, which includes both the Beauty and the Grooming Segment. The Household GBU comprises both the Baby & Family Care Segment and the Fabric Care and Home Care Segment. The third Unit, Health & Well-Being, includes the Health Care and the Snacks, Coffee, and Pet Care Segments.

Contributions to Management Practices

Procter and Gamble is often described as a key innovator in the way companies interact with their consumers. Hence, they are believed to be among the first companies to engage in brand management as well as media sponsorship. P&G created its marketing department in 1931. The department focused on creating specific brand messages for each of the company's products. It also invested heavily in marketing research so P&G could understand how to make its products much more appealing to the consumer. Both of these approaches, quite common today, were revolutionary when they were developed by Procter & Gamble.

Following these developments, market research found that there was an opportunity in sponsoring radio shows. These shows became known as soap operas (a tribute to Procter & Gamble's soap product lines). In the 1930s, P&G heavily sponsored radio shows, and progressively moved to sponsoring television shows in the 1950s. Two of the first series P&G sponsored (*As the World Turns* and *Guiding Light*) are still on the air today and are produced by a division of P&G called Procter & Gamble Productions. This approach to sponsorship and production extended into many other types of shows, including prime-time shows (such as *Our Private World*), comedy series (such as *Down to Earth*), as well as supporting many Spanish-language *novelas*. Even today, P&G continues to invest heavily in soap operas as a major marketing channel.

On the employee relationship side, P&G developed some remuneration programs that were uncommon at the time. In 1887 it established a profit-sharing program for its workforce, hoping that giving a stake in the company to workers would reduce chances of them going on strike. It continued to incorporate the interest of workers into its constituting charter, and continues today to be viewed as a prime location to work.

See Also: Advertising; Branding; Johnson & Johnson; Marketing; Profit-Sharing.

Bibliography. Davis Dyer, Frederick Dalzell, and Rowena Olegario, *Rising Tide: Lessons From 165 Years of Brand Building at Procter & Gamble* (Harvard Business School Press, 2004); Ingird Farasyn, Koray Perkoz, and Wim Van De Velde, "Spreadsheet Models for Inventory Target Setting at Procter & Gamble," *Interfaces* (v.38/4, 2008); Jay R. Galbraith, *Designing Matrix Organizations That Actually Work: How IBM, Procter & Gamble, and Others Design for Success* (Jossey-Bass, 2009); Tuomas Sandholm et al., "Changing the Game in Strategic Sourcing at Procter & Gamble: Expressive Competition Enabled by Optimization," *Interfaces* (v.36/1, 2006); Brian Steinberg, "P&G Comes to Rescue of Soaps on the Ropes," *Advertising Age* (January 2008).

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Procurement

Procurement can be simply defined as the acquisition of goods and services for the firm at the "best" price. Procurement includes sourcing (identifying and working with appropriate suppliers) and purchasing (the specific functions associated with the actual buying) and covers all the activities necessary to obtain goods and services consistent with user requirements from the placement of an order through to its delivery.

Companies procure direct goods that go straight into the production of a product, such as coffee beans or rubber; indirect goods that do not directly go into a product, such as office supplies and furniture; and services that support the production process or the supply chain, such as warehousing, distribution, or information systems. Purchased parts and materials may account for over 60 percent of the cost of finished goods. Procurement is therefore one of the primary activities related to the supply chain.

A major element when developing a procurement strategy is the establishment of links between the company and its suppliers. To sustain these links communication and proximity are the keys. Today many suppliers work alongside their clients in product-design development from the very beginning of the production process, and to minimize inventory levels and support Just-in-Time (JIT) systems, have moved closer to their customers, sometimes on the same industrial park. Many companies have instituted certification and award programs to recognize their best suppliers.

The development in IT systems is having a major impact on procurement activities. The most common technology used is electronic data interchange (EDI) that involves the electronic transmission of data (e.g., purchase orders, order status, tracking, and tracing information) between a firm and its suppliers. Another e-procurement application is the development of electronic catalogues, allowing buyers rapid access to product specifications and prices. Buying exchanges or e-marketplaces are another development. They represent cooperative efforts among companies, frequently competitors, to deal with their common base of suppliers. A process used by e-marketplaces is the reverse auction, where suppliers bid on order contracts. When the auction is closed, the company can compare bids on the bases of purchase price, delivery time, and supplier reputation for quality.

According to John Coyle, Edward Bardi, and John Langley, there are 11 steps in the procurement process: identify new or existing needs of the users; define and evaluate user requirements; decide whether to make or buy; identify the type of purchase (routine purchase, modified rebuy, new buy); conduct a market analysis to determine the number of suppliers in the market and which method of buying (e.g., negotiation, competitive bidding) might be most effective; identify all possible suppliers that might be able to satisfy the user's needs; prescreen all possible sources to reduce the number of possible suppliers to those that can satisfy the user's demands; evaluate the remaining supplier base; choose a supplier; receive delivery of the product or service; and make a post-purchase performance evaluation.

Some products or services purchased by a company are more important than others and require greater procurement attention. Products may be placed in a two-by-two matrix on the basis of value and risk. Four different categories can be found: Generics are low-risk, low-value goods that typically do not enter the final product (e.g., office supplies). The procurement process should be simplified to reduce the purchasing cost. Commodities are low-risk, high-value goods that are fundamental to the finished product (e.g., bolts or packaging) but with many sources of supply. Procurement strategies include volume purchasing to reduce price and JIT to lower inventory costs. Critical items are high-risk, low-value goods that pose a threat to continued operation (e.g., parts with a long lead time). Strategies include ensuring availability and developing a standardization program moving these items to generic. Finally, strategic items are high-risk, high-value items that give the final product a competitive advantage in the marketplace. Close and long-term supplier relationships should be looked for.

Products and services may be sourced from around the world. The main advantages of local/national sourcing are close cooperation, lead times not affected by transport delays, short lead times may eliminate inventory, fulfilment of social responsibilities to the local community, easier resolution of disputes. Global sourcing may allow for lower costs but risks are often higher and companies have to be aware of cultural differences, variable lead times resulting from shipping schedules or storms at sea, lower quality, use of child labor, higher costs of doing business, laws and regulations, and nontransparent costs (such as procurement costs, management time, plant visits).

A final issue relates to the number of suppliers. A single supplier may allow for better prices or an easier establishment of EDI and JIT links but may also be regarded as a risk. The trend in sourcing today is to have fewer suppliers and to build better relationships with them.

See Also: Corporate Social Responsibility; Electronic Commerce; Electronic Data Interchange; Make-or-Buy Decision; Risk; Supply Chain Management.

Bibliography. Peter J. H. Baily, *Procurement Principles and Management* (Prentice Hall Financial Times, 2008); Fernando Bernstein and Francis de Vericourt, "Competition for Procurement Contracts With Service Guarantees," *Operations Research* (v.56/3, 2008); Thomas A. Cook, *Mastering Purchasing Management for Inbound Supply Chains*

(Productivity Press, 2009); John Coyle, Edward Bardi, and John Langley, *The Management of Business Logistics* (Thomson, 2003); M. Jose Garrido, Ana Gutierrez, and Rebeca San Jose, "Organizational and Economic Consequences of Business E-Procurement Intensity," *Technovation* (v.28/9, 2008); Robert M. Monczka, *Purchasing and Supply Chain Management* (South-Western, 2009); Jeffrey P. Wincel, *Lean Supply Chain Management: A Handbook for Strategic Procurement* (Productivity Press, 2008); Joel Wisner, Keong Leong, and Keah-Choon Tan, *Principles of Supply Chain Management* (Thomson, 2005); H. Yan, S. L. Tang, and G. Yen, "Quick Response Procurement Cost Control Strategy for Fabric Manufacturing," *International Journal of Production Research* (v.46/17, 2008).

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Product Component Model

Product component models are part of bill of materials (BOM) management. The BOM describes the materials, assemblies, parts, and components required to manufacture a particular final product, like the list of ingredients and equipment at the header of a recipe in a cooking magazine. BOMs are prepared toward various ends—during the design phase of a project, as the product is built, or when it is ordered, for instance, depending on the product and the industry. They're especially handy for products produced on an assembly line. Database software can often automate the process of generating a BOM.

Modeling techniques are used to manage BOMs. A complicated product—a circuit board, for instance, or an automobile—has many components, both independent and interdependent, and factors such as the final size, shape, weight, or cost of the product may impact changes to many components when one component is changed. A scarcity of a component could necessitate this, or new regulations or standards, or the availability of an improvement that replaces an old component. The product can be complicated in ways other than its physical construction, as well, as in the ingredients used in a commercial flavoring blend, which may shift in proportion to one another according to the prices on the global market or the capsaicin content of the season's crop of chile peppers.

During the modeling process, the components of the product are defined in three ways. The BOM identifies a raw list of parts, with quantities of each. Subassemblies are then defined: Subassemblies are the configuration of specific parts together, in operations that need to be performed before those subassemblies are then integrated into the final product. Subassemblies are familiar to anyone who has assembled his or her own furniture or bicycle at home. In the recipe analogy, subassemblies are the butter and sugar creamed together before adding the flour and baking soda that were combined in advance. The configuration of the product—the recipe for putting it together from those subassemblies—is then outlined.

In this terminology, a batch of cookies is an assembly or product, and the instructions for how to create them is its configuration, headed by the BOM; the butter and sugar, a subassembly; the other ingredients, if no manipulation is done to them before adding them to the bowl, are components. A commercial cookie company might model different ingredients on the computer—not for taste, which can be tested in the test kitchen, but in order to calculate the cost, complexity, and dietary information of different possible recipes.

The BOM is complemented by the bill of quantities (BOQ) and bill of resources (BOR). The BOQ delineates the cost of the labor and materials necessary to build or repair a structure. The BOR itemizes the resources required to complete a product, especially toward the end of advance arrangement of resources that are in short supply or have limited availability.

See Also: Manufacturing; Manufacturing Strategy.

Bibliography. L. Hvam, "A Procedure for Building Product Models," *Robotics and Computer-Integrated Manufacturing* (v.15, 1999); H. Peltonen, "Concepts and an Implementation for Product Data Management," *Acta Polytechnica Scandinavica, Mathematics and Computing Series* (n.105, 2000); D. Svensson and J. Malmqvist, "Strategies for Product Structure Management at Manufacturing Firms," *Journal of Computing and Information Science in Engineering* (v.2/1), 2002).

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Product Development

Product development refers to the process of creating new goods and services or modifying existing goods and services. Why do companies develop products? Companies have financial, sales, and market share goals; products can be developed to reach these goals. In addition, companies can initiate product development to respond to rivals' actions, to commercialize an invention, to get benefit of a new technology, to get involved in global markets, or to modify the product with respect to its life-cycle phases. Being a source of revenue, and thus profit, goods and services are the heart of any business. Nowadays, technologies have been changing very quickly, and this rapid change brings new technologies that ultimately result in changes in products by shortening their life span. Therefore, product development is crucially important for both domestic and international companies, because successful new products increase company revenues.

To be successful in developing new products and modifying existing products, companies need to be able to answer various questions: Does a new or modified product satisfy customers' perceived needs? Is it likely to survive in the competition? How will the competitors fight back? What is the size and growth of the (target) market? Is the company a market leader or follower? What are the monetary and engineering requirements to develop the product, and how capable is the company in meeting these requirements?

Marketing plays an important role in answering some of these questions, and in product development. Technology will be used to create products that consumers need and want; in addition, products should be positioned and competitively priced in a way to meet market needs and expectations. When a marketing element in product development is missing, products may not be effectively engineered and priced. Therefore, marketing helps effectively design and develop products.

Product development can be classified into two categories, the development of new goods and services that were not available earlier and the development of the existing products through modifications. For instance, cell phones and laptops with new features that were not available earlier can be examples of the second category of product development. Both types of product development are important. The first type introduces a new product and service, and if these are successful, the company is expected to lead the industry. However, this leadership is contingent on how successfully the company develops, upgrades, and modifies the new product through time against the attacks of rivals.

In today's business environment, competition becomes more and more intensified every day. Companies struggle to decrease production costs, increase productivity, develop new products, modify existing products, acquire or partner with other companies, construct close relationships with their suppliers, expand across national borders, and follow and adopt the latest technology. The major goals of these practices are no doubt to survive in a competitive business environment and to create and sustain competitive advantage over rivals.

Although all these practices are important, perhaps product development is more important than others, because products are the sources of revenues and are crucial to successful and increased company growth and profit. Companies can get the latest technology, hire good employees, expand overseas markets, and engage in partnerships with other companies. In these instances, money is important. However, developing products requires much more than money.

There are essential questions to be answered. How to come up with some potential ideas to be converted into physical goods and services? What products to develop? How to develop products? What features to include? Is there really demand for it? Is it profitable? Is it strategic? How long does it last? These and many other related questions are not easy to answer. That is why product development is very difficult, costly, and risky. Nevertheless, the success in product development is very rewarding.

A company successful in developing a product can easily be a market leader, set standards, and be a unique brand in the market. A good example in this regard would be Microsoft with its operating system that has been leading the industry and has become a unique brand among operating systems. Therefore, product development is very important in surviving and leading in today's competitive business environment.

Product Development Process

Product development is a process consisting of opportunity identification, design, testing and improving, and introduction. Product development approaches can be classified in two ways: reactive and proactive product development. When companies develop products just to respond to rivals' actions, this is a reactive way of approaching product development; however, when companies develop products under a strategic plan and according to their perceptions of the market's current and future needs, then this is a proactive way of approaching product development. There is no single answer as to which one is the best way of initiating product development; conditions may determine the appropriate type.

The first step in the product development process is opportunity identification. Market definition is important in this step, because it shows the boundaries and scope of the competition. Markets can be defined using different criteria such as products competing with each other, customer needs, demographics, attitudes, preferences for product benefits, price, decision rules, usage, product form, and so forth. Ultimately, the market definition will be useful in identifying the related customer groups or segments, in finding the customers and determining their basic needs and habits, as well as in understanding competing products within the segments. Idea generation involves formulating creative ideas that will be converted into products having value for customers in the markets defined earlier. Creative ideas can come from many different sources, such as employees, managers, customers, suppliers, environments, and company departments, such as research and development departments. These product ideas are then subjected to strict analyses to see whether they are feasible, useful, and appropriate for the company objectives.

The second step in the product development process is the design stage, which involves the identification of key values the product will offer, the positioning of these values versus those of competitive products, and the development of physical products, marketing strategy, and service policy to accomplish these values. Customers buy products based on their judgment of the product's ability to satisfy needs. The aim in the design stage is to identify the needs and priorities of consumers and develop an appropriate design to deliver and communicate values to satisfy consumers' needs. Some keys features of the design stage are that a new product becomes a tangible entity and is psychologically positioned. In addition to its features, how customers think of it (positioning) is important. The design is iterative and integrative; product design requires many attempts in which the design is evaluated, refined, and modified. Therefore, different organizational departments such as production, marketing, research and development, and engineering should work in a cooperative manner.

The next step in the product development process is the testing phase, which involves advertising and product testing, pretest and prelaunch market forecasting, and test marketing. The quality of advertising content is important in creating awareness and communicating the product. Through advertising testing, a good ad can be selected among many available alternatives; in addition, advertising testing can provide managers with insights into whether a particular ad is sufficient for a new product introduction. Product testing involves an analysis of whether the product performs or delivers its intended benefits; this test can be useful in identifying product deficiencies and thus improving the product. Laboratory tests, expert evaluation, and customer tests are some ways of conducting product testing.

After the test of the product design with respect to its physical and communication features, the integrated new product also needs to be tested. This test can give managers a more precise conjecture so that potential failure risks can be minimized or prevented. However, a pretest market analysis can be beneficial if the company is able to obtain enough accurate predictions, if the analysis can be done without using a large number of resources, if new knowledge to improve the product can be obtained, and if the cost of such an analysis is within the budget of the testing. At the end of this analysis, the company expects to obtain a forecast of sales and diagnostics. Some ways of implementing pretest market analysis are judgment and past product experience, trial/repeat measurement, laboratory measurements, and attitude change analysis. The last test in the testing phase is test marketing that is targeted at acquiring market information to reduce risk and improve the product. Test marketing is actually introducing the product to a limited number of customers in a number of cities representative of the country and/or at controlled stores.

In the last step, if all tests have been successful, then the product is approved and ready to be introduced to the market. At this point the company has a physical product, advertising, personal selling tactics, promotion plans, price, distribution channels, and service procedures in place. There are two alternatives with respect to the introduction phase if a test market was not implemented: introduction under a quick adaptive control system and market by market introduction to control the failure risk. Learning from the customer feedback and production experience is the key in such introductions. In addition, an effective coordination of production and marketing activities is necessary to ensure all the components of the introduction work properly and are timely.

The product development process becomes the product life cycle management process with the product introduction. Like people, products have different periods in their life: introduction, growth, maturity, decline, and death. The life cycle begins with the introduction; as the product becomes successful, there will be more demand and the product will grow until the demand reaches its highest level, called the maturity phase, or market saturation. After a while, the demand will decline as the product is not demanded anymore, and the company will sooner or later stop producing the product. There are many strategies to manage the product throughout its life cycle. However, these are beyond the scope of this entry.

In sum, product development is a strategic process, and product development and design activities are important corporate tools that are essential to wealth creation. However, product development involves risks and uncertainties; it can be very costly and can last years in some industries, for example, in the aviation and pharmaceutical industries. In addition, product development is complicated; the management of products themselves, their sales and sustainability, and their environmental impacts are not easy to manage. However, a very carefully planned management of the product development process can increase the likelihood of success. Companies that are able to compress or shorten their product development cycles are also in a more advantageous position.

See Also: Consumer Needs and Wants; Entrepreneurship; Market Audit; Product Life Cycle Hypothesis; Research and Development; Risk Management.

Bibliography. Michael Z. Brooke and William R. Mills, *New Product Development: Successful Innovation in the Market Place* (International Business Press, 2003); Margaret Bruce and Wim G. Biemans, *Product Development: Meeting the Challenge of the Design-Marketing Interface* (Wiley, 1995); Dan Dimancescu and Kemp Dwenger, *World-class New Product Development: Benchmarking Best Practices of Agile Manufacturers* (AMACOM, 1996); Nukhet Harmancioglu, Regina C. McNally, Roger J. Calantone, and Serdar S. Durmusoglu, "Your New Product Development (NPD) Is Only as Good as Your Process: An Exploratory Analysis of New NPD Process Design and Implementation," *R & D Management* (v.37/5, 2007); Kenneth B. Kahn, *The PDMA Handbook of New Product Development* (Wiley, 2005); Stylianos Kavadias and Christoph H. Loch, *Handbook of New Product Development Management* (Elsevier Butterworth-Heinemann, 2008); Michael N. Kennedy, *Product Development for the Lean Enterprise: Why Toyota's System Is Four Times More Productive and How You Can Implement IT* (Oaklea Press, 2008); Elko J. Kleinschmidt, Ulrike de Brentani, and Soeren Salomo, "Performance of Global New Product Development Programs: A Resource-Based View," *Journal of Product Innovation Management* (v.24/5, 2007); Anil Mital, *Product Development: A Structured Approach to Consumer Product Development, Design, and Manufacture* (Elsevier Butterworth-Heinemann, 2008); Glen L. Urban and John R. Hauser, *Design and Marketing of New Products* (Prentice Hall, 1993); Steven C. Wheelwright and Kim B. Clark, *Leading Product Development: The Senior Manager's Guide to Creating and Shipping the Enterprise* (Free Press, 1995).

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Productivity

Productivity is a measure of how efficiently a company, industry, or society uses inputs, or factors of production (e.g., labor, energy, capital) to generate products and services. A number of methods can be used to measure productivity. In a factory, productivity might be measured based on the number of man-hours to produce a good, and in the service sector, a common measure of productivity would be revenue per employee, that is, the total amount of revenue

Technology in the workplace is having a significant impact on productivity, especially in the United States. In 2008 over 75 percent of economic growth came from technological change; by 2030 it may account for 80–90 percent of a country's economic growth.

generated by an employee divided by that employee's salary. It should be noted that, because output is more difficult to measure in the services sector, productivity measurements in that sector tend to be less reliable than is the case in manufacturing.

Productivity is a central issue in global business. Productivity is driven by a number of forces, including technological and organizational innovation, interest rates and availability of capital for investment, the level of entrepreneurialism within a society, and, more recently, scale and effectiveness of outsourcing activity undertaken by a society's corporate community in order to realize economies of specialization. Because it is a crucial component in the degree of competitiveness of one country relative to another, productivity is an important indicator of how attractive a country is as a host for foreign direct investments as well as how able one country will be in gaining foreign markets.

The Industrial Revolution from the mid-19th to the early 20th century saw an unprecedented rise in productivity, first in England and then within the United States. Labor-saving technology, innovation in organizing work and process flow, and the coming of the mass production revolution continually raised the upper limit of efficiency with which factors of production were used to create final products and services. Productivity grew, not simply because of the introduction of new types of production technology onto the factory floor, but also in the ability of enterprises to effectively link this technology to all phases of business operations, including supply, distribution, and marketing.

By the 1970s, certain industries that regularly expanded their productivity, such as power generation, reached the technological limit to these increases. Similar barriers to productivity growth are anticipated in computers and information technology by 2020. At that point, semiconductor chips reach the point of diminishing returns to specialization and Moore's Law begins to break down. Another technological revolution will then be required, involving a new generation of advanced materials and hardware to break through these barriers and set semiconductors on a new path of expanding productivity.

Within the United States, the trend rate of labor productivity in the post–World War II period went through three phases: rapid growth—annual average rate (AAR) of 3.2 percent—from the late 1940s to 1973; slower growth (AAR 1.5 percent) from 1973 to 1994; and an acceleration in growth (AAR 2.5 percent) from 1995 to 2005. The two decades following the war saw rapid and effective development of productivity-enhancing innovation, part of which originated prior to and during World War II. The decline in productivity during the 1970s and 1980s came in the wake of a technological slowdown by the large corporations in such traditionally productivity-enhancing areas as petrochemicals, advanced materials, and mechanical systems, in part the result of increasing costs of R&D; it was also because of the continued inability of companies to effectively integrate the output of an emerging information and communications sector (ICT) across the functional areas of business activity.

The acceleration of productivity in the 1990s, especially within the United States, resulted from a resurgence of technological innovation, not from the large corporations as in the past, but from small start-up firms—supported by an increasingly specialized venture capital community—and licensing the fruits of research conducted by universities and government laboratories. These innovations, such as a new generation of advanced materials that started coming on line in the late 1980s, fed into the ICT sector, also composed of a growing proportion of innovative small and medium-sized firms. This technology transfer between sectors, in turn, pushed the memory capacity of, and thus the number of functions accomplished at faster speeds by, a new generation of ICT hardware to ever higher levels. At the same time, it opened the way for a significant reduction in the costs in the production of semiconductors, resulting in sharply falling prices in ICT equipment and systems.

By the 1990s, the business community invested in ICT equipment and software as never before. It integrated the technology throughout companies, thus linking together different functional areas all along the supply chain, from cash registers linked to bar code systems and connected to inventory control units in warehouses to computers and peripherals connecting different floors within buildings and different facilities across the United States and globally. The implementation of ICT systems across business operations accelerated productivity in such areas as data processing, inventory control, and Just-in-Time (JIT) delivery.

Productivity, Economic Growth, and the Competitive Advantage of Nations

The ability of a country to achieve economic growth, and so compete globally, closely shadows productivity trends. In the first place, slack productivity growth prevents resources from being generated and used in the most effective manner. Thus, critical resources are wasted that could be applied to augmenting opportunities for improving the material qualities of life and this dampens prospects for robust economic growth. Conversely, robust productivity increases private purchasing power and, through an expanding tax base, the prospects of heightened government services for technology creation, infrastructure, education, healthcare, and other important factors driving economic growth. Higher productivity also reduces inflationary pressures since the economy could (theoretically) grow at a faster rate without fear of widespread price increases. In general, long-term productivity growth is commonly viewed as the speed limit for sustainable economic growth.

Comparing productivity trends in the United States vs. the European Union (EU), we find that the United States has surged ahead of Europe, especially during the 1990s. In terms of gross domestic product (GDP) per worker and GDP per hour, the United States, by 2000, exceeded European productivity by 20 percent. Starting in 1990, growth of real GDP in the United States was greater than that of both the EU (and Japan as well) by 25 percent to 30 percent. Because of its achievements in productivity growth from the 1990s, stemming for the most part from its technological leadership, the American economy has been growing faster than the economies of many European countries, and of the EU as a whole. From 1980 to 2005, the economic growth rate for the EU averaged 2.1 percent—with a number of major economies such as Germany doing considerably worse on average—in comparison with an average annual rate of 3 percent for the United States. Indeed, despite the elimination of trade barriers and the close economic integration resulting from the single market, the EU continued to lag behind, and significantly so, the United States as an economic performer, with several EU members—including Germany, France, and Italy—close to economic stagnation during this period

A number of reasons can be brought forward to account for this global discrepancy in productivity, economic growth, and competitiveness. These include the EU's constraint by inflexible labor markets, rising energy prices, and increased competition from Asia. Cultural differences regarding leisure time as an influence on productivity differences also come into play; the significantly greater number of hours dedicated to work in the United States appears to be one component in America's production gains. However, even when these factors are taken into account, the divergence in productivity between the United States and the EU remains, indicating the primary importance of U.S. technology creation and implementation across business functions to productivity growth.

Over the next two decades, technology is expected to play an even greater role in driving productivity gains and, in turn, economic growth within and between nations. In the 1970s, less than 50 percent of economic growth came from technological change. In 2008 this figure has increased to over 75 percent; by 2030 it is estimated that new technology will account for between 80 percent and 90 percent of a country's economic growth. Assuming that the technical barriers imposed by the limits of Moore's Law can be scaled, information and communication technology (ICT) systems and their implementation across business operations will continue to dominate the industrialized and emerging economies. However, energy and biotechnology innovation will generate an increasing proportion of productivity (and economic) growth, especially within the developed part of the world.

See Also: Economic Indicators; Economies of Scale; Global Competitiveness Index; Technology; Working Hours.

Bibliography. R. G. Anderson and K. L. Kliesen, "The 1990's Acceleration in Labor Productivity: Causes and Measurements," *Review* (Federal Reserve Bank of St. Louis, 2006); F. Bergstrom and R. Gidehag, *EU Versus USA* (Timbro, 2004); Tito Boeri, Michael C. Burda, Francis Kramarz, and Pierre Cahuc, *Working Hours and Job Sharing in the EU and USA: Are Europeans Lazy? or Americans Crazy?* (Oxford University Press, 2008); Ian Dew-Becker and Robert J. Gordon, *The Role of Labor Market Changes in the Slowdown of European Productivity Growth* (National Bureau of Economic Research, 2008); Harold O. Fried, C. A. Knox Lovell, and Shelton S. Schmidt, *The Measurement of Productive Efficiency and Productivity Change* (Oxford University Press, 2008); Oded Galor and Andrew Mountford, "Trading Population for Productivity: Theory and Evidence," *Review of Economic Studies* (v.75/4, 2008); Philipp Koellinger, "The Relationship Between Technology, Innovation, and Firm Performance—Empirical Evidence From E-Business in Europe," *Research Policy* (v.37/8, 2008); Geoff Lewis, *Innovation and Productivity: Using Bright Ideas to Work Smarter* (New Zealand Treasury, 2008); Mario Davide Parrilli, Roger Sugden, and Patrizio Bianchi, *High Technology, Productivity and Networks: A Systemic Approach to SME Development* (Palgrave Macmillan, 2008); World Economic Forum, *Global Competitiveness Report* (2006).

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Product Life Cycle Hypothesis

Attempting to explain patterns of international trade, Raymond Vernon observed a circular phenomenon in the composition of trade between countries in the world market. Advanced countries, which have the ability and competence to innovate as well as high-income levels and mass consumption, become initial exporters of goods. However, they lose their exports initially to developing countries and subsequently to less-developed countries and eventually become importers of these goods. Vernon's hypothesis was an attempt to advance the trade theory beyond the static framework of the comparative advantage of David Ricardo and other classical economists to explore hitherto ignored or unexplained areas of international trade theory such as timing of innovation, effects of scale economies, and the role of uncertainty and ignorance in trade patterns. His intent was not to propose a biological analogy such as is understood by the theory of product life cycle as commonly understood by marketing theorists.

Vernon's product cycle is a macro-level attempt to generalize patterns of trade between nations based on empirical data. It offers innovation and economies of scale as predominant explanatory variables. Vernon hypothesized a circular pattern of trade composition that occurs between trading partners in different stages of economic growth. Vernon's hypothesis identifies four stages that the trade patterns go through.

1. Introduction: New products are introduced to meet local or national needs, and new products are first exported to similar countries, that is, countries with similar needs, preferences, and incomes. If we also presume similar evolutionary patterns for all countries, then products are introduced in the most advanced nations. This is the traditional idea of the home country as the producer of first-of-a-kind products and the exporter of products to countries with similar needs, preferences, and incomes.
2. Growth: A copy product is produced elsewhere and introduced in the home country (and elsewhere) to capture growth in the home market. This moves production to other countries, usually on the basis of cost of production. At this stage foreign production starts.
3. Maturity: The industry contracts and concentrates—the lowest cost producer wins here. At this stage, foreign production is competitive in export markets.
4. Decline: Poor countries constitute the only markets for the product. Therefore, almost all declining products are produced in lesser-developed countries at this stage, import competition begins.

Vernon stresses degree of standardization as evidence of product maturation: a mature product typically may become standardized across international markets.

Vernon's product cycle model is fundamentally production oriented and based on industrial goods in manufacturing sectors, virtually ignoring trade in intangibles such as services or brand names. While it provides a broad, long-term macro frame of reference, it is not particularly valuable in making micro-level and short-term managerial decisions in firms. His approach is more likely to provide insights for national policy formulation at macro levels.

Cornelia Navari acknowledges the theory's important implications for thinking about processes of industrial growth in a one-world-system in which industrialization was, at least in part, an autonomous, dynamic process, not a product of special talents, and in which the less developed depended on the more developed to develop and simplify technology, allowing them to evade the costs of innovation, while the more developed were pushed by the less developed into new product innovation, allowing them to stay in the advance of industrial growth.

Vernon's hypothesis also had its critics. Edward K. Y. Chen and Peter Drysdale argue that product life cycle theory has been called into question by four main forces: the narrowing of the income gap between countries to the extent that there is no longer a hierarchical sequence with respect to investment location, the shortening of the product life cycle because of the growing emphasis on technology as the basis for competition, the compression of time to market for competitive advantage, and the rising cost of investment to create new technologies and product innovations. Those firms that are the technological leaders and that are first to get their products onto the market set the rules of the game, establish the critical standards, and thus define the overall terms of competition. Certainly, rising investment costs have forced firms to develop and produce first-of-a-kind products outside the home market and often to sell first of the kind conterminously in many markets to achieve first mover advantage and delay competitive response.

Other critics have found difficulty with Vernon's hypothesis as an explanation of growth after World War II on grounds such as the theory's inability to explain nonexport-substituting investments, the appearance of nonstandardized products being produced abroad, and the case of carefully differentiated products to suit the local market. Christos Pitelis and Roger Sugman point out another criticism of the theory: the decline in the rate of growth of demand in the maturity phase can be avoided through unrelated diversification to products at a different phase of their cycle.

See Also: Comparative Advantage; Market Development; Markets; Product Development.

Bibliography. Edward K. Y. Chen and Peter Drysdale, *Corporate Links and Foreign Direct Investment in Asia and the Pacific: Pacific Trade and Development Conference*

(Harper Collins, 1995); Debra Johnson and Colin Turner, *International Business: Themes and Issues in the Modern Global Economy* (Routledge, 2003); Ram Narasimhan, Soo Wook Kim, and Keah Choon Tan, "An Empirical Investigation of Supply Chain Strategy Typologies and Relationships to Performance," *International Journal of Productions Research* (v.46/18, 2008); Cornelia Navari, *Internationalism and the State in the Twentieth Century* (Routledge, 2000); Evan Osborne, "Rethinking Foreign Aid," *The Cato Journal* (v.22, 2002); Christos N. Pitelis and Roger Sugden, *The Nature of the Transnational Firm* (Routledge, 1991).

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Profit-Sharing

Profit-sharing is an incentive pay system where the employees are entitled to a predetermined part of the company's profits. It can be applied in various ways and for various reasons. In the theoretical literature, profit-sharing is often seen as an arrangement with the purpose of aligning the interests of employees and capital owners. Profit-sharing was known already in the 19th century and has become particularly common in countries where legislative measures have prescribed or encouraged its application. A defining feature of profit-sharing is that the employees' share of the company's performance is determined beforehand and not in a discretionary fashion. Usually, profit-sharing is thought of as remuneration in addition to the base wage covering all or most employees.

Three basic types of schemes are commonly distinguished. In cash-based schemes, profit shares are paid immediately in ready money. In share-based schemes, employees are encouraged to become part owners of the company. In deferred profit-sharing, employees cannot take part of the profit shares until a certain time has passed. Gains-sharing can be regarded as a bonus incentive system related to, but distinguished from, profit-sharing. In gains-sharing schemes, employees are entitled to a predetermined part of efficiency gains. Generally, gains-sharing runs on a monthly basis, whereas profit-sharing usually runs on an annual or quarterly basis.

In theory, there are several reasons why some employers apply profit-sharing. An important motive is to link the employees' interests to the company owners'. By connecting a part of the remuneration to the company's performance, employees get incentives to perform at their best and encourage their colleagues to do the same. However, some economists argue that the positive incentive effect is hampered by a free-riding problem. If the profits are shared between a large number of individuals and the contribution of each individual to the company's results is small, profit-sharing has weak prospects of boosting employee effort.

Another property of profit-sharing that may be attractive for employers is that it has the potential of reducing personnel turnover and making investments in firm-specific training more worthwhile. As labor costs automatically adjust to the business cycle, firms can avoid layoffs in bad times and employees will be less inclined to quit voluntarily in good times. In empirical research it has proven hard to establish an effect of profit-sharing on productivity. This is partly because of problems with establishing the direction of causality; it is difficult to know whether companies become more productive by imposing profit-sharing or if more productive companies are more inclined to impose profit-sharing.

Historically, profit-sharing has its origins in the 19th century or even farther back in time. A pioneer company was Redouly & Co., whose owner, Edme Jean Leclaire, introduced a profit-sharing scheme in 1842, along with participation in management, for a selected group of employees. Some decades later, profit-sharing had spread to such countries as France, Great Britain, and the United States. The idea had several famous advocates among scholars and intellectuals, and it was discussed in 1889 at a congress in Paris. This congress, among others, established the definition of profit-sharing that basically is still in use today.

During the 19th and early 20th centuries, profit-sharing was seen as a way of reconciling the interests of workers and capital owners. The incentive system was often used by employers alongside corporate welfare systems, such as pension schemes, company housing, and healthcare. Politically, profit-sharing had advocates among both conservatives and progressive-liberals, but generally, the idea was regarded with suspicion by socialists.

By the late 20th century, profit-sharing was a well-known business practice, though more common in some countries than in others. This is partly related to institutional differences. Two countries have made profit-sharing compulsory for certain categories of firms and other countries have introduced legislation that encourages the remuneration form.

Mexico is the country with the longest tradition of statutory profit-sharing. According to the constitution, a national commission establishes the percentage of company profits that is to be shared with employees. The profits share received by each employee is governed by number of days worked during the year and wages received during the year. Directors, general managers, and administrative staff are not included in the statutory profit-sharing in Mexico. The other country with statutory profit-sharing is France, where legislation prescribing schemes with deferred payment for companies with 100 employees or more was introduced in 1967. The threshold was later lowered to 50 employees.

Legislation that encourages profit-sharing, for example, by means of tax concessions, is more common. In the United Kingdom, for example, legislation for cash-based schemes was passed in 1987. This legislation includes prescriptions for how schemes should be designed in order to qualify for concessions. Among others, schemes have to be approved by the workforce, include at least 80 percent of the employees, and payments have to be allocated according to a uniform procedure.

Tax concessions for profit-sharing are also given in the United States and Canada, but here the legislation encourages schemes with deferred payment. In the United States, the legislation allows schemes where companies, at their own discretion, decide how much of the profits to distribute among the employees. In Canada it has been observed that cash-based schemes have proliferated, although not encouraged by tax concessions.

Japan is thought of as a country with a comparatively high incidence of profit-sharing. However, empirical inquiries have shown that while various forms of bonus payment are encouraged by legislation, and commonly applied by large Japanese firms, only a small part of these bonus systems can be defined as profit-sharing. A recent study indicates that about 25 percent of traded firms in Japan apply profit-sharing.

See Also: Compensation; Employer–Employee Relations; Motivation; Procter & Gamble.

Bibliography. Joseph R. Blasi, *Creating a Bigger Pie? The Effects of Employee Ownership, Profit Sharing, and Stock Options on Workplace Performance* (National Bureau of Economic Research, 2008); Alex Bryson and Richard B. Freeman, *How Does Shared Capitalism Affect Economic Performance in the UK?* (National Bureau of Economic Research, 2008); Su-Fen Chiu and Wei-Chi Tsai, "The Linkage Between Profit Sharing and Organizational Citizenship Behavior," *International Journal of Human Resource Management* (v.18/6, 2007); Luci Ellis and Kathryn Smith, *The Global Upward Trend in the Profit Share* (Bank for International Settlements, 2007); Saul Estrin et al., "Profit-Sharing in OECD Countries: A Review and Some Evidence," *Business Strategy Review* (v.8/4, 1997); Douglas Kruse, Richard B. Freeman, and Joseph R. Blasi, *Do Workers Gain by Sharing?: Employee Outcomes Under Employee Ownership, Profit Sharing, and Broad-Based Stock Options* (National Bureau of Economic Research, 2008); Derek Matthews, "The British Experience of Profit-Sharing," *Economic History Review* (v.42/4, 1989); Michele Moretto and Paola Valbonesi, "Firm Regulation and Profit Sharing: A Real Option Approach," *B E Journal of Economic Analysis and Policy* (v.7/1, 2007).

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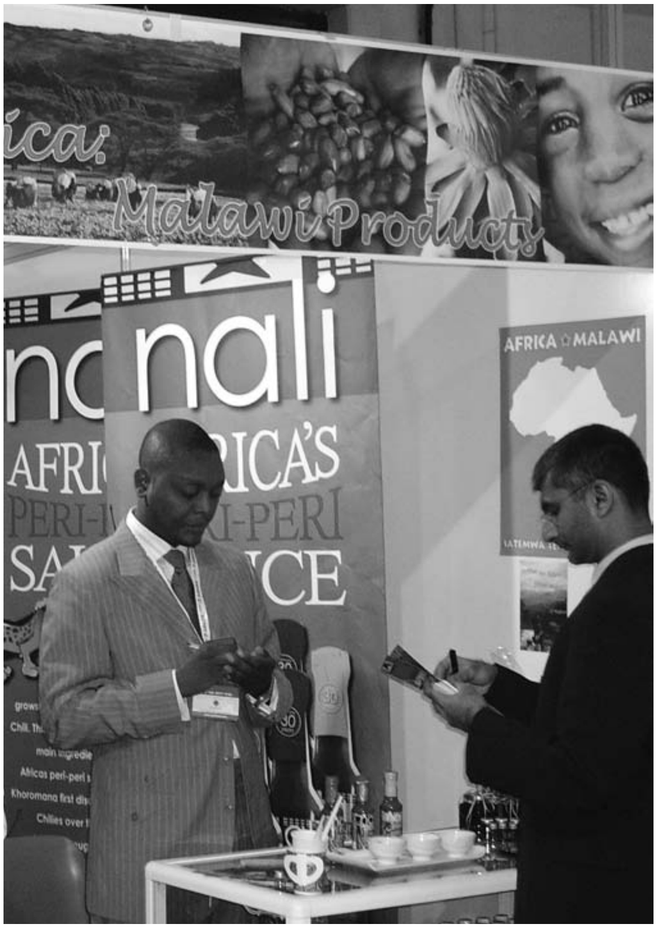
Promotions

Promotion is one of the four activities traditionally included in the marketing mix (the other three being product, price, and place). Promotion aims to increase the customer's familiarity with the product by using a vast array of techniques and tools. Activities included in the promotion mix consist of personal selling, sales promotion, public relations, direct mail, trade fairs, advertising, and sponsorships. Each of these methods has an impact on the customer's awareness of the product, comprehension, and conviction to purchase the item and the probability that all these actions will translate into a purchasing action by the client. During the course of the promotion activity, the company manages both the promotion budget size and how that



Wholesale food companies from Malawi using personal selling and product displays at a 2008 trade fair in Dubai.

budget is allocated. Maximizing this budget through low-cost methods is one of the keys of a successful promotional campaign (through word-of-mouth or viral marketing, for example).

Promotion is separated into two categories: above-the-line promotion describes activities that directly target customer sensibility (such as advertising and personal selling), while below-the-line promotion is usually much more subtle (such as product placement and public relations).

Above-the-Line and Below-the-Line Promotion

Above-the-line promotion refers to activities the firm performs to promote its product by directly targeting the potential customer. Advertising is one of the main methods companies use to engage in above-the-line promotion. The main advantage of advertising is that the firm is able to reach multiple buyers simultaneously, resulting in a low total cost per user, but there is the likelihood of reaching many consumers who will not convert into buyers. For example, some companies purchase ads in generalist newspapers; although the ad is read by thousands of people (generating a low cost per consumer), only a small percentage could actually be considered to be potential customers. Hence, companies increasingly target consumers through specialized media (like specialized magazines) to increase the chance of being read by a potential customer.

The other major technique used for above-the-line promotion is personal selling; this occurs when the firms employs dedicated staff to sell its product. Targeted selling, while highly efficient, is often offset by the high cost per contact, as the firms need to retain and train an adequate sales force.

Below-the-line promotion encompasses all activities the firm engages in to promote its product in a much more subtle manner. Examples of such activities include product placement (wherein the firm pays for its product to be featured prominently in a media setting), public relations (wherein the firm deploys various public-related efforts to garner public attention), or sponsorship (wherein the firm sponsors an event in exchange for visibility).

In all cases, companies that use below-the-line promotions must be careful to keep the balance between having too much or too little visibility. A careful balance is necessary to assure that below-the-line promotions do not become too prominent, which will generate criticism. For example, some recent movies and television series have been criticized for having movie story lines influenced by product placement to the point of affecting the content of the show and annoying consumers.

Objectives and Evaluation

Promotion is mainly used to stimulate sales for the company by convincing customers to purchase the product, but a company might engage in promotional activities with other objectives in mind. For example, some promotional campaigns are used to increase customer awareness of the company's offerings; this is especially true when the company is a new entry in a market. Other campaigns intend to provide information to the customer; rather than stimulating sales directly, this type of campaign will target customers who are at the decision-making stage and are comparing the different products. Finally, some promotional campaigns are used to reinforce the brand to increase the opportunity for repeat purchases by customers, increasing the relationship with the company.

Companies find it very important to measure the return on investment (ROI) that each dollar invested in promotion will generate for the company. Hence, if a company can demonstrate a promotion's influence on sales, it will be able to justify further budget increases. It is important to be able to justify the returns and not blindly invest money in nonmeasurable activities.

The most common way of measuring the effect of promotions is analyzing sales or market share data over a set period. Hence, if over a set period, sales have not changed following a promotional activity, the company might conclude there is no effect in continuing this activity. It is also possible to measure success by doing a consumer survey to measure the level of satisfaction or experimenting on markets by targeting two geographies differently (for example, running an ad campaign in some cities and then comparing sales in both geographies). These two methods are more costly and are often used by larger corporations.

See Also: Advertising; Distribution; Market Development; Marketing; Market Research; Sales.

Bibliography. George E. Belch, Michael A. Belch, and Michael Angelo Guolla, *Advertising & Promotion: An Integrated Marketing Communications Perspective* (McGraw-Hill Ryerson, 2008); Kenneth Manning and David E. Sprott, "Multiple Unit Price Promotions and Their Effects on Quantity Purchase Intentions," *Journal of Retailing* (v.83/4, 2007); Thomas C. O'Guinn, Chris T. Allen, and Richard J. Semenik, *Advertising and Integrated Brand Promotion* (South-Western, 2009); Larry Percy and Richard H. Elliott, *Strategic Advertising Management* (Oxford University Press, 2008); J. Paul Peter and James H. Donnelly, Jr., *A Preface to Marketing Management* (McGraw-Hill Irwin, 2000); Jan-Benedict E. M. Steenkamp, Vincent R. Nijs, Dominique M. Hanssens, and Marnik G. Dekimpe, "Competitive Reactions to Advertising and Promotion Attacks," *Marketing Science* (v.24/1, 2005).

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Prospectus

A prospectus is a document that provides detailed information about an investment. The prospectus first arrived in the investment arena with the Securities Act of 1933, which was created to improve investor confidence, prohibit fraud and misrepresentation in securities, and facilitate the creation of the Securities and Exchange Commission (SEC). The Securities Act emerged after litigation showed that investors did not have access to reliable information on which to make an informed decision regarding the investment. Thus, a prospectus has two purposes. First, it acts to protect investors from unreliable, fraudulent, or missing information. Second, a prospectus also acts to protect investment firms from dishonest investors claiming that they were not informed about the investment.

In the United States, a prospectus is considered a legal and binding agreement between a firm and its investors. This document must contain information on the public offering, the firm, its industry, financial statements, management, legal agreements, risks, and concerns. If any of this information is missing or incorrect, the prospectus becomes null and void. The SEC also requires that the prospectus be written in clear and concise language. Highly legal or technical language is discouraged. The SEC requires that all publicly traded firms and investments (such as mutual funds, bond funds, and real estate investment trusts) have a prospectus on file and sent to investors. Firms that are not publicly traded are not required to file a prospectus. It must be updated annually or with any significant change in the investment's strategy or structure.

When an investment is initially placed for sale to the public (such as initial public offering or IPO), the firm representing the investment is required to write a prospectus. A preliminary prospectus (also known as a red herring because of the color of some of the print on the cover) is written before the stock sale goes into effect. It provides all of the information required in a final prospectus except the offer date and price, because those may not be known at the time. When the sale of the investment is made effective and the offer date, price, and final number of shares offered is known, a final prospectus is written and filed. The final prospectus supersedes the preliminary prospectus.

Similar to investments into public firms, the SEC also requires that a prospectus be filed by the managers of mutual funds and provided to their investors. Mutual fund investors also must be provided a prospectus upon investing. The regulations regarding mutual funds differ slightly from those for public firms. For example, investment companies of closed-end funds (which are created with a fixed number of shares and investors are allowed to purchase shares either during the fund's first round or on a secondary market) are required to provide the fund's prospectus only to the investors in the first round. Investors purchasing shares of a closed-end fund on the secondary market may not receive a prospectus since the purchase is through another investor and not the fund.

Mutual fund and closed-end fund prospectuses must contain information about three main areas: the logistical information of investing, the fund's strategy and performance, and its management. The logistical information of investing includes details about the date of issue, fees, expenses, pricing, and share purchase and redemption. The strategy and performance information includes details about past performance, the investment's objectives, investment strategies, risks of investing in the fund, and past performance. It will also contain a bar chart showing the total returns for the fund at the end of each of the last 10 years, or the life of the fund if it was issued within the last 10 years. The bar chart will be followed by a table summarizing the before and after tax returns for the past one, five, and 10-year periods. Management information includes the identities of fund managers and advisers and will often include biographical information as well. Last, the fund's SEC file number will be provided on the back page.

The laws surrounding prospectuses vary by country and each stock exchange has differing regulations regarding the content and review of prospectuses. For example, firms in the European Union must abide by the EU Prospectus Directive. Those seeking admission to the Hong Kong Stock Exchange abide by the Hong Kong Companies Ordinance, the Securities and Futures (Stock Market Listing) Rules of Hong Kong, and the Hong Kong Listing Rules. The Australian Stock Exchange is governed by the Corps Act, which requires a security's prospectus to be reviewed by the Australian Securities and Investments Commission. The Singapore Stock Exchange requires that the Monetary Authority of Singapore review each prospectus under the Listing Manual & Securities & Futures Act.

See Also: Bonds; Initial Public Offering; Investment Banks; Investor Protection; Securities and Exchange Commission.

Bibliography. Luis de Carlos Bertrán, *Raising Capital in Europe: The Legal Framework Following the EU Prospectus Directive* (Richmond Law & Tax, 2005); Harvey E. Bines and Steve Thel, *Investment Management Law and Regulation* (Aspen, 2004); *SEC Handbook, Securities Act of 1933 and the Edgar Rule* (R. R. Donnelley, 2001); Securities and Futures Commission (Hong Kong, China), *A Consultation Paper on Possible Reforms to the Prospectus Regime in the Companies Ordinance* (Securities and Futures Commission, 2005); Dirk van Gerven, *Prospectus for the Public Offering of Securities in Europe* (Cambridge University Press, 2008).

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Prudential

Prudential plc is a holding company headquartered in London, England, created in October 1999. The company was founded in 1848 as the Prudential Mutual Assurance Investment and Loan Association and provided loans secured by life insurance to professional people. Prudential became a limited company in 1881 and became a public company listed on the London Stock Exchange in 1924. In June 2000, it also listed its shares on the New York Stock Exchange.

As of December 31, 2007, Prudential listed approximately 75,948 shareholders. It is an international retail financial services company currently managing over £267 billion in funds derived from its customers, policyholders, and clients in Asia, the United States, and the United Kingdom. Prudential plc employs over 28,000 people around the world. The Prudential company is structured around four core business units: Prudential Corporation Asia, Jackson National Life Insurance Company, Prudential UK, and M&G. Group. Strategy, reputation management, cash and capital management, leadership development and succession, and other core functions are handled centrally.

Business Units

Prudential Corporation Asia was formed in 1994 in Hong Kong as a regional head office. Prudential Corporation Asia currently has life insurance and asset management operations in 13 markets across Asia: China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan, Thailand, Vietnam, and the United Arab Emirates. Prudential Corporation Asia serves over 10 million customers in these markets, with some 410,000 agents providing savings, investment, and protection products tailored to each local market. Its top life insurance markets in Asia (as a percentage of total new life business) for 2007 were Korea (19), Taiwan (18), India (13), Hong Kong (13), and Singapore (10). Prudential Corporation Asia manages 17.4 billion pounds worth of branded mutual funds (equities, fixed income, private equity, and structured products) for retail investors, and manages £19.6 billion of institutional and internal assets. Its top retail mutual funds markets in Asia (as a percentage of total new business) for 2007 were Japan (250), India (21), Korea (20), Taiwan (12), and Singapore (7). Prudential Corporation Asia has strategic partnerships with CITIC Group in China, ICICI Bank in India, and the Bank of China International in Hong Kong.

The Jackson National Life Insurance Company was named after Andrew Jackson, the seventh president of the United States, and was founded in Jackson, Michigan. In 1961 Jackson was acquired by the Prudential Group in 1986 and is now headquartered in Lansing, Michigan. Jackson National Life Insurance Company provides products and services in all 50 states as well as the District of Columbia. Jackson provides variable annuities, fixed annuities, fixed index annuities, term insurance, and life insurance targeted to clients in the mass and mass-affluent markets in the United States through independent broker-dealers, regional broker-dealers, independent financial agents, and financial institutions. In 2005 Jackson acquired the Life Insurance Company of Georgia (now JNL Southeast Agency) with more than 100 career agents who also sell its products directly to customers residing in the southeastern United States. Jackson also sells institutional products such as guaranteed investment contracts (GICs), funding agreements, and medium-term notes (MTNs). Jackson's Curial Capital subsidiary provides financial professionals with fee-based separately managed accounts (SMAs). Jackson's affiliated network of independent broker-dealers, National Planning Holdings (NPH), is the investment holding company for four firms: INVEST Financial Corporation, Investment Centers of America, SII Investments, Inc., and National Planning Corporation.

M&G originated in 1901 as the Municipal and General Securities Company and was acquired by Prudential in 1999. M&G is Prudential's European fund management business, with assets of some €167 billion (of which some €116 billion are internal corporate funds). M&G now runs operations in Germany, Austria, Luxembourg, Italy, France, Switzerland, and South Africa. M&G is composed of the M&G Asset Management business and Prudential Capital (renamed in 2007 Prudential Financial). M&G manages about €22.3 billion of retail assets invested in equities, fixed income instruments, and property. Its retail business offers open-ended investment companies (OEICs), investment trusts (ITs), individual savings accounts (ISAs), personal equity plans (PEPs), and mutual funds to investors in the UK, Europe, Asia, and South Africa.

Prudential Portfolio Managers (PPM) is the management entity for Prudential's institutional funds. M&G manages some €28.9 billion of institutional assets for pension funds, insurance companies, and other financial institutions. It offers both segregated funds and pooled funds, as well as structured and private finance products. PPM Ventures provides private equity finance through offices in London, Paris, Munich, and Sydney. Prudential Property Investment Managers (PruPIM) is the property investment part of M&G with global property investments, including its Singapore joint venture Asian property fund entity, PRUPIM.

Prudential UK provides retirement savings and income solutions for its seven-plus million retail customers in the United Kingdom. These products and services include individual annuities, individual and corporate pensions, lifetime mortgages, and health insurance. The company also operates selectively in the wholesale market for insurance through bulk and back-book buyouts that appear actuarially favorable. Prudential UK uses a number of channels to reach customers: direct (telephone, mail, and internet), financial advisers and partnerships, and business-to-business advisers and consultants.

As suggested by its name, Prudential seeks to secure profitable growth through long-term value while acting responsibly with integrity. For its fiscal year 2007, Prudential delivered a European Embedded Value (EEV) calculated operating profit from its long-term business of 15.4 percent, about £2,542 million, and its International Financial Reporting Standards (IFRS) calculated an operating profit about £1,213 million. The operating profits by business unit for 2007 were as follows: Prudential Corporation Asia accounted for 41 percent of the EEV operating profits and 17 percent of the IFRS profits; Jackson National Life Insurance Company accounted for 25 percent of the EEV operating profits and 30 percent of the IFRS profits; Prudential UK accounted for 34 percent of the EEV operating profits and 36 percent of the IFRS profits; and M&G accounted for 17 percent of the IFRS profits.

See Also: Foreign Portfolio Investment; Investment Banks; Prudential Financial.

Bibliography. Prudential plc, www.prudential.co.uk (cited March 2009).

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Prudential Financial

Prudential Financial (Prudential Financial, Inc.), as a holding company, is one of the biggest insurance companies in the United States. The company offers a variety of financial products and services, including life insurance, mutual funds, annuities, pension and retirement-related services, asset management, banking and trust services. Prudential Financial operates largely in the United States, but also in over 30 other countries. Prudential Financial incorporated in 1999 and now employs around 40,000 people (as of January 1, 2008). Its headquarters is located in Newark, New Jersey. Prudential Financial is quoted in the New York Stock Exchange with the ticker symbol of PRU. It has approximately 2.5 million shareholders (as of January 1, 2008).

Prudential Financial generates its revenues from four business divisions: insurance (28 percent of its revenues in 2006), investment (22 percent of its revenues in 2006), international insurance and investments (26 percent of its revenues in 2006), and closed block business (24 percent of its revenues in 2006).

The insurance division includes Individual Life, Individual Annuities, and Group Insurance segments. The Individual Life segment provides individual variable life, term life, universal life, and nonparticipating whole life insurance products. The Individual Annuities segment offers individual variable and fixed annuity products through independent financial planners, banks, and agents. The Group Insurance segment provides group life, long-term and short-term group disability, long-term care, and corporate and trust-owned life insurance products to institutional clients.

The investment division includes Asset Management, Financial Advisory, and Retirement segments. The Asset Management segment provides investment management and advisory services, mutual funds, and other structured products. The Financial Advisory segment provides trading, investment services, equity sales, and research operations. The Retirement segment provides recordkeeping, actuarial advisory services, planning, communication services, and institutional and retail investment funds to public, private, and not-for-profit organizations.

The company's international insurance and investments division offers private banking, proprietary and nonproprietary asset management, and investment advice and services to high-net-worth retail clients and to institutional clients in certain international markets. The international insurance and investments division includes international insurance and international investments segments. The international insurance segment provides individual life insurance products to foreign countries.

The company's closed block business is managed separately from its financial services business. The segment includes the closed block assets and certain related assets and liabilities, including its "IHC debt."

Prudential Financial has numerous subsidiary companies. These include, but are not limited to, Prudential Equity Group, Pruco Securities, Prudential Investment Management Services, Pruco Life Insurance Company, Pruco Life Insurance Company of New Jersey, and the Prudential Insurance Company of America.

Prudential Financial was founded in 1875 to operate as a provider of industrial insurance to workers and people of limited means. During the 1950s, Prudential Financial established regional home offices across the United States to reinforce its operations. Its common stock began trading on the New York Stock Exchange in 2001. The company reorganized its operations into four divisions in 2002. Prudential Financial preferred to grow by acquiring other insurance companies. As a result, it acquired Jennison Associates Capital Corporation in 1985; acquired Kyoei Life Insurance, a Japanese stock life insurance company in 2001; and acquired Aoba Life Insurance Company of Japan in 2004.

There are many reasons why Prudential Financial is successful. First of all, the company has a diversified product portfolio, including a range of financial products and services to various client segments. A wide collection of services enhances the company's cross-selling opportunities. The second reason is Prudential Financial is one of the largest financial services companies in the United States. The company's leading market position gives it a competitive advantage against its rivals. The company also owns a multinetwork distribution channel, including advisers, fee-based consultants, specialized consultants, independent financial planners, insurance agents, banks, and direct channels. This strong distribution network provides Prudential Financial with many profitable opportunities.

See Also: American International Group; Foreign Portfolio Investment; Prudential.

Bibliography. Prudential Financial, www. prudential. com (cited March 2009); SEC-EDGAR, www.sec.gov (cited March 2009).

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Public Finance Reform

Public finance is concerned with the financing and administration of government activities—and thus includes taxation, expenditure, fiscal policies, monetary reform, and so forth. Public finance reform seeks to streamline and improve these activities.

Tax Reform

Not all advocates of tax reform want the same thing. In the United States, tax reform efforts in recent years, and ongoing, have focused separately on the abolition of income tax; the adoption of a flat tax instead of the progressive income tax rate in use; the "FairTax" that would replace federal income tax with a federal progressive sales tax; shifts of the tax burden to or away from one class of society or another; and state-specific concerns, such as the ongoing debate over sources of tax revenue in New Hampshire, the only state with neither sales nor income tax. In the United States, perhaps more than in some other countries or perhaps simply with uniquely American rhetoric, there is a special emphasis on the importance of fairness in taxation, harkening back to the "taxation without representation" thorn in the Patriots' side.

The means by which fairness is achieved can vary from party to party, persuasion to persuasion; for some it may mean taxing principally those who can afford to be taxed, for others it means a flat tax, and for still others it means taxing only those who participate in the systems and services funded by the tax. For some, a cigarette tax is a valid way to attach a tax to an opt-in item, the use of which no one enters into involuntarily; for others, it is an unfair tax that creates a special class of citizen.

Monetary Reform

Monetary reform calls for changes in the creation of money and maintenance of its supply. In the past, monetary reformers typically wanted a change to the government's stance on gold and silver—either the return to a gold standard or the adoption of bimetallism. There are still some who want to readopt a gold or other precious metals standard, but 21st-century monetary reformers are more likely to focus on the abolition of central banks and fractional reserve private banking, in favor of full reserve private banking.

Economists like Ludwig von Mises and the Austrian school criticize fractional reserve banking—in which banks are legally obligated to keep only a fraction of their cash in reserve, expanding the money supply by loaning money to one client that still belongs to another client—as a form of fraud, and blame it for the highs and lows of the business cycles. Money is created every time a new loan is approved, but this money is not represented by anything tangible; money represents obligation where it once represented a receipt for gold or other tangible assets. Full reserve banking was in use until the 19th century, and some reformers seek a return to it as an inoculation against the economic upheavals of the last two centuries. Critics of full reserve banking point out that a return to it would not be a reform of monetary policy so much as an abandonment of it, as banks would be all but unable to issue loans at all, and there would be no means through which the government could manipulate the money supply. (Interestingly, Islamic banking comes close to full reserve banking, because Muslim religious law proscribes the charging of interest. In practice, the banks find ways around this; a mortgage transaction may be conducted by the bank buying the home and selling it to the buyer in installments, rather than explicitly lending the funds to the buyer.)

Public finance reform is also a concern during times of transition. China has faced issues of reform as it adopts some free market initiatives; Hungary went through the same debates in the 1990s, when it shifted from a socialist economy to a free market one.

See Also: Currency; Monetary Intervention; Taxes.

Bibliography. Anthony B. Atkinson and Joseph E. Stiglitz, *Lectures in Public Economics* (McGraw-Hill, 1980); Robert Barro and Vittorio Grilli, *European Macroeconomics* (Palgrave Macmillan, 2007); Joseph E. Stiglitz, *Economics of the Public Sector*, 3rd ed. (Norton, 2000).

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Public Relations

Public relations (PR) is the business function charged with planning and managing an organization's relationships with key stakeholders through the effective use of a range of communication channels and methods. The purpose of public relations is to gain and maximize the support of stakeholders for the organization and to ameliorate the risk posed by any who might be opposed to it.

The jurisdictional boundaries and precise function of public relations are open to some debate, and the role ascribed to it depends on where it is located within the organizational structure and the span of activity allocated to it. In some organizations, it is represented at board level and is regarded as essential for strategic decision making; in others, it is deployed as a tactical promotional tool and a part of the marketing function. This lack of consensus on the purpose and activity-set of public relations is reflected in the literally hundreds of definitions that seek to delineate and describe it. One that has broad acceptance is that proposed by the International Public Relations Association in 1978, which, as written by Sam Black, states that

> public relations is the art and social science of analysing trends, predicting their consequences, counselling organisational leaders, and implementing planned programmes of action which will serve both the organisation's and the public's interest.

This statement encapsulates a number of key features that help to explain public relations' inherent complexity and tensions.

Public Relations Definitions

First, the phrase *public relations*—this identifies that the function is responsible for those organizational relationships that are not private; they are available to scrutiny by others. The word *public* also introduces other concepts particular to the field. The "general public" often is identified as a "target" for public relations activity, because one of the many purposes of the discipline is to influence public opinion, often through the mass media. Also implicit is the notion of the "public sphere," where debate and discussion about issues affecting the general public and the nature of society itself occur. These debates, in turn, affect "public opinion."

A term specific to the field is *publics*. Publics are groups (usually called stakeholders in the business and management literature) who have characteristics in common. Thus, typical publics for organizations are employees; customers; the local community; financial investors and analysts; local and national government entities; suppliers and distributors; opinion formers; professional, trade and regulatory bodies; and increasingly, ill-defined online communities with multiple relationships with organizations. These groups, in turn, have specific labels within the practice. Hence, work with employees is called internal or employee relations; with customers, consumer or marketing PR; with local and national governments, public affairs or lobbying; and with financial investors and analysts, city or financial PR.

Stakeholding as a concept emerged in the 1980s. Stakeholders are those groups or individuals who both affect or are affected by an organization. A differentiating concept between the notions of stakeholders and publics is that the latter are active or potentially active and that they collect around interests, issues, or opportunities that usually have been created by the organization, for example, polluting the local environment, introducing new services, moving to a new location, or acquiring another company.

Second, the phrase *art and social science* illustrates the duality of the practice in that it has a creative side that finds expression in the problem-solving capabilities required of practitioners and in the tactics used in public relations programs such as imaginative events, creative writing, the use of powerful imagery, and the effective exploitation of channels such as newspapers or mobile technologies. The other side of the practice emphasizes that public relations is a measurable, scientific discipline that systematically employs communication tools to persuade target publics to think, feel, or, ultimately, behave in particular ways. To do this requires a knowledge of the social sciences, including psychology, sociology, politics, anthropology, philosophy, and management theory.

Third, the analytical and predictive aspects of public relations work point to one of its key tasks: to see the organization in context. Organizations are constantly affected by changes in the external environment. The social, political, technological, economic, and regulatory environment is in constant flux, and stakeholder reactions to these changes need to be monitored and predicted, because this could well alter stakeholder perceptions of and attitudes toward the organization. For example, if an organization does not adapt quickly to changes in attitude to a particular political regime, it may find itself out of step with the views of its stakeholders, who may then withdraw their support for its products or shares. Analyzing these broader trends and predicting their consequences is at the heart of issues management, a mainstay of strategic public relations.

Public relations seeks to create a "buffer" against undesired consequences by identifying those issues that are potentially dangerous to the organization and recommending mitigating courses of action. These recommendations may include that the organization must align itself to public opinion or, if this is not possible, recommend courses of action that will minimize the damage caused by being misaligned, for example, explaining why a plant has to be closed in an area of high unemployment. The key is that public relations is concerned with maintaining the organization's "license to operate" with the publics with which it is engaged and on which it depends. It also seeks to build a "bridge" to key stakeholders through communication so that those stakeholders are engaged with the organization in a positive way. Hence, when the organization is acting in ways that carry stakeholders' approval, they will become its supporters and ideally its advocates. Stakeholders with whom there is ongoing dialogue also act as a sounding board so that when organizations are about to act in ways that may alienate stakeholders, early warning signals can be detected.

Counselling Organizational Leaders

The role of public relations practitioners as counsellors of organizational leaders implies that it is a senior management activity. In some organizations public relations is relegated to a tactical role, often known as the "journalist in residence" role. In this position the public relations practitioner is treated as the "post boy," tasked with getting out the message in as favorable light as possible after all the important decisions have been made. In its strategic manifestation, public relations is seen as integral to decision making at the most senior level. It sets the context for decisions by providing the trend analysis and predictions indicated earlier, and it informs senior management of the likely consequences of decisions by predicting what stakeholder reaction will be. By facilitating good decision making and articulating the process and the resultant content, indeed often negotiating these factors with stakeholders, public relations again seeks to reinforce the legitimizing of the organization, and hence diminish risk.

Planning

Public relations programs are planned. They are not haphazard, but are purposeful and deliberate. Good practice mirrors typical business planning models and embraces four stages. Stage 1 is situation analysis, where research will reveal the context of the issue under consideration, the nature of the communication task, and the benchmark position. Stage 2 is program strategy in which objectives for the program are set, target publics identified, appropriate content designed, the overall approach and individual tactics decided, and the appropriate resources and timescales allocated. Stage 3 is implementation, where the strategy is executed and monitored. Stage 4 is evaluation, where the effect of the program is measured against the benchmarks and objectives set. It is estimated that in good organizations, up to 70 percent of the public relations work is planned, with the remaining 30 percent being taken up with capitalizing on ad hoc opportunities such as exploiting emerging topics in the media or dealing with crises.

Also implicit in the word *planned* is that the relationships that result from these communication programs will be long term and sustained. Indeed, if the "bridge" to stakeholders is to be a solid one, communication must be two-way, ongoing, and built on principles of openness, honesty, commitment, and mutuality in order to generate trust.

Ethics

The professional bodies for public relations practitioners, for example, the Public Relations Society of America and the Chartered Institute of Public Relations in the United Kingdom, have a code of ethics that states that public relations practitioners must not only serve their organization and clients with integrity and competence, but that they should also serve the public interest.

It is in this arena that much of the controversy surrounding public relations resides. There are numerous books that describe the excesses of public relations in furthering organization interests above the public interest, notably those by Sheldon Rampton and John Stauber. In the realm of political public relations, too, the concept of "spin doctoring," where spokespeople will, for example, put the best possible gloss on an unfeasible position, or even appear to lie or mislead by omission to justify a political decision, has done much to undermine public trust. The term *public relations exercise* is synonymous with slick activity that disguises deceitful intent. There is no escaping the fact that public relations is purposive and persuasive in intent and that in a democracy there are serious questions about the legitimate limits of persuasion, access to the public agenda by those who have the power and/or resources to buy professional help, and the nature of the relationship between the press and organizational and political spokespersons.

Activities

Public relations practitioners work in all industry sectors and for the public sector, nongovernmental organizations, and charities. They also work for a nation's political parties and for individuals seeking to represent themselves, whether they be football players or royalty. They work on short-term projects such as product launches, or on long-term behavioral change programs such as antismoking or climate change mitigation. At the heart of public relations work is change. Organizations and their publics engage with each other in a relationship where, ideally, both are seeking benefits either for themselves or for others and where both are prepared to give benefit in return. However, it has to be recognized that sometimes relationships are fostered for purely instrumental reasons, and even where relationships are mutually beneficial, the balance of give and return may vary over time. Implicit in the communication and relationship-building paradigm is proactivity, response, and adaptation to change.

The activities that practitioners undertake to effect that change are broad-ranging and include intelligence gathering and interpretation in order to advise senior management, issues and crisis management, and planning and implementing relationship-building programs with the key publics (or stakeholders) of the organization. In practical terms this may include activities such as organizing face-to-face or small group meetings, organizing events and exhibitions, managing and producing content for bespoke or bulk publications (including Web-based materials), media relations, corporate social responsibility activities, sponsorship, and corporate advertising.

Public relations is a fast-developing discipline. The emergence of new technologies along with the challenges of globalization have given it added prominence as organizations seek to establish and preserve their legitimacy with a growing number of diverse and demanding stakeholder groups. Organizations are defined by what they say about themselves and also by what others say about them. The ability of public relations to build and maintain relationships over the long term is being increasingly recognized as a vital element in the strategic capability of organizations and is essential if organizations are to maintain their license to operate.

See Also: Communication Challenges; Corporate Social Responsibility; Employer–Employee Relations; Lobbying; Marketing; Persuasion.

Bibliography. Sam Black, ed., *Public Relations in the 1980s: Proceedings of the Eighth Annual Public Relations World Congress* (Pergamon, 1979); Scott Cutlip, Allen Center, and Glen Broom, *Effective Public Relations* (Prentice Hall, 2000); Bob Franklin et al., *Key Concepts in Public Relations* (Sage, 2009); Robert Heath, ed., *Handbook of Public Relations* (Sage, 2001); Jacquie L'Etang, *Public Relations, Concepts, Practice and Critique* (Sage, 2008); Paul S. Lieber, "Moral Development in Public Relations: Measuring Duty to Society in Strategic Communication," *Public Relations Review* (v.34/3, 2008); Melanie Joy McNaughton, "Guerilla Communication, Visual Consumption, and Consumer Public Relations," *Public Relations Review* (v.34/3, 2008); Trevor Morris and Simon Goldsworthy, *Public Relations for the New Europe* (Palgrave Macmillan, 2008); Lars Rademacher, *Public Relations und Kommunikationsmanagement: Eine medienwissenschaftliche Grundlegung* [Public relations and communication management] (VS Verlag für Sozialwissenschaften, 2008); Brian Solis and Deirdre Breakenridge, *Putting the Public Back in Public Relations: How Social Media Is Reinventing the Aging Business of PR* (FT Press, 2009); Krishnamurthy Sriramesh and Dejan Verčič, *The Global Public Relations Handbook: Theory, Research, and Practice* (Routledge/Taylor and Francis Group, 2008); Ralph Tench and Liz Yeomans, eds., *Exploring Public Relations* (Prentice Hall, 2006); Cees van Riel and Charles Fombrun, *Essentials of Public Relations* (Routledge, 2007); Jordi Xifra and Assumpcio Huertas, "Blogging PR: An Exploratory Analysis of Public Relations Weblogs," *Public Relations Review* (v.34/3, 2008).

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Purchasing Power Parity

The theory of purchasing power parity (PPP) explains movements in exchange rates by changes in countries' price levels. It is derived from the "law of one price," which says that identical goods should sell for the same price in all countries if there are no impediments to international trade. If prices for an identical good differ, a profit can be made by a process of "arbitrage"—buying the good from a low-priced country and selling it in the high-priced country. This process will alter supply and demand and force the prices to converge to a common equilibrium level in each country, when expressed in the same currency.

The theory of PPP is simply the application of the law of one price to all goods in an economy and thus to the general level of prices rather than to the price of a specific good. The exchange rate between two countries should thus equal the ratio of the prices of the baskets of goods used in the construction of the price indices that measure inflation. This is known as "absolute PPP," because it refers to the exchange rate that should exist at a given point in time. In contrast, "relative PPP" is concerned with how exchange rates alter over time to maintain equal purchasing power. When a country's price level is increasing at a faster rate than the price level in another country, its exchange rate must depreciate to counteract the higher inflation in order to return to PPP. This occurs because foreign demand for goods in the high-inflation country will decrease because of the higher prices, while home demand for foreign goods will increase because they are cheaper. If changes in actual exchange rates, known as "nominal" exchange rates, are fully offset by changes in inflation, then the "real" exchange rate will remain constant.

The ideas underlying PPP can be traced back to scholars at the University of Salamanca in the 16th century, although the term was first used by the Swedish economist Gustav Cassel (1918) when suggesting a means of adjusting the exchange rates of those countries intending to return to the gold standard after World War I to account for inflation. Cassel's idea was picked up by John Maynard Keynes, who used it to argue against Winston Churchill's decision to return the British pound to its prewar parity against gold in 1925, because it overvalued the currency relative to its PPP level; the criticism proved to be justified, because British exports duly declined and unemployment rose sharply.

A simple way of assessing whether PPP is valid is to compare the prices of similar, or identical, goods across countries. A well-known example of such an exercise is provided by *The Economist* magazine's "Big Mac Index," which divides the local price of McDonald's Big Mac hamburgers around the world by the U.S. dollar price. By comparing this "PPP exchange rate" with actual exchange rates, the extent to which a currency is undervalued or overvalued can be measured. Although burgers cannot be traded across borders, and are thus not subject to arbitrage, the "Big Mac Index" nevertheless has an impressive record in predicting exchange rates, with currencies identified as overvalued tending to depreciate in later years.

The evidence from extensive testing of PPP is that the theory holds up well in the long run but poorly for shorter time periods and that it holds better for countries with relatively high inflation rates and underdeveloped capital markets. Deviations from PPP are caused by transport costs and barriers to trade, such as tariffs and quotas, which prevent arbitrage opportunities from being exploited. Deviations may also be because not all goods included in a price index are tradable. In addition, a component of household income is spent on services, such as healthcare, that cannot effectively be traded between countries and for which arbitrage, which drives PPP, is not therefore possible.

Because of deviations from PPP, international comparisons of gross domestic product per head using market exchange rates tend to give a misleading picture of international differences in productive potential and living standards. To correct for these differences, the United Nations International Comparison Project (ICP) collects data on the prices of goods and services for most countries in the world by calculating PPP exchange rates.

See Also: Big Mac Index; Economic Indicators; Exchange Rate; Gross National Product; Pricing.

Bibliography. Mikael Carlsson, Johan Lyhagen, and Pär Österholm, *Testing for Purchasing Power Parity in Cointegrated Panels* (International Monetary Fund, 2007); Gustav Cassel, "Abnormal Deviations in International Exchange," *Economic Journal* (v.28/112, 1918); Imed Drine and Christophe Rault, *Purchasing Power Parity for Developing and Developed Countries: What Can We Learn From Non-Stationary Panel Data Models?* (CESifo, 2008); Meher Manzur, *Purchasing Power Parity* (Elgar, 2008); Organisation for Economic Co-operation and Development, *Purchasing Power Parities and Real Expenditures: 2005 Benchmark Year* (OECD, 2008); Michael R. Pakko and Patricia S. Pollard, "Burgernomics: A Big Mac™ Guide to Purchasing Power Parity," *Federal Reserve Bank of St. Louis Review* (v.85/6, 2003); Alan M. Taylor and Mark P. Taylor, "The Purchasing Power Parity Debate," *Journal of Economic Perspectives* (v.18/4, 2004); United Nations, *Handbook of the International Comparison Programme* (United Nations Statistics Division, 1992).

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Qatar

With a population of about a million people and an area smaller than Connecticut, the 11,500 sq. km of Qatar are home to Al Jazeera, the Arab world's most popular television network; the U.S. military's Central Command; the Doha Round of World Trade Organization (WTO) negotiations; and the world's finest museum of Islamic arts. This small peninsula, jutting out into the Persian Gulf from the land mass of Saudi Arabia, has a free press and women's political rights, and dabbles in partial democracy.

With a long early history as a trading and fishing outpost, by the third century C.E., the peninsula witnessed active exchange of copper, spices, sandalwood, and teak from the east for purple dye, clothing, pearls, dates, gold, and silver from the Gulf region and elsewhere. By 628, Islam arrived via the Bahrain ruler who controlled the region, and fine textile crafts flourished. During the late 18th century, the Al Khalifa branch of the Utub tribe in Kuwait emigrated to Qatar. Accomplished sailors and skilled traders, Al Khalifa became the mainstay of commercial development in this region.

The Ottoman and British Empires had contesting imperial interests in the region. The British found the peninsula ideal for shipping routes to their colonies in India. Following World War II and India's independence in 1947, pressure for British withdrawal increased. Britain announced a political withdrawal from the Gulf region in 1968, resulting in Qatar's joining seven other Trucial States in a federation. Regional disputes ensued, and Qatar ultimately became an independent sovereign nation on September 3, 1971. In a bloodless 1995 coup, Emir Hamad bin Khalifa Al-Thani deposed his father to become the ruler of Qatar and ushered in a period of liberalization.

Only 40 percent of the residents of Qatar are of Arab descent, and international expatriates are crucial to the economy. Pakistanis and Indians contribute 18 percent each to Qatar's population. Qatar has the world's ninth-highest per capita income. It has the highest per capita gross domestic product in the Arab world, at $75,900. Its citizens pay no income tax, and Qatar is the second-least-taxed sovereign state in the world, after Bahrain. The economy has experienced a robust 7.8 percent growth per year. The country's primary export is liquefied natural gas, with enough reserves to supply global demand for more than a century. Oil is the second-largest export, with 1.9 percent of the world's reserves in Qatar.

To diversify away from fossil fuels, the Qatari government is investing heavily in tourism development. To create a cultural magnet for foreigners, the Pearl—

a $2.5 billion, 4 million-sq.-meter artificial island—is under construction. With five-star hotels, 2 million sq. meters of high-end shopping, and more than 15,000 residences, the Pearl is expected to attract 1 million visitors per year upon completion in 2010. The real estate industry has benefited from these immense projects. The Lusail City project, just north of Doha, will eventually house more than 200,000 people. Large-scale construction projects such as the Dubai Towers and the Aspire Tower in Doha's Sports City are expected to attract tourists and sports fans.

In 1995 the Qatar Foundation, headed by First Lady Sheikha Al-Missend, was established to fund education, science, and community development. Qatar is building an Education City in the capital, Doha. Six American and two Canadian universities already operate there, and the race is on to catch up to Dubai's huge Academic City.

See Also: Bahrain; Doha Round; Oman; United Arab Emirates; World Trade Organization.

Bibliography. Habiba Anwar, *Qatar's Business Environment* (GMB Publishing Limited, 2008); Association of British Chambers of Commerce, *Qatar: Market Brief* (Ten Alps, 2007); Anoushiravan Ehteshami and Steven M. Wright, *Reform in the Middle East Oil Monarchies* (Ithaca Press, 2008); William Evans and Daniel J. Harris, *Politics and Economics of the Middle East* (Nova Science Publishers, 2008); Gabriella C. Gonzalez et al., *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates: Executive Summary* (RAND, 2008); International Business Publications, *Qatar Banking & Financial Market Handbook* (International Business Publications, USA, 2007); Augusto Lopez-Claros and Klaus Schwab, *The Arab World Competitiveness Report 2005* (World Economic Forum, 2005); Lisa McCoy, *Qatar* (Mason Crest, 2004); Marcus Noland and Howard Pack, *The Arab Economies in a Changing World* (Pearson Institute for International Economics, 2007); Rosemarie Said Zahlan, *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman* (Ithaca Press, 1998).

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Quality

Quality as defined by the American National Standard Institute (ANSI) and the American Society for Quality (ASQ) is the totality of features and characteristics of a product or service that bears on its ability to satisfy stated or implied needs. Quality is a subjective term for which each person has his or her own definition. Quality can be also understood as a product or service free of deficiencies. Quality matters to any customer, future employee, or manager and it affects the entire organization from supplier to customer.

All processes in an organization are affected by quality, from locating a facility, designing products and services, planning production and service processes, designing jobs and work activities, and managing the supply chain, to planning and scheduling the flow of products or flow of customers through the system. Quality is a competitive strategic issue, because it leads to increased productivity, lower rework and scrap costs, lower warranty costs, lower production costs, increased profits, improved company reputation, higher customer satisfaction, and expanded markets. Poor quality can be very costly to businesses and investors in the form of product recalls and lost customers. Numerous recalls of cars by General Motors in 2005 (more than 300,000 car recalls) and Chinese toy recalls in 2007 provide examples of serious quality issues. Poor-quality products and services result not only in higher costs but also lead to injuries, deaths, lawsuits, and more government regulations.

20th-Century Developments

During the last century, many leaders contributed to the field of quality and quality management. Walter Shewhart, who in 1931 introduced statistical process control (SPC) charts, noted that price has no meaning without quality. Dr. W. Edwards Deming (1900–93), a famous quality guru, insisted that managers accept responsibility for building good systems. He recognized the importance of viewing management process statistically and as a system. During World War II, he taught quality courses to the U.S. military, and after the war, he was invited to Japan to help the country take a census. Deming's teaching was instrumental in improving Japanese industry. He received Japan's highest honor, the Royal Order of the Sacred Treasure, from the emperor, and the Union of Japanese

Scientists and Engineers (JUSE) established the Deming Application Prize to recognize companies that had a high level of achievement in quality practices.

Deming synthesized his approach to quality in 14 Management Points, known as "A System of Profound Knowledge," which consists of four interrelated parts: appreciation for a system, understanding variation, theory of knowledge, and psychology. Deming identified two primary sources of process improvement: eliminating special causes of quality problems, such as specific equipment or an operator, and reducing common causes, such as poor product design or insufficient employee training. According to Deming, workers are responsible for 10 to 20 percent of the quality problems, and the remaining 80 to 90 percent are under management's control. He was against the use of final-product inspection as a waste of time and resources. He advocated continuous improvement, and he is known for developing a Plan-Do-Check-Act (PDCA) cycle, originally formulated by Walter Shewhart.

PDCA cycle is a four-step process for continuous improvement. Continuous improvement refers to both incremental changes and large and rapid improvements. These improvements may take many forms, such as enhancing value to the customer through new and improved products and services, reducing errors and defects, increasing productivity and effectiveness, and reducing customers' complaints. In the United States, Deming's teaching was ignored for many years, until in 1980 NBC aired the program, "If Japan Can, Why Can't We?" This was the beginning of Deming's recognition in the United States.

Another leader in quality was Joseph M. Juran (1904–2008), who believed strongly in top management commitment, support, and involvement in quality efforts. His definition of quality was fitness for use, not necessarily the written specifications. Juran created a "quality spiral" that shows that each element of the business process and each function— not just the final product or service—is important for the customer. Juran included quality in the strategic planning process. He proposed a "quality trilogy process" composed of quality planning (developing the products and processes required to meet customer needs), quality control (meeting product and process goals), and quality improvement (exceeding customer satisfaction levels of performance).

Philip B. Crosby (1926–2001) created the term *zero defects* and stated that there is absolutely no reason for having errors or defects in any product or service. According to him, "quality is conformance to requirements or specifications." In his book *Quality Is Free*, he emphasized that the cost of poor quality is understated and leads to a large loss in profits. He said that concentrating on making quality certain would increase profit by any amount from 5 to 10 percent of sales. Crosby introduced a quality management grid, which is divided into five stages of maturity and six measurement categories of evaluating process. This grid serves as the evaluation tool for operations that have potential for improvement.

In the 1980s Armand V. Feigenbaum introduced the *total quality control* term to reflect total commitment of management and employees throughout an organization to improve quality. In Japan this concept is called *company wide management*. The Toyota production system (TPS) and Japanese scientists contributed significantly to the current quality improvements. Dr. Kaoru Ishikawa (1915–89) promoted quality circles and quality improvement teams. They were very successful in Japan, where more than 20 million Japanese workers and supervisors have participated in quality circles and several million projects have been undertaken since 1960. Quality circles in the United States did not achieve the same popularity as in Japan. However, many leading American firms, such as General Electric, Ford, Coors, and Westinghouse were able to establish successful quality circles and process improvement teams. Many firms have an "employee suggestion box," for individual suggestions for quality improvement. Ishikawa created a cause-and-effect (or fish-bone) diagram that is instrumental in finding causes of poor quality.

Another Japanese engineer, Genichi Taguchi, contributed significantly to current quality topics. He explained the economic value of reducing variation, and he is known for "Taguchi loss function." His loss function is a quadratic function that is used to determine the loss to society when quality moves away from the target. The quality loss function is expressed in monetary units.

New Approaches

A new approach to quality is to build quality into the product and into the service. Interdisciplinary teams are created to improve quality in the design stage of a product or service. Managing processes to achieve maximum customer satisfaction at the lowest overall cost to the organization, while still maintaining process improvement, is called *quality management*. Planned and systematic activities implemented within the quality system that can be demonstrated to provide high confidence that a product or service will fulfill requirements for quality are called *quality assurance*. A systematic and independent examination or review whether quality activities comply with planned procedures and if they are effectively implemented to achieve objectives is called a *quality audit*. Quality audits can be performed by internal or external teams.

The global implications of quality are so important that the International Organization for Standardization (ISO) developed ISO 9000 standards, which were revised in 2000 into more of a quality management system. For companies doing business in Europe and globally, it is critical to be ISO 9000 certified. Also, many countries established national quality awards. The United States established the Malcolm Baldrige National Quality Award in 1987 to stimulate U.S. companies to improve quality and set as examples those companies that were successful in improving quality.

Among international quality awards there are the European Quality Award, the Canadian Quality Award, the Australian Business Excellence Award, and the Deming Prize in Japan. The American Society for Quality sponsors a number of individual awards, including the Armand V. Feigenbaum Medal, the Deming Medal, the E. Jack Lancaster Medal, the Edwards Medal, the Shewhart Medal, and the Ishikawa Medal. The George M. Low trophy is NASA's Quality and Excellence Award to contractors, subcontractors, and suppliers for excellence in quality and productivity. Many states have created various quality awards and excellence awards to recognize high-quality achievements in organizations.

See Also: Deming Model; Manufacturing; Operations Management; Quality Control.

Bibliography. Philip Crosby, *Quality Is Free* (McGraw-Hill, 1979); W. Edwards Deming, *The New Economies for Industry, Government* (MIT Center for Advanced Engineering Study, 1993); W. Edwards Deming, *Out of the Crisis* (MIT Center for Advanced Engineering Study, 1993); James R. Evans and William M. Lindsay, *The Management and Control of Quality* (Thomson South-Western, 2008); Emi Osono, Norihiko Shimizu, and Hirotaka Takeuchi, *Extreme Toyota: Radical Contradictions That Drive Success at the World's Best Manufacturer* (John Wiley & Sons, 2008); Daniel I. Prajogo, Peggy McDermott, and Mark Goh, "Impact of Value Chain Activities on Quality and Innovation," *International Journal of Operations and Production Management* (v.28/7–8, 2008); Walter A. Shewhart, *Economic Control of Quality of a Manufactured Product* (Van Nostrand, 1931); Deb Stewart and Dianne Waddell, "Knowledge Management: The Fundamental Component for Delivery of Quality," *Total Quality Management & Business Excellence* (v.19/9, 2008); Mohamed Zairi and Mohamed Zairi, *Deming & Juran: Gift to the World: Total Quality Management* (Spire City, 2007); Xingxing Zu, Lawrence D. Fredendall, and Thomas J. Douglas, "The Evolving Theory of Quality Management: The Role of Six Sigma," *Journal of Operations Management* (v.26/5, 2008).

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Quality Control

The systematic approach to quality control was developed in industrial manufacturing in the interwar years. With the impact of mass production required during World War II, it became necessary to introduce a more rigorous form of quality control. Some of the initial work is credited to Walter Shewhart of Bell Labs, starting with his famous one-page memorandum of 1924.

Control charts are often employed to detect changes in a process mean over time. In the traditional approach, a sample is drawn, and the sample mean ($\bar{x}$) is calculated and plotted on a Shewhart $\bar{X}$ chart having control limits, which depict the extremes of pure chance fluctuations. A point outside the limits suggests that the process is off target. While a Shewhart $\bar{X}$ chart is relatively easy to use and interpret, according to W. H. Woodall, a cumulative sum (CUSUM) chart is more capable of detecting small changes in the process mean, as well as pinpointing the exact time when the process goes "out of control." Faster detection of significant changes means tighter control, which is necessary if corrective action is to be taken promptly.

Like Shewhart and CUSUM control schemes, an exponentially weighted moving average (EWMA), as discussed by J. M. Lucas and M. S. Saccucci, control scheme is easy to implement and interpret. The ability of the EWMA chart to detect small shifts in the process mean is on a par with the CUSUM chart and superior to the Shewhart $\overline{X}$ chart. Lucas and Saccucci argued that the EWMA chart is simpler to explain to the lay user than the CUSUM chart, by noting its similarity to the classical Shewhart $\overline{X}$ chart. Both the CUSUM and EWMA charts are more suitable for single sampling schemes.

A control chart procedure has been proposed for which the Shewhart $\overline{X}$ chart, the cumulative sum chart, and the exponentially weighted moving average chart are special cases. The procedure for constructing these charts has been described by C. W. Champ and colleagues.

A typical statistical test examines the validity of a null hypothesis, H_0 (the process is on target), against an alternative, H_A (the process has changed). A Type I error is said to occur if H_0 is rejected when it is true and occurs with a probability α. That is, the process is on target, but, by chance, lies outside the control limits. A Type II error is said to occur if H_0 is accepted when H_A is true and occurs with a probability β. That is, the process has deviated, but lies within the control limits. The power of a test is defined to be the probability of correctly rejecting a false null hypothesis, and is equal to $1-\beta$. For a given α, one test is more powerful than another if $1-\beta$ for the former is greater than for the latter for all possible changes in the process mean.

Referring to the process under consideration, assume a batch has a true mean μ. Let τ be an acceptable target value for μ; therefore a batch is acceptable if $\mu=\tau$. In this case H_0 is $\mu=\tau$ and H_A is $\mu\neq\tau$. If a batch is rejected when, in fact, the mean is $\mu=\tau$, this is unfair to the producer. This is called the producer's risk or Type I error, and occurs with a probability α. Conversely, if a batch is accepted when, in fact, the mean is $\mu\neq\tau$, this is unfair to the consumer. This is called the consumer's risk or Type II error, and occurs with a probability β.

The consumer's risk (β) depends on the absolute difference between μ and τ. This is the drift Δ, where $\Delta=\tau-\mu$. The sample size and control limits may be selected to obtain acceptable values of α and β for a specified Δ.

The Average Run Length (ARL) for a given Δ gives the average number of batches sampled till one is rejected. The ARL is dependent on both α and β and is an important factor in selecting a control chart. The plan (the sample size and control limits) is usually chosen so that the ARL is large (500 to 1,000) when the process is on target, and small (1.1 to 10) when the process changes by Δ. The criteria are acceptable risks of incorrect actions, expected average quality levels reaching the customer and expected average inspection loads.

All the charts described so far examine the sample mean. In a process the mean might appear acceptable, but there could be a change in the inherent process variation. To monitor this variability, a range chart should also be used.

See Also: Deming Model; Management Science; Manufacturing; Operations Management; Quality.

Bibliography. Ron Basu, *Implementing Six Sigma and Lean: A Practical Guide to Tools and Techniques* (Butterworth-Heinemann, 2008); Dale H. Besterfield, *Quality Control* (Pearson Prentice Hall, 2009); Charles W. Champ, William H. Woodall, and Hassan A. Mohsen, "A Generalised Quality Control Procedure," *Statistics & Probability Letters* (v.11/3, 1991); Mark L. Crossley, *The Desk Reference of Statistical Quality Methods* (ASQ Quality Press, 2008); Acheson J. Duncan, *Quality Control and Industrial Statistics* (Richard D. Irwin Press, 1986); James M. Lucas et al., "Exponentially Weighted Moving Average Control Schemes: Properties and Enhancements," *Technometrics* (v.32/1, 1990); Douglas C. Montgomery, *Statistical Quality Control: A Modern Introduction* (John Wiley & Sons, 2009); Walter A. Shewhart, *Economic Control of Quality of Manufactured Products* (Macmillan, 1931); William H. Woodall, "The Design of CUSUM Quality Control Charts," *Journal of Quality Technology* (v.18/2, 1986).

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Quota

A quota is a threshold quantity, used as either a minimum required (such as in a sales quota) or a maximum permitted (such as an import quota), depending on the context. The purpose of a quota is to control the degree of variation in a factor. A sales quota properly met ensures a certain amount of profit over the period of the quota; an import quota that is sufficiently less than the domestic demand for an item ensures a certain amount of domestic sales in that industry. A quota is not the same thing as a goal; a country imposing an import quota would probably be much happier with even fewer imports of that item, and a business requiring a sales quota certainly would like to see sales exceed them. Quotas are baselines.

Import quotas are devices used by protectionist governments—national governments that restrict trade with other nations, especially import trade, in order to "protect" domestic businesses, workers, and profits. Protectionism has been condemned for as long as capitalism has held sway; it was one of the foundations of the mercantilism criticized by Adam Smith, and nearly every economic school of thought in the two centuries since has said that the problems of protectionist policies outweigh their benefits. Nevertheless, in a struggling economy, they can appear necessary, or offer short-term gains (or stops to short-term losses) that are politically attractive.

Import quotas and administrative barriers are the most common protectionist actions after tariffs. They limit the amount of a particular good that can be imported into the country, by each foreign country, in order to reduce the impact that foreign goods have on the equilibrium point where the domestic supply curve and the demand curve intersect. Foreign goods may be significantly cheaper, more plentiful, or more desirable, their presence thus hurting domestic competitors. Import quotas clearly benefit domestic producers, not consumers, but the underlying theory when they are put in place is that the economy itself is being protected, which benefits consumers in a less direct way.

Such quotas are kept in place by requiring importers to seek licenses, permits, or other official permission for the goods they send to the country, which represents another problem: rarely is the government agency in charge of such paperwork capable of, or necessarily interested in, making sure that the quota is distributed principally to the best or most efficient producers. There is a "deadweight loss" to the global economy inflicted by such trade circumstances, as the presence of import quotas and the potential of rewarding any but the best producer interferes with the natural mechanics of the economy under free trade, artificially shifting circumstances away from those of the equilibrium that unrestricted market forces would naturally seek out.

On the other hand, import quotas are not used only to protect inefficient domestic producers from competing with better and more efficient foreign producers. Such quotas are often defended, in industry- and country-specific contexts, in order to prevent foreign producers from flooding the market with underpriced shoddily made goods, or from "dumping"—an act in international trade in which goods are sold for less than fair value. Many international trade agreements that otherwise strongly support free trade, such as the General Agreement on Tariffs and Trade and the World Trade Organization, allow restrictive actions such as quotas to be taken in order to prevent dumping.

A special type of import quota is the voluntary export restraint, which is voluntary only in the sense that it is adopted by the exporting country at the strong urging of the importing country. VERs were permitted under GATT and bilateral VER agreements were common, in which two countries would agree to restrict their trade of two types of goods—one import and one export—in an arrangement that theoretically benefited the economies of both countries.

See Also: Dumping; General Agreement on Tariffs and Trade; Nontariff Barrier; Tariff; Trade Balance; Trade Barriers; Trade Sanctions; Voluntary Export Restraints; World Trade Organization.

Bibliography. Robin Anson, *World Textile and Clothing Trade and Capacity: Impact of Quota Elimination* (Textiles Intelligence, 2007); Kala Krishna and Ling H. Tan, *Trade Policy With Heterogeneous Traders: Do Quotas Get a Bum Rap?* (National Bureau of Economic Research, 2007); Hong Song, "Global Quota System and China's Textile and Clothing Industry," *China and World Economy* (v.14/5, 2006); Robin Stryker, "Disparate Impact and the Quota Debates: Law, Labor Market Sociology, and Equal Employment," *Sociological Quarterly* (v.42/1, 2001); Technopak Advisors Pvt. Ltd., *Strategies for Textile and Apparel Manufacturers in the Post-Quota Era: Prospects to 2015* (Textiles Intelligence, 2007); David Vanzetti, Santiago Fernández de Córdoba, and Veronica Chau, *Banana Split: How EU Policies Divide Global Producers* (United Nations, 2005).

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Real Hedge

The meaning of a real hedge varies with the context in which it is used. A real hedge involves taking of positions by investors to alter their exposure to risk. The term *real hedge* is most widely used in the risk management literature to mean a hedge based on real options. A hedge is any device used by an investor to reduce the risk of a given investment. This can take the form of the purchase of any asset or array of assets to issue against fluctuations in wealth from alternative sources.

The distinguishing feature then of a real hedge is the kind of assets used in such a hedge portfolio or collection of hedge portfolios. If the hedge portfolio consists of only financial assets, then this is a financial hedge whereby the holder acquires the right to buy or sell a traded asset such as a stock. For example, a forward foreign exchange contract can be used by a company based in Europe that exports its products to the United States and is exposed to the risk of changes in exchange rates between the euro and the U.S. dollar. In a case such as this, if the firm exports goods worth US$10 million annually and there transpires a 10 percent depreciation of the U.S. dollar against the euro, it stands to lose €10 million per annum. The firm can sell U.S. dollars forward, thereby using a financial hedge to offset its exposure to foreign exchange risk in the short run. Considering long-run horizons, however, if the underlying transactions do not materialize because of unanticipated changes in business conditions, the intended financial hedge can be transformed into a form of financial speculation. A real hedge, based on real options, is more suitable in the long run.

A real option is the right to take a specific business decision such as making or not making a capital investment. An important distinction between real and financial options is that the underlying assets on which real options are based are not traded in competitive markets. This distinction thus also applies with respect to real hedges and financial hedges. Real options give an investor the flexibility to choose the most attractive alternatives subsequent to the availability of new information and thereby add value to investment opportunities. Real options are almost always investment specific. In the example above, the European-based firm has, at least in theory, the real option of starting up production in the United States. This specificity makes it difficult to describe a general theory of real options on which real hedging is based. There are, nonetheless, three main types of options that are commonly encountered in the literature. These are the option to delay an investment opportunity, the option to grow, and the option to abandon an investment opportunity. The option to delay an investment opportunity gives the firm a chance to choose an optimal time to commit to an investment and thus add value to it. The growth option entails a firm having a real option to invest in the future, especially when market conditions are better than expected. The growth options can involve expanding the capacity of an existing product line, going into new geographic markets, or adding new products.

The abandonment option is the option to walk away from a project. In the example above, the European-based manager does not have to be restricted to a financial hedge. The company can use a real option of shutting down production in Europe and starting production in the United States. This is subject to absence of barriers to entry in the U.S. market, if the firm does not have any facilities in the United States initially.

From this perspective of real hedging, the decision as to whether a financial hedge or real hedge should be adopted depends on whether the described level of risk is for the short run or part of a long-term problem. Empirical studies show a preference for financial hedges in the short run, while real hedges are more commonly used for the longer-term risk strategies. The decision also hinges on the costs and benefits of hedging, it being the case that the real cost of hedging is what the firm incurs by not hedging.

See Also: Hedging; Option; Risk Management.

Bibliography. Tom Aabo and Betty J. Simkins, "Interaction Between Real Options and Financial Hedging: Fact or Fiction in Managerial Decision-Making," *Review of Financial Economics* (v.14, 2005); Udo Broll and Jack E. Wahl, *Export Production, Hedging Exchange Rate Risk: The Duopoly Case* (Technische Universität Dresden, 2008); Björn Döhring, *Hedging and Invoicing Strategies to Reduce Exchange Rate Exposure: A Euro-Area Perspective* (European Commission, Directorate-General for Economic and Financial Affairs, 2008); John C. Hull, *Options, Futures and Other Derivative Securities* (Pearson Prentice Hall, 2009); Kit Pong Wong, "The Effects of Abandonment Options on Operating Leverage and Forward Hedging," *International Review of Economics and Finance* (v.15, 2006).

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Recruitment

Recruitment is the process of generating a pool of qualified candidates for a particular job. The firm must announce the job's availability to the market (inside and outside the organization) and attract qualified candidates to apply.

To date most of the research conducted has addressed recruitment sources, recruiters, and realistic job previews. Once an employer has decided that external recruitment is necessary, a cost-effective and appropriate method of recruitment must be selected. There are a number of distinct recruitment sources to choose from, each of which is more or less appropriate in different circumstances. As a result, most employers use a wide variety of different recruitment sources at different times; the most prominent are the following (in many situations there is also a good case for using different sources in combination when looking to fill the same vacancy):

1. Current employees. Internal job postings give current employees the opportunity to move into the organization's more desirable jobs. Internal advertising has the advantage of providing maximum information to all employees, who might then act as recruiters. It also provides the opportunity for all internal employees to apply, and is speedy and cost-effective. Conversely, it is limited to a certain number of applicants, the internal candidates are not matched against those from outside, and it could be unlawful if it inserts indirect discrimination.
2. Referrals from current employees. Studies have shown that employees who were hired through referrals from current employees tended to stay with the organization longer and displayed greater loyalty and job satisfaction than employees who were recruited by other means. Employee referrals can be an effective recruitment tool, because employees have a good sense of what it takes to be a successful worker and member of the organization.
3. Former employees. An organization may decide to recruit employees who previously worked for the organization. Forming an online alumni network could be a simple and cost-effective way to maintain a hiring pool of competitive candi-

dates. Moreover, a network of former employees can be a source of employee referrals, because they are familiar with the company, its culture, and its values.

4. Print and radio advertisements. Advertisements can be used both for local recruitment efforts and for targeted searches. Advertising in the national press has the advantage of reaching large numbers and constitutes the accepted medium for search by those seeking particular posts. Conversely, the cost might be high and much of the cost could be wasted in reaching inappropriate people. Advertising in the technical and targeted press has the advantage of reaching a specific population with minimum waste, but it is inappropriate when a nonspecialist is needed or where the specialism has a choice of professional publications.
5. Internet advertising and career sites. Employers are increasingly turning to the Web as a recruitment tool, because online ads are relatively cheap, are more dynamic, and can often produce faster results than newspaper ads. For employers the principal attraction is the way that the internet allows jobs to be advertised inexpensively to a very large audience. The cost of setting up a good Web site is quite low. The other big advantage is speed. People can respond within seconds of reading about a job opportunity by e-mailing their CV. Shortlisting can also be undertaken quickly with the use of CV-matching software or online application forms.

   In practice, however, there are major problems. A key drawback is the way that employers advertising jobs tend to get bombarded with hundreds of applications. To prevent this, online shortlisting software that is able to screen out unsuitable applications must be used. Such technologies, however, are not wholly satisfactory. Those that work by looking for key words in CVs inevitably have a "hit and miss" character and can be criticized for being inherently unfair. The alternative is to require candidates to apply online by completing an application form or psychometric test. Other problems concern fears about security and confidentiality, which serve to deter people from submitting personal details over the Web. Criticisms have also been made about poor standards of ethicality on the part of cyber agencies.
6. Employment agencies. Many organizations use external contractors to recruit and screen applicants for a position. Agencies can be particularly effective when the firm is looking for an employee with a specialized skill.
7. University or college recruiting. Many organizations recognize that there is value in interacting with university or college students, developing relationships, and generating interest in the pool of candidates through activities such as company visits to college campuses, job fairs, and internships.
8. Customers. An innovative recruitment source is the organization's customers, who are already familiar with the organization and what it offers. Customers may bring more enthusiasm to the workplace than other applicants and, as the recipients of the firm's product or service, may have valuable insights into how the organization could be improved.

With regard to recruitment sources, it is expected that different sources might be associated with different recruitment outcomes. Two main explanations have been offered that try to understand this association. The realistic information hypothesis proposes that persons recruited via certain sources are likely to have more accurate information about what a job entails. Possessing such information is thought to enable an applicant to make a more informed decision about whether to pursue a job. Lacking such information, the individuals are thought to be less likely to be able to self-select out of consideration for jobs that may not be a good fit in terms of their skills and interests. If hired, these less-informed individuals are more likely to be unhappy with their job choice and may be more likely to resign. The second explanation is known as the individual difference hypothesis. This explanation is based on the premise that sources differ in the types of individuals they reach and that these differences result in different outcomes.

The human resource manager needs to monitor the effectiveness of the recruitment sources, first to ensure value for money, and second, to ensure that the pool of applicants produced by the various sources is suitable. Researchers have suggested four numbers to collect to monitor the effectiveness of the recruiting: (1) number of initial inquiries received that resulted in completed application forms; (2) number of candidates at various stages in the recruitment and selection process, especially those shortlisted; (3) number of candidates recruited; and (4) number of candidates retained in the organization after six months. There is also a good case for monitoring the numbers of men and women who are successful at each stage of the process and the numbers of people from different ethnic minorities. Where an imbalance becomes apparent, the organization can then take remedial action.

Recruiters and Job Previews

In addition, recruiters play a central role in the recruitment process, because applicants' perceptions of recruiters' behaviors (e.g., their willingness to provide information) and attitudes (e.g., their interest in the candidate) are associated with applicants' expectations of receiving a job offer and their reported probability of accepting the offer. In terms of recruiter demographic characteristics, there is a weak relationship between demographic characteristics and applicant reactions. However, it could be argued that similarity on certain dimensions with the recruiters might be important to job applicants, especially for variables such as job attractiveness. Finally, the evidence regarding the effect of recruiter experience, training, and functional area on applicants' reactions remains quite inconclusive.

Recruiters might have an effect on job candidates because they serve a key role in directly communicating information about a position and an organization to applicants. To carry out this communication role effectively, a recruiter needs to have both the ability to communicate effectively and personal credibility. Moreover, recruiters could be seen by applicants as signals of unknown aspects of the organization, especially when the applicants lack detailed knowledge of the hiring organization and when the recruiter is from their functional area.

Finally, realistic job previews play a crucial role in the recruitment process. A realistic job preview refers to the presentation by an organization of both favorable and unfavorable job-related information to job candidates. Most realistic job preview models hypothesize that providing realistic job information to applicants results in their having their job expectations met. It is further assumed that providing realistic job previews influences job clarity and individuals' perceptions that the organization is honest with them. Given that candidates perceive alternatives to accepting an undesirable job, providing a realistic job preview results in applicant self-selection, which, in turn, results in a higher level of job satisfaction, a lower level of voluntary turnover, and a higher level of performance.

In addition to the above-mentioned traditional sources of recruitment, many companies recruit from nontraditional labor pools and use innovative methods to attract new employees. Nontraditional labor pools can include prisoners, welfare recipients, senior citizens, and workers from foreign countries.

Other Considerations

An integral part of many organizations' recruitment efforts, both externally and internally, is attracting women, minorities, people with disabilities, and other employees in the protected groups. Many private sector employers believe that policies such as affirmative action make good business sense for them. A good rule of thumb is to target potential recruits through media or recruitment methods that focus on minorities. However, when a company puts too much emphasis on hiring of minorities in ads, candidates may feel resentful or believe they are being hired simply to fill a quota. Thus, recruitment experts say that minority candidates should be addressed the same way all candidates are.

It is also important to provide certain types of documentation to recruits as a means of focusing their minds on whether the job will suit them or not. Documents that are commonly provided for applicants are the following: a copy of the relevant job description and personnel specification, a copy of the advertisement for reference purposes, a copy of any general recruitment brochure produced by the organization, the staff handbook or details of a collective agreement, details of any occupational pension agreements, and general information about the organization. It is also essential to have some method of tracking recruitment, so that an immediate and helpful response can be given to applicants inquiring about the stage their application has reached. It is also necessary to ensure that all applicants are informed about the outcome of their application. This will reduce the number of inquiries that have to be handled, but it is also an important aspect of public relations, as the organization dealing with job applicants may also be dealing with prospective customers.

Finally, it is useful and far more satisfactory to have in place a fair and objective system for shortlisting candidates that produces the best group of alternative candidates to move forward to the interview stage. This can be achieved by using a panel of managers to undertake shortlisting, reducing the likelihood that individual prejudices will influence the process. Another way is by employing a scoring system with which to score each CV or application form received against the key shortlisting criteria identified at the start of the process.

See Also: Diversity; Multicultural Work Groups and Teams; Salaries and Wages; Staffing Levels; Training.

Bibliography. Irving H. Buchen, *Partnership HR: New Norms for Effective Recruitment, Performance, and Training of Today's Workforce* (Davies-Black, 2007); Constangy, Brooks & Smith, LLC, *Recruiting, Retaining, and Terminating Employees* (Ceridian, 2008); Margaret Foot and Caroline Hook, *Introducing Human Resource Management* (Prentice Hall Financial Times, 2008); Niamh Gallagher and Duncan O'Leary, *Recruitment 2020: How Recruitment Is Changing and Why It Matters* (Demos, 2007); Marloes De Graaf-Zijl and Ernest E. Berkhout, "Temporary Agency Work and the Business Cycle," *International Journal of Manpower* (v.28/7, 2007).

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Redundancy

In business terminology, redundancy is the condition of having more employees—specifically, more man-hours of labor—than there is work that needs to be done. Though desirable in some sense, as it can be the consequence of improved efficiency particularly if demand does not increase enough to take up the slack, from the employee's point of view it is a workplace bogeyman, leading to the dreaded layoffs.

Changes to a company can also lead to redundancy—even if the company is expanding, it may find itself with employees it no longer has work for, such as if a merger results in combining departments or middle management positions. Restructuring often follows a leveraged buyout of a company, especially with the aim to improve efficiency and profitability—nearly always leading to lost jobs. Because the collective bargaining agreements of labor unions may include clauses restricting layoffs, companies may try to attract volunteers for "voluntary redundancy."

Like the passenger bumped off an overbooked flight in exchange for free tickets another time, voluntarily redundant employees are given financial incentives in exchange for terminating their employment. The financial incentive will usually be a reasonable severance package, and in some cases there may be pension benefits awaiting; voluntary redundancy is often offered to the older employees, for much the same reason that early retirement is encouraged. As the average age of the company decreases, so—as a broad rule of thumb—does its average wage. Voluntary redundancy severance packages may include a continuation of pay over a certain period, a bonus payment, and assistance in job searching. Benefits specific to the company's industry may also be included—when Delta Airlines offered a voluntary redundancy package to some of its employees, one benefit was free airfare on Delta flights for a limited period of time. Positive letters of recommendation are, of course, to be expected as well, and there is no particular stigma attached to having left a job because of voluntary redundancy.

Restructuring often leads to renegotiating labor contracts while retaining—even rewarding—upper management, which can make involuntary layoffs an option even at companies where the collective bargaining agreement previously limited them. This is the sort of redundancy that is typically referred to by one euphemism or another: *downsizing, smartsizing, rightsizing, simplification, workforce optimization.* Thanks to euphemism drift—the process by which one term after another is introduced to replace the one that has become sullied by its associations with a negative thing, like *recession* replacing *depression*, which replaced *panic*—these terms have become as reviled as *layoff* and *redundancy*. The term *attrition*, on the other hand, specifically indicates that the positions being vacated will be eliminated.

Workers who are laid off involuntarily may or may not be offered a severance package, though it is typical and traditional to do so. The severance package typically includes an extension of benefits coverage (health and life insurance) for several months to a year after termination of employment; a balloon payment based on length of employment; and compensation for unused vacation or sick days. Additional payments may be made to employees in some cases in order to compensate for a lack of notice before termination; this becomes common when companies worry about morale and performance of employees aware that they are being forced out of the company. Layoff severance packages may be predetermined by company policy or labor union agreements. Employees who are involuntarily laid off are eligible for state unemployment benefits; voluntary layoffs usually are not.

See Also: Employer–Employee Relations; Staffing Levels.

Bibliography. Kenneth De Meuse and Mitchell Lee Marks, *Resizing the Organization: Managing Layoffs, Divestitures, and Closings* (Pfeiffer, 2003); Louis Uchitelle, *The Disposable American: Layoffs and Their Consequences* (Vintage, 2007).

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Reentry

Reentry of expatriates (or repatriation) refers to the process and the outcomes of the return to the home country of employees who have been sent on assignments abroad. The reentry of expatriates has been given minimal attention until recently, as most practitioners and scholars focused on problems faced by expatriates during their stay in the host country (which is termed *expatriation*). However, in recent years it has become evident that repatriates also face substantial problems, which incur negative consequences for both themselves and their employers.

It is not unusual for repatriates to experience an intense cultural shock (which signifies the inability to accept and adapt to differences between the culture one is familiar with and the culture one is required to live and work in) when they return to their mother country after completing their assignments. It can be similar to the cultural shock experienced by expatriates when they are sent abroad. This is because these individuals have stayed for substantial amounts of time (normally for a minimum of three years, but in some cases for considerably longer) in countries with different cultures and have adapted and functioned within these cultural environments. Cultural values, assumptions, habits, and behavioral patterns are entirely learned. Hence, during the assignment to the host country, individuals tend to learn and acquire the cultural characteristics of the host country, while at the same time they unlearn (or set in latent mode) the cultural features of their home country. In this sense, repatriation may require similar levels of cultural adaptation as expatriation.

There are, however, additional problems that go beyond cultural readaptation. These can be categorized in terms of problems in personal readjustment and problems in reabsorption to the home country workplace. Problems in personal readjustment include the loss of fringe and other benefits that are typically enjoyed by expatriates; loss of certain privileges; and in some cases, "demotion" in the cultural lifestyle. For example, expatriates normally enjoy attractive financial packages that are lost upon return to the home country; a fact that forces them and their families to adjust to lower standards of living. At this point it must be kept in mind that in most cases personal readjustment includes the family, which tends to play a pivotal role in the lives of the majority of individuals.

Problems in reabsorption to the home country workplace include dealing with organizational changes while abroad. It is likely, for example, that during the time the individual has been abroad, the home country unit the individual was based in restructures and the individual's position either becomes redundant or less pivotal. It is also likely that while abroad key peers, mentors, and allies of the individual in his/her home country workplace are transferred or leave the organization.

Other problems may stem from technological advances in the home country operation while abroad. Such advances are likely to make the knowledge and skills of the individual (for which he/she was sent abroad in the first place) obsolete in the home country; meaning that the value the repatriate adds to his/her company upon return has to be reconsidered and adjusted at lower levels. The home country unit in which the individual was based may also learn to operate without him/her, and may "forget" the contributions and value of the individual.

It appears that the majority of repatriates experience work readjustment and reabsorption problems in various degrees. These are likely to result in negative evaluations of the organization, which may be manifested in terms of repatriates' perceptions that they have been "demoted" upon return to the home country, that their acquired foreign experience is neither appreciated nor used, and that the organization misled them in its promises. These, in turn, are translated in low motivation and high turnover intentions. Indeed, evidence suggests that repatriates are significantly more likely than other employees to leave their employer.

Because of the problems experienced by expatriates, and consequently by their employing organizations, a number of methods have been developed to manage the transition back home smoothly:

- Establishing repatriation agreements. This should take place before the individual leaves for the expatriate assignment. Repatriation agreements reduce the likelihood that false expectations develop and, hence, reduce the likelihood that repatriates feel that they have been misled or betrayed by their employer.
- Mentoring or sponsorship during the expatriate assignment by senior colleagues or peers in the home country. This increases the likelihood that individuals are kept informed on changes and developments in the home country while abroad and, hence, reduces the likelihood that individuals face totally unexpected situations upon return.
- Maintenance of regular contact between the home operation and the individual during the expatriate assignment. This can be achieved in terms of regular memos as well as briefings during the visits of the expatriate to the home operation. The advances in information and communication technology greatly facilitate the implementation and running of such policies.
- A dedicated human resources unit to deal with repatriate and expatriate issues. Some large corporations have resorted to the establishment of such units. The specialist unit can function as a link between the individual and the home country and can assess the personal and professional needs of the individual before his/her return to the home country in order to identify (a) areas in which the repatriate can contribute to the home operation and (b) knowledge, skills, and competencies of the repatriate that need improvement.

Repatriates are at risk for a number of problems and may be much more likely to leave their employer than other staff.

See Also: Acculturation; Culture Shock; Expatriate; Multinational Corporation.

Bibliography. J. Stewart Black, "Coming Home: The Relationship of Expatriate Expectations With Repatriate Adjustment and Job Performance," *Human Relations* (v.45, 1992); Shu-Cheng Steve Chi and Shu-Chen Chen, "Perceived Psychological Contract Fulfillment and Job Attitudes Among

Repatriates," *International Journal of Manpower* (v.28/6, 2007); Michael Dickmann and Noeleen Doherty, "Exploring the Career Capital Impact of International Assignments Within Distinct Organizational Contexts," *British Journal of Management* (v.19/2, 2008); Jean-Marc Hachey, *The Big Guide to Living and Working Overseas* (Intercultural Systems, 2007); Mitchell R. Hammer, William Hart, and Randall Rogan, "Can You Go Home Again? An Analysis of the Repatriation of Corporate Managers and Spouses," *Management International Review* (v.38/1, 1998); Anne-Wil Harzing and Joris Van Ruysseveldt, *International Human Resource Management* (Sage, 2004); Tiina Jokinen, Chris Brewster, and Vesa Suutari, "Career Capital During International Work Experiences: Contrasting Self-Initiated Expatriate Experiences and Assigned Expatriation," *International Journal of Human Resource Management* (v.19/6, 2008); John M. Mezias and Terri A. Scandura, "A Needs-Driven Approach to Expatriate Adjustment and Career Development: A Multiple Mentoring Perspective," *Journal of International Business Studies* (v.36/5, 2005); Arvind V. Phatak, *International Dimensions of Management* (PWS, 1992); Rosalie L. Tung, "Career Issues in International Assignments," *Academy of Management Executive* (v.2/3, 1988).

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Regiocentric Human Resource Policy

A multinational organization is able to pursue one of a number of different approaches in relation to its international staffing. One of these approaches is the regiocentric staffing approach. A regiocentric approach is applicable to situations where regional groups of subsidiaries reflecting the organization's strategy and structure work as a unit. Where multinational corporations structure their organizations based on regions, they are more likely to view their staffing on a regional basis rather than on a host-country basis. A regiocentric staffing approach is one where the human resource policies reflect the strategies used by the multinational organization in that particular geographic region. This approach is similar to a geocentric approach in the sense that a wider pool of managers is used. Unlike the geocentric approach, however, the movement of managers is restricted. Under this strategy, regional staff have the capacity to move outside their countries, but they are limited to their geographical regions. While regional managers are also not able to be promoted to positions at headquarters outside their region, they do experience autonomy in terms of decision making within their regional boundaries.

A regiocentric staffing approach develops regional staff for key positions anywhere in the region that is defined by the multinational organization. For example, a United Kingdom–based company could differentiate into a number of different regions, including western Europe, eastern Europe, North America, Latin America, the Caribbean, southeast Asia, the Pacific Rim, the Middle East, and west Africa. Their staff could easily be transferred between countries in the western European region (e.g., from the United Kingdom to France; from Ireland to Italy), however, transfers between the regions (e.g., United Kingdom to Japan) would be rare. Regiocentric policies allow multinational organizations a means of gradually progressing from a strictly ethnocentric or polycentric approach to a more geocentric approach by breaking down the steps of transition.

Regiocentric staffing policies can involve the use of a mixture of host country and parent country nationals. Given the regional focus, all transfers within the region are considered to be host country nationals. Where parent country nationals are used, they are more likely to be allocated to a region rather than a particular country.

Because local subsidiaries are staffed almost entirely by host country nationals, the staffing policy is one that reflects sensitivity to local operations with less corporate integration, similar to the polycentric approach. Language and culture barriers are reduced alongside the costs associated with hiring. Additionally, this approach allows interactions and the sharing of information between those managers who have been transferred to regional headquarters from subsidiaries within the region and the parent country nationals who have been posted to regional headquarters.

The disadvantages associated with a regiocentric approach mirror those that accompany the use of largely host country nationals. Because of the high levels of control given to regional managers, the levels of control held by global headquarters may be inhibited. Furthermore, although a regiocentric approach does improve career prospects at national levels, opportunities are largely limited beyond the given subsidiary or region of operation. Thus, while opportunities may exist at the level of regional headquarters, these seldom extend to those at parent headquarters. Because a regiocentric approach constitutes a large concentration of host country nationals, there is also a risk that it can produce federalism among the regional units, rather than on a national basis. This, in turn, may hinder the organization from establishing a global stance.

Research has shown that better-performing multinationals are more likely to make use of regional transfers. Multinational organizations in certain regions may, however, experience difficulties finding adequately qualified managers to staff their operations. Those located in emerging markets such as China, eastern Europe, southeast Asia, the Middle East, and Africa, in particular, may encounter difficulties locating managers with the right mix of skills necessary to manage regional operations. In these situations, it is far more likely that parent country nationals will be posted.

See Also: Ethnocentric Human Resource Policy; Geocentric Human Resource Policy; Multinational Corporation; Polycentric Human Resource Policy.

Bibliography. Yi Ying Chang, Adrian J. Wilkinson, and Kamel Mellahi, "HRM Strategies and MNCs From Emerging Economies in the UK," *European Business Review* (v.19/5, 2007); Fragkiskos Filippaios and Ruth Rama, "Globalisation or Regionalisation: The Strategies of the World's Largest Food and Beverage MNEs," *European Management Journal* (v.26/1, 2008); David A. Heenan and Howard V. Perlmutter, *Multinational Organisation Development* (Addison-Wesley, 1979); Allan J. Morrison, Daniel A. Ricks, and Kendall Roth, "Globalisation Versus Regionalisation: Which Way for the Multinational?" *Organisational Dynamics* (v.19/3, 1991); Arnold Schuh "Regionalization in Central and Eastern Europe: Searching for Regiocentric Orientations in MNC Strategies," *Journal of East-West Business* (v.13/2–3, 2007).

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Regional Development Banks

Regional development banks (RDBs) are public regional financial organizations established by governments of countries in a region with an aim to spur economic development in a region (or continent). They are, to a large extent, the result of mimicking the International Bank for Reconstruction and Development (IBRD), better known as the World Bank. However, the focus of the regional development banks is somewhat narrower, and they usually do not have as large a portfolio of services. Regional development banks are the product of the 20th-century trend of promotion of multilateral diplomacy.

The era of multilateral diplomacy basically started with the end of World War I and the attempts to create a long-lasting peace in Europe. Although the United States actively participated in World War I (from 1917) the U.S. Senate did not look favorably at further U.S. involvement in European affairs and full U.S. participation in the League of Nations. So, although the Bank for International Settlements (BIS) was created to support financial stability in Europe, acting as the "bank of the central banks," it has, to a large extent, failed to play the role that it was supposed to play.

The end of World War II brought another attempt to create a more efficient and stable world order, where the basic ideals of democracy and universal freedom would be upheld. With the establishment of the Organization of United Nations (OUN), a large part of the political infrastructure has been set up, while the Bretton Woods institutions (IBRD and the International Monetary Fund, or IMF) were created to cover the economic sphere. The IBRD had more or less universal coverage, operating in the majority of the countries. However, already in the late 1950s, there was dissatisfaction with the World Bank, and a series of regional financial organizations were set up. Although they are regionally based, some founding members are not countries from the region, but are the leading countries in the world (most Organisation for Economic Co-operation and Development [OECD] countries are founding members of regional development banks).

Regional development banks share the same broad objective with the IBRD, which is to promote the social and economic development of the population of their beneficiary member countries through the provision of financial assistance. However, over time, most of the regional development banks are providing, increasingly, technical assistance in the implementation of the project, as well. Although regional development banks are regarded as regional (public) financial institutions, they are still banks. They may not be profit-driven organizations, but they have to ensure that their operations have some surpluses that can be reinvested in the bank. These banks are characterized by a broad membership, including both borrowing developing countries and developed donor countries, and are not limited to member countries from the region.

All regional development banks are multilateral organizations that are established by both countries that are beneficiaries (clients) and those countries that have interests in promoting economic development, and are usually providers of finance, rather than users of the banks' funds. All the banks have a separate legal structure, although a closer look at their internal organization and modus operandi suggests that IBRD was the blueprint for designing their internal infrastructure.

Banks operate through loan support to the beneficiary member governments for a specific project and/or program. They are lending institutions, not the donor agencies. Their loans focus on one of three areas: works, supplies, or services. In the first area, the focus is on infrastructure projects, especially those that can promote sustainable development and spur economic growth. Financing for acquiring supplies usually focuses on particular goods (for instance, medical supplies), while services focus on technical knowledge—consultancy and/or other various technical assistance projects.

Banks will grant short- to medium-term credit at market rates, and one of the advantages is that usually what the regional development banks may finance, some purely commercial banks/entities would not consider economically viable and would not extend credit at regular market rates. Long-term credits are often granted to less developed countries (LDCs) to support development in a particular area. Often these credits may be given with a generous grace period, or very easy terms for servicing, compared to the usual market rates and conditions.

Some regional development banks have a private (finance) arm, which supports economically viable projects that come from private persons/entrepreneurs. Increasingly, both international and regional development banks are looking for new ventures in the near future and to improve the visibility of these projects.

Examples

At present the most well-known regional development banks are the Asian Development Bank (ADB), the African Development Bank (AfDB), the Inter-American Development Bank (IADB), and the European Bank for Reconstruction and Development (EBRD). There also are the Caribbean Development Bank, Central Asian Development Bank (CADB), Black Sea Trade and Development Bank (BSTDB), Islamic Development Bank (IDB), Central American Bank for Economic Integration (CABEI), East African Development Bank (EADB), West African Development Bank (BOAD), and others. There are also other organizations that are genuinely multilateral and promote development in third world countries. Those are the International Fund for Agricultural Development (IFAD), Nordic Development Fund (NDF), and OPEC Fund for International Development. There are also two banks that are regional but that have more than a classical development function, because they operate primarily in highly developed Western countries: the European Investment Bank (EIB) and the Nordic Development Bank (NDB).

ADB, AfDB, IADB, and EBRD are "real" multilateral development banks that focus on a particular region but that have in their membership both regional and nonregional members, and the membership is rather wide. In other cases, the membership is usually regional, and the countries that own the bank are, at the same time, the beneficiaries. Often the creation of these regional banks has been connected with the discovery of oil and significant inflow of oil money and the desire to support sustainable development from mineral extracting revenues. Regional development banks that are less multilateral and do not have any or significant numbers of regional members are often referred to in the World Bank parlance as "subregional development banks."

Regional development banks have primarily been organized to serve developing countries and only in

Financing from the African Development Bank reached this Egyptian firm via a 2005 deal with the National Bank of Egypt.

the case of the EIB is there a quasi-development bank operating in the advanced industrialized economies (and new member states that have graduated in the process of economic, political, and social transition). The target countries are often subjected to serious economic and financial crises, and there is relatively little that can be done about their stability from the global level. The provision of financial and economic stability may be a task for the national governments, but a longer view is also needed to see to what extent the regional policies may assist in development of financial stability.

Regional development banks have been serving and will probably continue to serve not only as a source of financial resources for worthwhile projects that the governments of member states cannot fund or are not within their immediate priorities, but they will also continue providing technical assistance and sound development advice. Even the EIB is an active investor that offers assistance in management of the projects and provides necessary advice. RDBs are expected to continue supporting, along with the World Bank, the implementation of so-called second generation reforms to create an institutional setting adequate for a modern market economy, encompassing the rule of law, promoting property rights and adequate enforcing mechanisms, giving transparency to economic and political activities, improving financial regulations and supervision, strengthening the financial institutions (banks, microfinancial institutions, financial markets, and so on), and furthering similar structural reforms.

Overall, the role of RDBs is important, because they primarily operate through financing projects in the real sectors of economy and therefore could provide stabilization behavior ex ante. They are also active in the long-term end of finance provision, and therefore they can offer long-term solutions in securing stability and holding off occasional systemic shocks. And, finally, they are, as a rule, in a "coterminosity" position with the Bretton Woods institutions (World Bank and IMF) when it comes to promotion and enforcement of far-reaching structural reforms. These reforms are much needed in countries in the process of building a modern, vibrant, functioning market economy and addressing adverse remnants of past (state-dominated) economic behavior.

See Also: African Development Bank; Asian Development Bank; Bretton Woods Institutions; Development Assistance; European Bank for Reconstruction and Development; Inter-American Development Bank; International Bank for Reconstruction and Development; International Monetary Fund; World Bank, The.

Bibliography. Lalit Kumar Bansal, *Regional Development Banks and Development* (Deep & Deep Publications, 1988); Aron Cronin and James McLeod, *Winning Aid-Funded Business: The Regional Development Banks* ([UK] Department of Trade and Industry, 2005); James M. Cypher and James L. Dietz, *The Process of Economic Development* (Routledge, 2009); Maurice Schiff and L. Alan Winters, *Regional Integration and Development* (World Bank, 2003); John White, *Regional Development Banks: The Asian, African and Inter-American Development Banks* (Praeger Publishers, 1972); John White, *Regional Development Banks: A Study of Institutional Style* (Overseas Development Institute, 1971); World Bank, *Evaluation of World Bank Support of Regional Development Programs* (World Bank, 2007).

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Regional Divisions

A regional division is a multinational firm's organizational structure by which the primary division of the firm is by a small number of geographic regions. For example, an insurance firm may be primarily divided into four regional divisions (Americas, Africa/Middle East, Asia/Pacific, Europe), and each of these divisions may then contain various product, market, and country structures.

A school of thought exists, largely led by Alan Rugman and associates, that sees regionalism as an a priori level of analysis. However, most writers seem to understand the regional mind-set with respect to global and multinational mind-sets. Whereas the global mind-set sees the similarities across markets and tends to compete as if national borders did not exist and the multidomestic philosophy recognizes the uniqueness of national markets and organizing the firm to compete at that level, the regional philosophy seeks to emphasize that there are significant similarities within the world's geographic regions.

The traditional way to think of regional divisions was as some variation on the "multidomestic structure." Thus, having recognized the uniqueness in the Argentinean versus the Brazilian versus the Colombian national markets, and granted some level of autonomy to subsidiary businesses units in each country, the firm with a regional worldview would likely set up a South American regional office. The basic purpose of this regional division would be to coordinate and aggregate managerial efforts for this part of the world. However, the region itself may have a strategic imperative—for example, to growth, profit, or innovation—searching for synergies within the region and may give different countries within the region different strategic roles.

Thus, for example, the Nestlé Group has three global geographic zones (Europe, Americas, and Asia/Oceania/Africa), each headed by a zone director who reports to Nestlé's CEO and also sits on the corporate board. Additionally, as an indication of the local responsiveness (or multidomestic) aspect of the overall structure, it is telling to note that each of the geographic zones is divided into individual countries or country groups. For example, the Americas zone contains the Latin American and Caribbean groups and the United States and Canada.

The other way to think of regional divisions is as a variant of a global strategy and structure. Thus, the baseline mentality would be one that considers the world as one market and tends to ignore national boundaries. However, the firm may see some strategic advantage to setting up a few regional divisional offices for some combination of administrative/control and strategic purposes. Microsoft, for example, which has a highly integrated global strategy and standardized products, has hundreds of local sales offices clustered into six regions, namely Asia, Europe, Middle East and Africa, North and Central America, South America, and South Pacific. These offices are mainly for marketing, sales, product support, and customer service.

George Yip reminds us that a region does not necessarily imply geographic proximity. He provides the example of Gillette, which uses a socioeconomic/usage criteria resulting in countries like Canada, the United States, Britain, Australia, and New Zealand being included in the same region. Another example comes from the Nissan Corporation. In addition to its corporate headquarters in Japan, Nissan has three regional offices with various roles. The North American office in Tennessee serves as headquarters for North American operations, for the manufacturing and sale of vehicles and auto parts. Nissan International SA, based in Switzerland, covers the management of European sales and manufacturing operations. And Nissan Europe S.A.S, based in France, is a holding company for European subsidiaries and pan-European operational support.

The regional concept is more relative than taxonomical. Structures of contemporary multinational firms are complex, commonly featuring global, regional, multidomestic, matrix organizations.

See Also: Globalization; Global Product Divisions; Global Structure; Home Country; International Division Structure; Internationalization; Matrix Structure; Multidomestic Structure; Subsidiary.

Bibliography. Christopher A. Bartlett, Sumantra Ghoshal, and Paul W. Beamish, *Transnational Management* (McGraw-Hill, 2007); Simon Collinson and Alan M Rugman, "The Regional Nature of Japanese Multinational Business," *Journal of International Business Studies* (v.39/2, 2008); Stuart Paterson and David M. Brock, "The Development of Subsidiary Management Research: Review and Theroretical Analysis," *International Business Review* (v.11/2, 2002); Michael Porter, *Competition in Global Industries* (Harvard Business School Press, 1986); C. K. Prahalad and Gary Hamel, "The Core Competence of the Corporation," *Harvard Business Review* (May–June 1990); Alan M. Rugman, *The End of Globalization* (Random House, 2000); Alan M. Rugman and Alain Verbeke, "A Perspective on Regional and Global Strategies of Multinational Enterprises," *Journal of International Business Studies*, (v.35/1, 2004); David Strang, "The Diffusion and Strategy of TQM Within a Global Bank," *Geography and Strategy* (v.20, 2003); George Yip, *Total Global Strategy II* (Prentice Hall, 2003); Stephen Young and Ana Teresa Tavares, "Centralization and Autonomy: Back to the Future," *International Business Review* (v.13/2, 2004).

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Regional Integration

Regional integration is an arrangement between nation states to cooperate in some comprehensive way for their mutual benefit. The term usually applies to neighboring states, and it usually entails a series of agreements to benefit the well-being of the region—for example, by promoting free trade, enabling easier flow of financial transactions, implementing uniform environmental and other legal standards, and allowing easier travel within the region. The scope of integration can grow to issues like security, culture, environmental protection, and social issues, and may extend also into the political realm. The aim of the integration is explicitly to benefit the members of the region (or bloc), but it comes at the cost of national sovereignty.

According to Luk Van Langenhove and colleagues, regional integration initiatives have the potential to fulfill important functions that are beyond the sphere of trade integration, such as the creation of an appropriate enabling environment for private sector development; the development of infrastructure programs in support of economic growth and regional integration; the development of strong public sector institutions and good governance; the reduction of social exclusion and the development of an inclusive civil society; contribution to peace and security in the region; the building of environment programs at the regional level; and the strengthening of the region's interaction with other regions of the world.

There are several forms of regional integration, each with varying levels of commitment and influence. Oded Shenkar and Yadong Luo discuss four forms of economic integration (or trading blocs) as follows: First, a free trade area is the least restrictive and loosest form of trading bloc among countries and aims to abolish all barriers to trade among member countries. The North American Free Trade Agreement (NAFTA) is an example of this form of integration. The next level is the customs union, whereby member nations dismantle barriers to trade in goods and services among themselves; it establishes a common trade policy with respect to nonmembers—for example, the Central American Common Market. A common market includes the features of the customs union with additional mobility of factors of production such as capital, labor, and technology as well as a common external trade policy by which members should cooperate closely in monetary, fiscal, and employment policies. Finally, the economic union is the ultimate form of regional economic integration that simply aims to eliminate all barriers that may impede trade and other economic interactions among member nations. As with the example of the European Union (which evolved from the European Common Market), members aim to harmonize monetary policies, taxation, and government spending, and a common currency would be used by all members. Beyond this level is the concept of "political union" that results in a single political entity like the United States.

Examples of prominent regional economic agreements are the Andean Community of Nations (CAN for Comunidad Andina de Naciones), Association of Southeast Asian Nations (ASEAN), Asia-Pacific Economic Cooperation (APEC), European Union (EU), Mercosur/Mercosul, and North American Free Trade Agreement (NAFTA). These agreements are never etched in stone and often change. However, the general historic trend is toward growth, strengthening, and affiliation to these blocs. For example, beginning from the Treaty of Rome in 1957, six European nations (France, Germany, Italy, Netherlands, Belgium, and Luxembourg) formed a customs union that grew in stages to become a common market and, in 1995, to the EU with 15 members. In 2007 EU membership was extended to Romania and Bulgaria so that total membership is now 27 members, and ongoing negotiations for future membership are also under way with a number of other states including Turkey.

More recently, in 2008, the Union of South American Nations (UNASUR or UNASUL) was formed largely by merging two existing South American customs unions (Mercosur and CAN) as part of a continuing process of South American economic and political integration. UNASUR is modeled on the European Union. However, it is unique in that it includes every sovereign nation on the continent (with the exception of French Guiana), and is currently working for the introduction of a regional identity card that will eliminate the need for passports for travel by citizens of members within South America.

The overall effect of these trends is not only a strengthening of regionalization but also adds to general globalization trends. Opinions differ as to whether this is a good or bad effect. Authors like Luk Van Langenhove, Isabella Torta, and Ana-Cristina Costea, who believe that institutions need to counter the trends toward globalization, argue that regional integration can itself be a significant factor in tackling deleterious global trends and forces. They argue that regional governance structures can be important in backing and complementing nation states and other international organizations. For example, they believe that, because regionalism entails building relationships among member nations, interactions and cultural ties will also improve, and these will facilitate the reaching of interstate agreements. These agreements have some chance of standing up for the rights and values of citizens of the region. For example, they may value environmental standards, labor conditions, protection of intellectual property, support for basic food prices, or other issues of local rather than global significance.

See Also: Asia-Pacific Economic Cooperation; Association of Southeast Asian Nations; Economic Integration; European Union; Mercosur/Mercosul; North American Free Trade Agreement; Regional Trade Agreements; Trade Bloc.

Bibliography. Simon Collinson and Alan M Rugman, "The Regional Nature of Japanese Multinational Business," *Journal of International Business Studies* (v.39/2, 2008); Viviana Fernández and Ali M. Kutan, *Do Regional Integration Agreements Increase Business-Cycle Convergence?: Evidence From APEC and NAFTA* (Centro de Economía Aplicada, Departamento de Ingeniería Industrial, Universidad de Chile, 2005); Norbert M. Fiess, *Business Cycle Synchronization and Regional Integration: A Case Study for Central America* (World Bank, Latin America and the Caribbean Region, Office of the Regional Chief Economist, 2005); Jong Kil Kim and Pierre-Bruno Ruffini, *Corporate Strategies in the Age of Regional Integration*. (Edward Elgar, 2007); Alan M. Rugman and Alain Verbeke, "A Perspective on Regional and Global Strategies of Multinational Enterprises," *Journal of International Business Studies*, (v.35/1, 2004); SAARC Business Conclave, Sadiq Ahmed, and Ejaz Ghani, *South Asia, Growth and Regional Integration* (Macmillan, 2007); Luk Van Langenhove, "Regional Integration and Global Governance," *UNUnexions* (v.4/August, 2003); Daniel Johannes Venter and E. W. Neuland, *Regional Integration: Economic Partnership Agreements for Eastern and Southern Africa* (Richard Havenga & Associates, 2007).

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Regional Trade Agreements

A number of multilateral trade agreements have accelerated the pace of global integration. NAFTA has expanded trade between the United States, Canada, and Mexico. The General Agreement on Tariffs and Trade (GATT), which was ratified by more than 120 nations in 1994, has created the World Trade Organization to promote and protect free trade. In Europe, the expanding membership of the European Union is lowering barriers to trade within the region. In Asia, the expanding membership of ASEAN (Association of Southeast Asian Nations) is promoting closer economic cooperation and trade within the member southeast Asian nations.

The WTO and NAFTA

The World Trade Organization (WTO), previously known as GATT, is a 123-country organization whose objective is to promote trade among its members. These countries account for over 90 percent of world trade. There are about 20 countries from the industrialized nations of the West, including Japan, and over 100 members or associates from the less developed countries. To achieve its aim, the WTO has over the years provided a forum where countries have met to negotiate on tariffs and trade. As a result of these forums or conferences, the tariff rates for tens of thousands of items have been reduced, and a high proportion of world trade has seen an easing of restrictions.

In 1988 the United States signed the North American Free Trade Agreement (NAFTA) with Canada, the scope of which was enlarged in 1993 to include Mexico. The United States, Canada, and Mexico promote economic growth via expanded trade and investment. All three governments acknowledge that free trade will help all countries to meet the economic challenges of the future. The gradual elimination of barriers to the flow of goods, services, and investment, coupled with strong intellectual property protection, will benefit all. Canada and Mexico rank first and third as the United States's most important trading partners (Japan ranks second).

The European Union

The European Union is composed of 27 independent sovereign countries, which are known as member states: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. The European Community (EC) was established by the Treaty of Rome, which came into force on January 1, 1958. A step-by-step reduction of internal customs duties on industrial goods resulted in their complete removal by July 1, 1968. Simultaneously, the duties applied to imports from third countries were gradually aligned, and the common external tariff within the EC also came into force on July 1, 1968, and there was a target of removing all internal barriers to the movement of goods and services by 1992.

A common agricultural policy has been adopted and the removal of internal agricultural duties has been completed. The external customs duties for the majority of agricultural products, which are subject to EC regulations, were suspended and replaced by variable import levies designed to bring the price of products imported from third countries in line with those prevailing from inside the community. The community has made progress in abolishing restrictions on the movement of capital, in the alignment of taxes, and in developing a community policy on competition, and restrictive practices such as price fixing, and company mergers. In addition, EC companies have received freedom for workers from member countries to obtain employment anywhere in the community and freedom for firms to establish and operate anywhere in the community.

The Treaty of Rome also provided for links between the European Community and the colonies and other dependencies in Africa and elsewhere of France, Belgium, the Netherlands, and Italy. The first association agreement signed in 1963, known as the Yaounde Convention, which was renewed in July 1969, specified duty-free entry for industrial goods to the common market and also specified that agricultural products subject to EC market regulations and some tropical products would enjoy a slightly improved preferential treatment in the EC. The associated African states may reimpose duties or other restrictions on imports for the EC if it is necessary for their economic development.

In 1975 the EC entered into a new trade and economic cooperation agreement with 46 African, Caribbean, and Pacific countries (ACP). The agreement, known as the Lome Convention, allowed the EC duty-free access to all the industrial goods and 96 percent of the agricultural products of the ACP. This agreement was extended to 70 ACP countries. Included in this agreement was an Export Revenue Stabilization Plan through which the EC provided development assistance to the ACP countries.

The economic influence of the EC expanded to the other developed countries in western Europe as well. In 1972, when the European Free Trade Association (EFTA) members Britain, Denmark, and Ireland joined the EC, it agreed to establish a free trade area with the remaining EFTA members (Iceland, Norway, Sweden, Finland, Austria, and Switzerland). Since then the European Union has continued to expand; it has developed its own currency, the euro, and has expanded the union to include the 27 countries that form the European Union today with other countries, e.g., Croatia, the Republic of Macedonia, and Turkey recognized as potential candidate countries interested in joining the European Union.

Association of Southeast Asian Nations

Finally, the Association of Southeast Asian Nations (ASEAN) was established in 1967 in Bangkok to accelerate economic progress and to increase the stability of the southeast Asian region. The member countries are Brunei, Malaysia, Singapore, the Philippines, Thailand, Indonesia, Myanmar (Burma), Laos, Vietnam, and Cambodia. Vietnam became the first communist country in the group when it was admitted in 1995. Cambodia and Laos were admitted to ASEAN in 1997. Myanmar was admitted in 1998. The countries have agreed to eliminate most tariffs by 2010.

The ASEAN industrial complementation program, begun in 1981, encourages member countries to produce complementary products in specific industrial sectors for preferential exchange among themselves (for example, components to be used in the automobile industry). Member countries have negotiated tariff reductions within the association and a customs code of conduct has been adopted.

Although the 10 countries of ASEAN are geographically close, they have been divided in many other respects. In mid-1987 President Corazón Aquino of the Philippines urged the association to become a real political and economic force, and it is well on its way to achieving that, with ASEAN becoming a platform upon which new expanded regional economic organizations such as Asia-Pacific Economic Cooperation (APEC) developed in the 1990s.

See Also: Asia-Pacific Economic Cooperation; Association of Southeast Asian Nations; Economic Integration; European Union; Free Trade; General Agreement on Tariffs and Trade; Mercosur/Mercosul; North American Free Trade Agreement; Regional Integration; Trade Bloc; World Trade Organization.

Bibliography. Ann Capling, "Preferential Trade Agreements as Instruments of Foreign Policy: An Australia-Japan Free Trade Agreement and Its Implications for the Asia Pacific Region," *Pacific Review* (v.21/1, 2008); Andrew Fenton Cooper, *Regionalisation and Global Governance: The Taming of Globalisation* (Routledge, 2008); David A. Gantz, *Regional Trade Agreements: Law, Policy and Practice* (Carolina Academic Press, 2008); Warren J. Keegan, *Global Marketing,* 4th ed. (Pearson/Prentice Hall, 2005); Kevin C. Kennedy, *International Trade Regulation: Readings, Cases, Notes, and Problems* (Aspen, 2009); Simon Nicholas Lester and Bryan Mercurio, *Bilateral and Regional Trade Agreements: Commentary and Analysis* (Cambridge University Press, 2008); Carl A. Nelson, *Import/Export: How to Get Started in International Trade* (McGraw-Hill, 2000); Federico Ortino and Lorand Bartels, *Regional Trade Agreements and the WTO Legal System* (Oxford University Press, 2006); Vern Terpstra, Ravi Sarathy, and Lloyd Russow, *International Marketing* (Northcoast Publishers, 2006).

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Regulation

As embodied in administrative rules, public regulation is any attempt by the executive branch of government to implement statutory law controlling the behavior of citizens, business and nonprofit enterprises, and subunits of national or state/regional/ provincial governments. In effect, public regulation is the government's attempt to limit the choices available to the regulated entity. The focus here, however, will be on the government's regulation of business enterprises and achievement of policy goals. In industrialized nations with democratic forms of government, the legislative branch enacts statutes that codify public policy. These statutes, or laws, are then executed by the executive branch or, in some cases by independent agencies, which implement the law through the development and codification process of administrative rule making. These administrative rules are used to guide agency oversight activities and to assess penalties against the regulated party for noncompliance. The judicial branch is responsible for ruling on the constitutionality of administrative rules or legislative intent in the law. It does not have to be an "all-or-nothing" judicial decision, as sections of a regulation may be judicially upheld or struck down.

There are two approaches to analyzing business regulation: positive and normative analysis. Positive analysis examines when and what type of business regulation will occur, while normative analysis asks when government agencies should intervene in private markets. It is normative analysis that presumes government intervention is required in cases where competitive markets do not exist to an optimal level, resulting in "market failure" allocating resources inefficiently. In the public interest, political leaders will subsequently intervene to correct this market failure by enacting laws and codifying and implementing public regulations.

Market failure conditions exist when (1) negative externalities occur, a condition when business transactions create uncompensated costs for third parties, including abuses of "public goods" such as common natural resources, or negative internalities, where the regulation of product quality or workplace safety, for example, are not reflected in market exchanges; (2) there are natural monopolies, such as public utilities, when economies of scale are of such a magnitude (also referred to as an "entry barrier") that a market can be serviced at the lowest cost only if production is limited to a single product; and (3) when market participants have inadequate information for markets to allocate resources efficiently. There is also a moral rationale for instituting business regulation. Elected representatives may put forth utilitarian fairness and justice ethical rationales to establish health and safety standards of behavior to protect employees, consumers, and other stakeholders.

"Public choice" economics provides another perspective on the normative analysis of public regulation. According to the public choice perspective, government officials, elected officials, and those in the executive branch and interest groups (including the business community) pursue their private interests in the regulatory arena with the same enthusiasm they individually display in the private market arena. Therefore, the pursuit of public regulation should be recognized as nothing more than an effort by government officials and interest groups to use public authority to redistribute income from one interest group to another, maximizing private gain at the expense of others. According to the public interest perspective, any benefits accruing to private groups from lobbying efforts to obtain these *regulatory rents* should not be considered as a subversion of the democratic process, but only as a reflection of the nature of the regulatory process.

From a positive analysis perspective, public regulation comes in essentially two forms: economic or social. Economic, or competitive, regulation is the oldest form of regulation and is most often industry specific (although industry wide as pertaining to, for example, labor issues) with public agencies concerned about the overall economic performance of the industry, while seeking to compensate for market failure by mimicking market conditions through administrative rule-making procedures. This form of regulation uses economic controls on prices, interest rates, and wages (using price ceilings or floors); places restrictions on the quantity of goods; establishes service territories; limits the number of participating firms; and allocates public resources. While some scholars view antitrust as a form of economic regulation, a stronger case can be made for the promulgation of antitrust, or competition, laws as an effective tool for avoiding public regulation, thus leaving resource allocation to competitive market forces rather than public regulators. The absence of competition in the marketplace is more likely to result in direct public regulation of price and profits or direct public regulation of a good or service. When antitrust policy fails to prevent the creation or maintenance of private monopoly power through the use of unfair business practices, direct public regulation is the usual response by government officials in a democratic market society.

The normative public interest justification for most economic regulation is to control prices established by so-called natural monopolies. While economic regulation has as its intention to protect consumers by adjusting prices so that they are equal to the competitive market price, there is no guarantee this will occur when decided by a public regulatory authority. There are five major reasons for this regulatory outcome not to occur: (1) regulatorily established prices that are below competitive market levels can create shortages, deterioration in the quality of service, or other problems diminishing consumer welfare; (2) regulation can hold prices above costs, thus increasing prices and reducing consumption; (3) regulation and monopoly inflate costs, thus firms fail to operate at minimum cost; (4) regulation stifles innovation and entrepreneurial incentives to lower costs, improve quality, and develop new products and services; and (5) expenditures by business firms or groups to retain monopoly profits, or to protect themselves from below-competitive prices that expropriate assets, is considered wasteful and may even exceed the size of the wealth transfer ("regulatory rent").

Social Regulation

Social, or protective, regulation is a more recent form of public regulation—emerging in the 1960s and 1970s—and tends to be industry wide in coverage (although industry-specific as it pertains to, for example, the consumer safety of a specific pharmaceutical). The purpose of social regulation is to improve the quality of life or social conditions by protecting individual members of society from mainly noneconomic public policy issues concerning the adverse effects of discrimination or serious risks to public health, safety, or the natural environment. As commerce has become increasingly global in nature, the public health and safety of imported products has become a serious regulatory concern, especially from developing countries importing their products into developed countries' economies. Social regulation may directly affect the conditions and physical characteristics under which products are manufactured (see command-and-control approach below). The normative public interest justification for most social regulation, particularly those addressing health, safety, and environmental concerns, is due to "externalities" or "information asymmetry."

Social regulations can be designed by agencies using a number of compliance approaches. A command-and-control approach to regulation specifies in the administrative rule the technologies which a business enterprise must adopt in its operations to be in compliance. An output approach to public regulation specifies a performance level, but not the production methods, which a company must meet to be in compliance with the administrative rule. An incentive approach to regulation offers economic benefits to companies—which exceed a technical performance standard—by allowing these companies to sell their unused credits to other companies not meeting the technical performance standard in the administrative rule. Lastly, a disclosure approach to regulation allows consumers to make informed purchasing decisions on products or services by providing accurate information on their attributes to the potential buyers. In a descending order of magnitude following command-and-control public regulation, these respective regulatory approaches each represent a declining level of direct government intervention in business operations and consequently, an increasing emphasis on market-based solutions.

Because social regulation so often concerns people's health and safety, risk assessment analysis is often applied to this form of administrative rule. Risk management analysis employs the science of risk assessment (which attempts to find out how much risk is presented by a certain factor "X"), as well as other pertinent information, and to find out how much risk is too much for society to accept. To acquire these answers, public regulators must balance the risk with the costs and benefits of reducing it. The evaluative methodologies applied to risk assessment include (1) risk-risk analysis, which compares the risks associated with regulating with the risks associated with not regulating; (2) cost-effectiveness analysis, which compares the cost of different approaches to meet the legislative charge underpinning the administrative rule against a quantitative metric—such as life-years saved or tons of pollutants removed from the atmosphere; and (3) cost-benefit analysis, which attempts to quantify and assign dollar values to the benefits and costs of different policy approaches. Economic regulation can also be evaluated using the above-cited methodologies of cost-effectiveness and cost-benefit analyses.

Self-Regulation

While public regulation receives the most attention, there is also a growing interest in private regulation, also referred to as self-regulation. Self-regulation, in its broadest sense, involves planning and policy making regarding issues and activities not covered by public regulation. Self-regulation exists when a firm, an industry (or profession), or the business community establishes its own standards of behavior, through a code of conduct or ethics, either self-established or adopted, or technical specifications where no such statutory or regulatory requirements exist, or when such standards assist in complying with or exceeding existing statutory or regulatory requirements. In general, self-regulation is a voluntary activity that involves behavior or activities (such as abiding by social, political, environmental, or economic principles) of a discretionary nature.

Industry self-regulation standards or business practices may eventually be referenced in administrative rules regulating business activities, thus giving these standards or business practice legal compliance requirements. Self-regulation standards or business practices also may include specified forms of inspection and certification of compliance with the established standards or business practices. Self-regulation standards or business practices may be certified by the firm (first-party certification), industry trade association (second-party certification), an independent third-party auditor, such as a nongovernmental organization (third-party certification), or by an international quasi-governmental or nonprofit assessment organization (fourth-party certification), such as the United Nations, with its business practice–oriented Global Compact, or the ISO, the international technical standards–setting body, respectively.

Trends in Public Regulation

In democratic, market-based economies, the trend throughout most of the 20th century has been to increase public regulation of the private sector. Beginning in the late 1970s and continuing through the 1990s, an international regulatory reform movement emerged that predominantly emphasized economic deregulation of industry—but not exclusively. For example, regulatory reform efforts in the United States and Great Britain have generally reduced public regulation of industry, but recent changes in Germany and Japan have reinforced national regulatory agency control (largely because of the movement from public ownership to "privatization" of major industries). There have also been some deregulation efforts occurring in European countries, especially directed at social regulation. During the early 2000s, there was reregulation of the U.S. securities industry, a result of corporate scandals typified by the demise of energy giant Enron Corporation, focusing on developing administrative rules strengthening financial reporting practices.

In the mid-to-late 1970s, many economists argued that the administrative rules that had been adopted to regulate "price and entry" by business were sometimes ineffective and could actually block the effective attainment of the original policy objectives, that is, to compensate for market failure, by failing to provide economic incentives for industry innovation. In contrast to the criticisms of economic regulation, critics of social regulation attacked the regulatory procedures, objectives, and goals of administrative rule making. Citing legislation specifying rigid industry standards (and thus, only one approach) and precise deadlines to attain compliance, these "technology forcing" administrative rules were often impossible to meet, as the technology was not, or did not, become available. Other critics of social regulation believed that the health, safety, environmental, and equity legislative objectives embodied in administrative rules were simply not worth the increased role (and cost) of government in society, as society would be better off relying on the values and choices of individual citizens.

The increase in, and costs of, economic and social regulation in the United States can be illustrated through the longitudinal data analyses conducted by the Center for the Study of American Business at the University of Washington. For example, between 1960 and 1980, the staffing requirements of national regulatory agencies rose from fewer than 40,000 federal employees to approximately 100,000 federal employees—or a 150 percent increase in the number of federal employees. For the same range of years (1960 to 1980), the costs (unadjusted for inflation) of federal regulation rose from just under $20 billion (1960) to approximately $80 billion (1980)—an average annual increase in regulatory costs of $3 billion, or 15 percent on the base year 1960, borne by industry and consumers. While economic regulation costs modestly exceeded the costs of social regulation in 1960, the cost of social regulation was nearly two-and-a-half times that expended on economic regulation in 1980.

In spite of these rapidly rising public regulatory costs, defenders of increased public regulation, particularly of the social form, argued that the benefits still outweighed the costs (although benefits are more difficult to monetize). Since 1980, regulatory reform efforts in the United States have stanched the increase in national regulatory agency staffing, as the level of employment has increased modestly to approximately 110,000 employees by the middle of the first decade of the 21st century. However, the costs of federal regulation (unadjusted for inflation) has continued to rise to more than $170 billion (2005) over the ensuing 25 years, although reflecting a decreasing rate of growth in the cost of public regulation over the 1960–80 period.

As global commerce has expanded, so has the international regulation of business practices. In 1994, the World Trade Organization was established to define the rules under which international trade is conducted and to resolve disputes among member nations. The World Health Organization (WHO), an agency of the United Nations, has partnered with the global pharmaceutical industry to establish quality standards and resolve potentially harmful marketing and manufacturing practices. WHO had previously worked with infant formula manufacturers to develop an international marketing code, which would later be adopted as national policy by governments. The development of bilateral or multilateral regulatory agreements between or among nations is a process by which numerous stakeholders, representing business, government, and nongovernmental organizations (the latter representing labor, consumer, or environmental interests), engage in lengthy consultation. The list of multilateral agreements regulating business practices pertain to ocean fishing, chemical emissions affecting the earth's ozone layer, and the dumping of hazardous chemicals in oceans, to name a few.

See Also: Antitrust Laws; Corporate Social Responsibility; Deregulation; Environmental Standards; Legal Environments; National Regulatory Agencies; Risk Management; World Trade Organization.

Bibliography. John Braithwaite and Peter Drahos, *Global Business Regulation* (Cambridge University Press, 2000); Michael A. Crew and David Parker, *International Handbook on Economic Regulation* (Edward Elgar, 2008); Simeon Djankov, Caralee McLiesh, and Michael Klein, *Doing Business 2007: How to Reform: Comparing Regulation in 175 Economies* (World Bank, 2006); Caroline Freund and Bineswaree Bolaky, "Trade, Regulations, and Income," *Journal of Development Economics* (v.87/2, 2008); John Gillespie and R. P. Peerenboom, *Regulation in Asia* (Routledge, 2009); Virginia Haufler, *A Public Role for the Private Sector: Industry Self-Regulation in a Global Economy* (Carnegie Endowment for International Peace, 2001); Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* (MIT Press, 1988); Laura Lynne Kiesling, *Deregulation, Innovation and Market Liberalization: Electricity Regulation in a Continually Evolving Environment* (Routledge, 2009); Kenneth J. Meier, *Regulation: Politics, Bureaucracy, and Economics* (St. Martin's Press, 1985); Robert L. Ohsfeldt and John E. Schneider, *The Business of Health: The Role of Competition, Markets, and Regulation* (AEI Press, 2006); Daniel F. Spulber, *Regulation and Markets* (MIT Press, 1989); United States, *The Cost of Regulation to Small Business: Hearing Before the Subcommittee on Workforce, Empowerment, and Government Programs of the Committee on Small Business, House of Representatives, One Hundred Seventh Congress, Second Session, Washington, DC, June 6, 2002* (U.S. Government Printing Office, 2002); W. Kip Viscusi, Joseph Emmett Harrington, and John M. Vernon, *Economics of Regulation and Antitrust* (MIT Press, 2005); Erich Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory,* International Economic Law Series (Oxford University Press, 2009); Thomas R. Wotruba, "Industry Self-Regulation: A Review and Extension to a Global Setting," *Journal of Public Policy & Marketing* (v.16/1, 1997).

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Relationship Marketing

The term *relationship marketing* implicitly recognizes the importance of both the buyer (the customer) and the seller in the marketing process. Beginning in the 1960s, marketing practitioners and scholars (like Theodore Levitt and Philip Kotler) began to emphasize that marketing truly was an "exchange" in which both parties shaped the direction and outcome of the ultimate product offering. Marketing, according to this perspective, was not equivalent to merely selling a finished product to a passive audience who lacked input; rather, marketing, to be most effective, needed to encompass a much broader range of activities that extended far beyond the traditional marketing department and it needed to involve more players, including customers. As a new breed of marketers stressed, it was essential that customer feedback be more fully incorporated into the planning and execution of marketing initiatives.

This emphasis on the critical roles played by customers (not just sellers) in the marketing process led to the rise in the 1980s of the term *relationship marketing*. According to this dogma, organizations, if they expected to be successful, needed to build long-term relationships with their customers. The tasks of listening to customers and keeping them engaged and satisfied were heralded as not only good for corporate profits but also socially responsible business practices and hence also good for consumers and society writ large.

Concurrent with organizations' growing awareness of the necessity of building deep relationships with buyers was a rising focus on "customer lifetime value," which recognized the many benefits that a firm accrued from keeping customers fully satisfied and coming back for additional purchases for the remainder of their lives. The term *relationship marketing*, like *customer lifetime value*, conveys the importance of customer retention. Marketing is not solely about making a one-time sale to a customer. It is, as Levitt once said, "after the sale is over" that the challenge of long-term customer relationship-building begins in earnest.

The rising importance of relationship marketing is well exemplified by the trajectory of the automobile industry's approach to customers. In the 1920s, Henry Ford famously said that a customer could have a car in any color he wanted, as long as it was black. While this simplified approach was conducive to achieving economies of scale and hence temporarily quite effective, Ford ultimately fumbled by ignoring customers' wishes. Competitors like General Motors rushed to fill the void in model designs. Automobile manufacturers (as well as other organizations) learned the importance of listening to customers' wishes and incorporating their feedback into the products and services being offered.

The buyer-seller relationship, however, does not end at the point of purchase. Extended warranties, customer service telephone lines, satisfaction surveys, and installment plans are just several of the ways the relationship evolves and builds after the sale is consummated. A customer satisfied with the post-purchase experience presumably is much more likely to buy from the same manufacturer again when down the road, he finds himself in the market for a new product to replace the old one.

The term *relationship management* remains popular today, although the concept is broadening to include more parties than strictly the buyer and seller. Organizations are engaged in many relationships, such as with vendors, suppliers, and other stakeholders. Today, a growing number of organizations are beginning to appreciate more fully the importance of nurturing these relationships, too, and moving them from a short-term, often adversarial orientation to a long-term, mutually beneficial relationship basis.

The cultivation of long-term, solid relationships with multiple constituencies now is widely perceived as a critical element in an organization's overall strategy, facilitating an organization achieving not just long-term survival, but sustained success.

See Also: Advertising; Consumer Behavior; Consumer Needs and Wants; Consumer Surveys; Customization; Marketing; Service Expectations; Service Level.

Bibliography. Lerzan Aksoy, Timothy L. Keiningham, and David Bejou, *Profit Maximization Through Customer Relationship Marketing: Measurement, Prediction and Implementation* (Haworth Press, 2007); David Bejou and Adrian Palmer, *The Future of Relationship Marketing* (Best Business Books, 2005); Ian Gordon, *Relationship Marketing: New Strategies, Techniques and Technologies to Win the Customers You Want and Keep Them Forever* (John Wiley & Sons, 1999); Evert Gummesson, *Total Relationship Marketing: Marketing Management, Relationship Strategy and CRM Approaches for the Network Economy* (Butterworth-Heinemann, 2008); Philip Kotler and Gary Armstrong, *Principles of Marketing* (Pearson, 2008); Theodore Levitt, "After the Sale is Over," *Harvard Business Review* (September–October 1983); Theodore Levitt, "Marketing Myopia," *Harvard Business Review* (February 1960); Brian Murphy and Manish Ranka, *An Evaluation of Stakeholder Relationship Marketing in India* (Massey University, College of Business, Department of Commerce, 2006); Y. M. Leo Sin et al., "Market Orientation, Relationship Marketing Orientation, and Business Performance: The Moderating Effects of Economic Ideology and Industry Type," *Journal of International Marketing* (v.13/1, 2005); Frederick E. Webster, Jr., "The Changing Role of Marketing in the Corporation," *Journal of Marketing* (October 1992).

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Renault

The French automobile manufacturer Renault takes its name from Louis Renault, the company's founder, and is currently the fourth-largest automaker in the world. It was founded by Louis, Marcel, and Fernand Renault, and also Thomas Evert and Julian Wyer, with Louis Renault being the main force behind the Société Renault Frères. The first car was made and sold by Louis Renault to his own father after it had gone on a test drive on Christmas Eve 1898, the company being formalized the following year. To gain attention for Renault cars, the first one having been driven by a 1¾-hp de Dion engine, the Renault brothers were involved in publicly racing their cars. However, Marcel Renault was killed in the Paris-Madrid race of 1903, and Louis gave up racing forever thereafter. There was a small battle for control between Louis Renault and Marcel's mistress. When Fernand Renault died in 1908, this left Louis in control of the entire company.

Renault's first sedan car was produced in 1899, and the company started manufacturing cars that were sold for 3,000 francs each, about 10 years' salary for the average worker. They also produced taxis and buses. Orders for the cars started coming from overseas, and even the young Winston Churchill was driven in a Renault taxi when he went to Buckingham Palace in 1911. During World War I, the company was involved in the construction of transport vehicles and also tanks such as the FT-17 tanks, which were effective on the battlefield and were involved in the victory parade in Paris on July 14, 1919. By this time, Louis Renault was wealthy, with a large house on Avenue Foch in Paris.

After World War I, the Renault company started producing agricultural and industrial machines. Their cars at this time were aimed at the very wealthy, and during the 1920s, they diversified to introduce smaller models, which were often shown for the first time at the Paris Motor Show in September/October each year. Renault by this time was selling many cars to Britain, and it was from there that these cars were sold to the United States. Renault cars were also sold around the French Empire.

The outbreak of World War II led to Renault helping in the French war effort. However, with the fall of France in June 1940, Renault continued production, mainly of trucks for Nazi Germany. The factories at Billancourt were heavily bombed during the war, and after the liberation of France in 1944, Louis Renault was arrested and charged with collaboration. He claimed he had to keep the factories going to protect his workers. However, he died in prison at Frèsnes, probably after having been attacked by a prison guard. The Renault car factories were seized by the new French government and were then run by them.

The rear-engine 4CV was produced in 1946 and soon became a rival of the British Morris Minor and the German Volkswagen Beetle. It was produced until 1961, with some 500,000 cars sold. Renault also started producing a number of other cars, introducing the Renault 4 in 1961, the Renault 8 in the following year, and the Renault 16 in 1966. The company gained a new corporate logo in 1972. In the oil crisis of 1973–74, Renault managed to flourish as their cars were remarkably cheap to operate and they were fuel efficient. This led to their entry into the U.S. market and they gradually started being sold in most countries around the world. In 1980 Renault was able to buy AMC and continue production of the Cherokee and other SUVs. By this time, they had a factory in Wisconsin and continued sales in the United States until 1989. Their cars remained popular in much of Europe and in former French colonies such as Algeria.

In 1996 the French government decided to privatize Renault and this coincided with the company aiming to expand in their markets in eastern Europe and in South America. They operated extensively from Turkey, Argentina, and Brazil, and gradually started taking over other companies or forming alliances with them. Renault took over Dacia, the Romanian car company, and also the Korean automaker Samsung. There have been press reports questioning whether Renault-Nissan will form an alliance with General Motors.

See Also: BMW; Daimler Chrysler; Fiat; Ford Motor; France; General Motors; Nissan Motor; Volkswagen; Volvo.

Bibliography. David S. Landes, *Dynasties: Fortunes and Misfortunes of the World's Great Family Businesses* (Penguin Books, 2007); James M. Laux, *In First Gear: The French Automobile Industry to 1914* (McGill-Queen's University Press, 1976); Anthony Rhodes, *Louis Renault* (Cassell, 1969); Blanche Segrestin, "Partnering to Explore: The Renault-Nissan Alliance as a Forerunner of New Cooperative Patterns," *Research Policy* (v.34/5, 2005).

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Repsol YPF

Repsol YPF is an integrated international oil and gas company with headquarters in Madrid, Spain. It operates in more than 30 countries and is the industry leader in Spain and Argentina. It is one of the 10 major private oil companies in the world and the largest private energy company in Latin America in terms of assets. The main oil and gas reserves are in Latin America and in North Africa.

The company is part of some of the most representative stock market indexes, such as FTSE Eurotop 100, Dow Jones Stoxx 50, and the Standard & Poor's Global 100. Since 2003, it is included in the FTSE4Good. In previous years, Repsol YPF has kept a leadership position in global sustainability indexes such as DJSI World (Dow Jones Sustainability Index World) and the European DJSI STOXX (Dow Jones Sustainability Index Stoxx), with maximum punctuation in transparency and social and human capital development.

Principal consolidated financial data for 2007 are as follows (in millions of euros): income from operations, 5,808; net income, 3,188; EBITDA, 8,573; operating revenues, 55,923; investments, 5,373; net debt, 3,493. Its number of employees was 37,565.

The main activities of the company are based in the following:

- Oil and gas exploration and production activities (in 2007, oil and gas production totaled 1,039 million barrels of oil equivalent per day)
- Oil refining activities in which it leads the sector in the Spanish and Argentinean markets, and is also present in Peru and Brazil
- Oil products marketing in 12 countries in Europe and Latin America through a network of over 6,500 points of sale
- Chemical activities, which are carried out principally in Spain, Argentina, and Portugal, and basic petrochemical production, which focuses on obtaining olefins and aromatics
- Gas and power activities, which comprise natural gas supply, storage, transport, distribution, and marketing in Spain and Latin America

Repsol YPF is the result of the acquisition in 1999 of YPF, the largest oil company in Argentina and the 12th largest in reserves, by Repsol, the dominant oil company in Spain and the 13th largest in the world in reserves. Repsol was founded in 1987 when the Spanish government consolidated various state-owned oil and gas assets. The government sold 24 percent of the firm to public investors in 1987, another 66 percent in 1996, and the remaining holdings in 1997. Its shares were quoted on the Madrid Stock Exchange and in the form of ADRs on the New York Stock Exchange. At that point, Repsol had operations in 26 countries and Latin America was the center of Repsol's expansion strategy. Prior to the YPF bid, Repsol had acquired refining assets in Peru and had a control majority in Astra, the fifth-largest energy company in Argentina since 1996. YPF, Argentina's largest company, was engaged mainly in exploration, development, and production of oil and natural gas, and electricity-generation activities, among others. The acquisition of YPF by Repsol facilitated the strengthening of upstream business, the international expansion of the company, and the diversification into gas and power generation.

Repsol YPF, one the world's 10 largest private oil companies, maintains 6,500 sales outlets in Europe and Latin America.

Currently, some of the main risk factors that Repsol YPF faces are the fluctuation in the exchange rates of the U.S. dollar against the euro, the changes of international reference crude oil prices, the concentration of operations in a few big markets, and the political instability and the negative regulatory environment and outlook for the oil and gas industry in some developing countries.

The main lines set up in the 2008–12 Strategic Plan of the company focus on the expansion of production and reserves, geographical diversification of activities, operational excellence as a low-cost operator, and profitability through an increase in average unit margins. In this sense, in the previous years there has been a strengthening of the company's position in some strategic geographical areas such as the Gulf of Mexico, North Africa (especially Libya and Algeria), Trinidad and Tobago, Peru, and Brazil. In April 2008, the company, jointly with Petrobras and British Gas, participated in the exploration of one of the biggest new oil fields in the world, located in the Santos Basin (Brazil) in the Atlantic Ocean. Biofuels and liquefied natural gas represent two key strategic areas for the company in upcoming years.

See Also: Argentina; BP; Brazil; Chevron; ENI; ExxonMobil; Petrobras; Spain; Total.

Bibliography. Robert F. Bruner, *Case Studies in Finance: Managing for Corporate Value Creation* (McGraw-Hill, 2002); G. Coloma, "The Effect of the Repsol-YPF Merger on the Argentine Gasoline Market," *Review of Industrial Organization* (v.21/4, 2002); Repsol YPF, *Annual Report 2007*, www.repsol.com (cited March 2009).

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Research and Development

Research and development (R&D) is defined by the Organisation for Economic Co-operation and Development as "creative work undertaken on a systematic basis in order to increase the stock of knowledge ... and the use of this stock of knowledge to devise new applications." As this definition indicates, R&D is more than just scientific inquiry; it is also the application of new knowledge (scientific or otherwise) for the generation of economically useful products and processes. The "research" part of R&D is often associated with scientific inquiry in one form or another. The "development" part of R&D utilizes engineering skills to apply research results to create new or improved products and processes. Development is also closely linked to commercialization, although these two activities can be, and generally are, distinct.

It is a mistake to conceive of R&D as a linear process; backward linkages typically occur. Often, issues arise in the development and commercialization phases that require kicking the project back to the research team for further study of the fundamentals of the mechanisms involved in hopes of improving the product or process. This type of iterative process has, in fact, proven quite successful in the past, resulting in such landmark innovations as nylon, catalytic cracking, Viagra, compact discs, and a host of other breakthrough technologies. Because these new technologies rapidly destroy the markets for existing products and processes, R&D is the source for the "creative destruction" witnessed throughout the 20th century. The typewriter, slide rule, vinyl record, fax machine, and many other familiar products have become (or are becoming) obsolete in the face of the output of corporate R&D. R&D is not the sole activity of high-technology firms, but is a presence as well in the service industry. Financial corporations undertake R&D to design and develop new financial products and new ways to deliver these products to the market. Over the last few decades, R&D conducted by the U.S. financial industry introduced such innovations into the international economy as ATMs, online banking, and smart credit cards.

Corporate R&D can be traced back to the German chemical industry in late 19th century. The results of these R&D efforts were impressive with Germany achieving leadership in the so-called coal-tar products including dyes, medicines, synthetic resins, and fuels. The United States in the 20th century expanded corporate R&D to an unprecedented scale. Prior to World War II, General Electric and Jersey Standard (Exxon) were early leaders in developing extensive and effective centers of R&D. Jersey Standard's R&D department, for example, was critical in the research and development of advanced catalytic cracking technologies and, during World War II, played a vital role in the synthetic rubber program. By the 1950s, most of corporate America emulated these earlier models and the R&D department proliferated throughout industry. It is no coincidence that these years also ushered in historic expansion of the American economy.

With the spread of globalization, a process that in fact can be traced to the years immediately following World War II, companies in other countries emulated the U.S. model. Through the second half of the 20th century, a country's R&D activity has been viewed as a prime indicator of its ability to compete on the global stage. By the first decade of the 21st century, the developed nations competed for primacy in resources dedicated to R&D activity. By 2006, all industrialized (or developed) countries undertook significant R&D activity at both the public and private levels. The United States leads all other countries in total R&D expenditures (US$343 billion in 2006), followed in order by (2006 figures) the European Union (EU) (US$231 billion), Japan (US$130 billion), and China (US$115 billion). However, in terms of percentage of gross domestic product (GDP), China leads at 4.3 percent, followed by Japan (3.2 percent), the United States (2.6 percent), and the EU (1.8 percent). These figures indicate an Asia aggressively competing with Western countries in their commitment to an aggressive R&D initiative as a key strategy to advanced technologies and the economic growth that results.

Historically, R&D activity of large multinationals within the United States and Europe has been localized within the home country because of the existence and availability of an already large market and abundant technological resources. However, since the 1980s, a number of factors have converged to entice companies—including Hewlett-Packard and Microsoft—to disperse their R&D work globally. Improved information and communication technologies help to monitor and coordinate far-flung R&D operations, economic and technical development in a number of newly developed and developing countries provide critical infrastructural support, increased incentives of foreign governments for multinationals induce the establishment of R&D facilities in host countries, and growing global harmonization of international patent law helps multinationals to better protect the fruits of offshore R&D.

Multinationals have been able to either outsource or carry out—via a subsidiary—certain amounts of their R&D activity. Thus, they optimize their R&D function and gain competitive power by benefitting from the location-specific advantages found in different countries, such as tapping local (and often cheaper) scientific and engineering talent, facilitating a better understanding of how to design products and processes for local markets, and establishing important scientific, technical, and market contacts in host countries.

As a result, in an effort to gain competitive advantage through economies of specialization, multinationals differentiate and specialize their R&D activity across their different subunits. Fundamental research aimed at radically new products may be carried out at some locations, while other R&D sites focus more on development, including improvements to existing products, while still other R&D facilities customize products and processes for local markets. In 2008, the percentage of the R&D that U.S. multinationals undertook outside their home countries ranged widely, from as little as 5 percent to more than 25 percent, with the average being 15 percent. This average figure is expected to rise approximately three- to five-tenths of a percent annually over the next two decades.

As multinationals distribute their R&D activity across their geographically dispersed business units, an increasingly important issue in the area of global R&D is how most effectively and efficiently to coordinate and integrate far-flung R&D operations within the foreign subsidiaries. If a business unit conducts its R&D within a host country, it must transfer its knowledge and hardware to other parts of the organization so that the company as a whole can plan overall strategic expansion. In thus managing its decentralized R&D structure, a primary concern hinges on facilitating the movement of critical information and technology derived from R&D from one unit to the rest of the organization.

A relatively new way to structure R&D activity within the multinational context is through what is termed R&D co-practice, which refers to joint R&D programs carried out between two or more subunits of a company. Recent research suggests that the greater the R&D co-practice activity undertaken between subunits located geographically apart, the greater probability that knowledge and technology created in one subunit will be transferred and utilized by the second subunit. Through such novel organizational mechanisms, global companies are more likely to capture the full benefits of creative multinational R&D programs.

See Also: Diffusion of Innovation; Economies of Scale; Productivity; Technology; Technology Transfer.

Bibliography. Christian Le Bas and Christophe Sierra, "Location Versus Home Country Advantages in R&D Activities," *Research Policy* (v.31/4, 2002); Allan Bird et al., *Global Leadership: Research, Practice, and Development* (Routledge, 2008); Business Insights and Joerg Gruenwald, *Future Functional Ingredients Novel Applications, Emerging R&D and New Product Opportunities* (Business Insights

Ltd., 2008); Joseph L. C. Cheng and Douglas S. Bolon, "The Management of Multinational R&D: Neglected Topic in International Business Research," *Journal of International Business Studies* (v.24/1, 2005); Christopher Darby, *CREST Report on the Application on the Internationalisation of R&D: Facing the Challenge of Globalisation: Approaches to a Proactive International Policy in S&T* (Council of the European Union, 2008); K. F. Ehmann, *Micromanufacturing: International Assessment of Research and Development* (Springer, 2007); Henry Etzkowitz, *The Triple Helix: University-Industry-Government Innovation in Action* (Routledge, 2008); Zheng Han, *Managing Foreign Research and Development in the People's Republic of China: The New Think-Tank of the World* (Chandos, 2008); Jeffrey T. Macher and David C. Mowery, *Innovation in Global Industries: U.S. Firms Competing in a New World: Collected Studies* (National Academies Press, 2008); World Economic Forum, *Global Competitiveness Report* (World Economic Forum, 2007).

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Research Methods: Mixed Methods

Mixed methods research is a field of inquiry that uses both qualitative and quantitative methods to answer research questions within a single study. The application of mixed methods research in social sciences can be traced at least to the beginning of the 20th century. The research is considered "mixed" because it uses quantitative and qualitative approaches in one or several of the following ways: it combines different types of research questions, data collection procedures, data, analytical approaches, or conclusions. One of the main advantages of mixed methods research is its ability to unite exploratory and confirmation research—in other words, it allows generating and testing a theory in the same study.

For over half a century, mixed methods research was considered legitimate in social sciences. However, during the 1970s to 1990s, the so-called paradigm wars broke out as a result of the ascendance of constructivism and the emergence of two distinct research subcultures associated with quantitative and qualitative paradigms. The wars were based on the incompatibility thesis, which posits that the assumptions of qualitative and quantitative paradigms are incompatible because they stem from different epistemological, ontological, and axiological views about the nature and purpose of research.

As a result of the paradigm wars, three major schools of thought emerged, namely purists, situationalists, and pragmatists. Purists and pragmatists lie on the opposite ends of the spectrum of views, with situationalists being somewhere in the middle. Purists fully support the incompatibility thesis and believe that quantitative and qualitative methods cannot and should not be mixed. They often picture qualitative and quantitative researchers as being in competition with each other. Situationalists also advocate mono-method studies, but they view qualitative and quantitative methods as complementary, arguing that both methods have value and some research questions lead to the use of qualitative methods while others are better suited to quantitative exploration. Pragmatists consider the attempts to contrast qualitative and quantitative methods as a false dichotomy. Neither do they agree that qualitative research always uses inductive reasoning and quantitative necessarily follows the hypothetic-deductive route.

Pragmatists are in favor of integrating mixed methods within a single study—they argue that both quantitative and qualitative methods have their strengths and weaknesses. The integration can take various forms such as contrasting, comparing, combining, or building one type of conclusion on the other. One of the main manifestations of pragmatism is the notion that research questions should be the central issue in any investigation and should drive the choice of methods. Methods are viewed as tools for the answering of research questions and not vice versa.

Pragmatists point out that researchers involved in the paradigm wars have tended to overemphasize the differences between the qualitative and quantitative approaches while failing to sufficiently take into account the similarities between them. For example, data reduction is important in both quantitative and qualitative studies; most researchers attempt to eliminate various biases and other sources of invalidity; theory plays an important part in both paradigms.

Some scholars argue that at the fundamental level, all research is ultimately qualitative because it depends on judgment, and meaning comes from the interpretation of the data, whether qualitative or quantitative, rather than depend on the type of data. Pragmatic researchers advocate deemphasizing the terms *quantitative* and *qualitative research* and suggest that research should instead be subdivided into exploratory and confirmatory methods. This would allow using different methods under the same framework.

Another justification for mixed methods research is the principle of triangulation, which implies that a single social phenomenon is studied from different points of view. If research findings converge, their validity is increased. They can also complement each other solving different parts of the same "puzzle" and providing deeper understanding of a phenomenon under investigation. Unexplainable divergence in findings is also useful because it can lead to the rejection of previously accepted theoretical assumptions that turned out to be false and suggest directions for future research. Many researchers now agree that by the end of the 1990s, the issues underlying the paradigm wars have largely been resolved in most social disciplines. However, in some fields such as finance, quantitative studies still dominate, whereas qualitative or mixed methods research is relatively uncommon.

There are different possibilities to combine quantitative and qualitative research, and various research designs are associated with them. Concurrent (triangulation) design with merged results is a study in which two types of data are gathered and analyzed independently (utilizing qualitative and quantitative methods). Subsequently, the results are merged in the discussion section to achieve deeper understanding.

Sequential explanatory design is used when the results obtained from the application of quantitative methods need further explanation or elaboration. A qualitative follow-up study is then conducted to explain the findings. Alternatively, the sequential explanatory design can take the form of an initial quantitative study followed by an in-depth qualitative investigation. For example, cluster analysis can be used to identify groups of people that are relevant for the study. Qualitative interviews are then conducted within each group to validate identified clusters and explain what it means to be part of each cluster.

Sequential design to generate and test a model is a study in which a qualitative stage is used to formulate a model. The conceptual relationships identified during this stage are used to formulate a hypothesis. Quantitative study is then conducted to test it formally using a survey of a representative sample.

See Also: Management Research; Research Methods: Qualitative; Research Methods: Quantitative.

Bibliography. Carolyn R. Benz and Isadore Newman, *Mixed Methods Research: Exploring the Interactive Continuum* (Southern Illinois University Press, 2008); Manfred Max Bergman, *Advances in Mixed Methods Research: Theories and Applications* (Sage, 2008); Alan Bryman, "Paradigm Peace and the Implications for Quality," *International Journal of Social Research Methodology* (v.9/2, 2006); Vicki L. Plano Clark and J. David Creswell, *The Mixed Methods Reader* (Sage, 2008); John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Sage, 2009); Timothy Kiessling and Michael Harvey, "Strategic Global Human Resource Management Research in the Twenty-First Century: An Endorsement of the Mixed-Method Research Methodology," *International Journal of Human Resource Management* (v.16/1, 2005); Anthony J. Onwuegbuzie and Nancy L. Leech, "On Becoming a Pragmatic Researcher: The Importance of Combining Quantitative and Qualitative Research Methodologies," *International Journal of Social Research Methodology* (v.8/5, 2005); Abbas Tashakkori and John W. Creswell, "Editorial: The New Era of Mixed Methods," *Journal of Mixed Methods Research* (v.1/1, 2007); Abbas Tashakkori and Charlie Teddlie, *Handbook of Mixed Methods in Social & Behavioral Research* (Sage, 2003).

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Research Methods: Qualitative

Qualitative research is a field of inquiry that usually emphasizes words rather than numbers in data collection and analysis, is inductive in nature, and more concerned with rich description and meaning than causal connections and generalizations.

The origins of qualitative research date back to the beginning of the 20th century. Initially, it was mainly used in anthropology and sociology, but gradually was

This business researcher was conducting an informal interview with carpenters in East Timor to gauge attitudes about loans.

adopted by other social science disciplines. Qualitative research is often associated with interpretivism. Within this paradigm, the social world is examined through intersubjective interpretations of its participants and the reality is viewed as socially constructed rather than objective and existing "out there" independently from those who created it. However, many social scientists argue that it is wrong to assume that qualitative studies always fall within the interpretive paradigm—there also exists positivist qualitative research.

Research Designs

In qualitative studies, the emphasis is usually made on the depth and complexity of the phenomenon under investigation. Qualitative researchers generally favor "why" types of questions and concentrate more on theory generation than hypotheses testing. Several major research designs are associated with qualitative research: qualitative interviewing (which can be used on its own or as part of other designs), case studies, ethnography, focus groups, and designs that focus on the examination of language (such as conversation and content analyses). Main methods of qualitative data collection include interviewing, documentation, and observation.

Qualitative interviewing can be unstructured or semistructured. Unstructured interviews do not have any predetermined order or wording of questions and resemble friendly conversations. They are particularly useful when the research question is novel, relatively unexplored, and a set of useful directions for analysis is still to be identified. Semistructured interviews usually rely on some predetermined questions or topics. However, the researcher is still free to develop the conversation flexibly and invent new questions during the course of the interview.

Documents represent a major source of heterogeneous data that can include companies' annual reports, mission statements, logos and mottos, memos, e-mails, press releases, visual images, and so forth. Some of the methods concerned with the study of documents include qualitative content analysis and semiotics. Qualitative content analysis comprises the search of underlying themes in the source materials; further investigation then evolves around these themes and is usually illustrated by examples and quotations extracted from the documents. Semiotic analysis is referred to as the "science of signs."

Observation is another important method of qualitative data collection. This term is also used to refer to a research design. It is different from "just looking" in its analytical orientation—the researcher usually holds specific questions in mind, so data collection has direction and purpose. Nonparticipant observation is usually passive—the researcher observes the setting under investigation without getting involved, makes field notes, and may occasionally ask questions to clarify some of the issues.

In contrast, participant observation implies that the researcher actively participates in an investigated setting. In social sciences, the term *ethnography* is increasingly used in the same sense as participant observation (or sometimes in a broader meaning—when not only a research process is implied but also a particular written outcome of research that is characterized by rich description, personal perspective, and a detailed account). One of the varieties of participant observation is autoethnography—a study in which the investigator acts as a member of the group in question and the research outcome is produced in the form of writing about the self analytically. Interviews, observations, field notes, and research diaries constitute common methods of data collection within ethnographic studies.

Case studies represent in-depth inquiries into a single instance or setting and serve as another popular research design within qualitative research. They sometimes combine both qualitative and quantitative techniques and can be particularly useful when the phenomena under investigation are unusual or contain a temporal dimension.

Grounded Theory

One of the most popular approaches to qualitative data analysis is grounded theory. The term can also refer to the theory developed as a result of its application. Two main features of this approach are constant comparison between the data and emerging theory and theoretical sampling. Constant comparison implies that the processes of data collection and analysis are not separated but happen simultaneously and all the procedures are highly iterative. Theoretical sampling refers to the selection of cases for investigation: instead of selecting cases randomly on statistical grounds, theoretically useful cases that can extend existing conceptual categories are used. Grounded theory has been described by some as a compromise between extreme empiricism and complete relativism.

See Also: Management Research; Research Methods: Mixed Methods; Research Methods: Quantitative.

Bibliography. Boris Blumberg, *Business Research Methods* (McGraw-Hill Higher Education, 2008); Alan Bryman and Emma Bell, *Business Research Methods* (Oxford University Press, 2007); R. Y. Cavana, Brian L. Delahaye, and Uma Sekaran, *Applied Business Research: Qualitative and Quantitative Methods* (Wiley, 2001); Norman K. Denzin and Yvonna Lincoln, eds., *The Sage Handbook of Qualitative Research* (Sage, 2005); Päivi Eriksson and Anne Kovalainen, *Qualitative Methods in Business Research: Introducing Qualitative Methods* (Sage, 2008); Lisa M. Given, *The Sage Encyclopedia of Qualitative Research Methods* (Sage, 2008); Mitchell J. Miller and Richard A. Tewksbury, *Research Methods: A Qualitative Reader* (Prentice Hall, 2005); Rebecca Piekkari and Catherine Welch, *Focused Issue: Qualitative Research Methods in International Business* (Betriebswirtschaftlicher Verlag Gabler, 2006); Donijo Robbins, *Understanding Research Methods* (CRC Press, 2008); Phyllis Tharenou, Ross Donohue, and Brian Cooper, *Management Research Methods* (Cambridge University Press, 2007).

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Research Methods: Quantitative

Quantitative research is a field of inquiry that emphasizes numbers, is often deductive in nature, concentrates on hypotheses testing, and aims to uncover causal connections between different phenomena as well as to make generalizations.

Quantitative research is often associated with a positivist paradigm. Positivists tend to see the social world as existing objectively and independently from the researcher. According to this paradigm, research should be conducted in a detached, impersonal way. Quantitative methods usually focus on testing theories as opposed to the qualitative approach, which is often more concerned with theory generation.

Main methods of data collection in quantitative research include experiments, surveys, structured interviews, structured observation, and various sources of secondary data. Experiments are characterized by an artificially created setting and an opportunity to control the experiment conditions. Two groups are normally used in experiments—a test group and a control group. Cases are assigned to the groups randomly. Although very useful and most similar to natural sciences in methodology, experiments have only limited applicability in business research and social sciences in general because of various ethical and practical issues. There also exist so-called quasi-experiments in which the groups emerge in a natural way rather than artificially, and the researcher has no power in assigning participants or cases to the groups.

Surveys are among the most popular methods of data collection in business research. They are conducted by mail or via the telephone; lately, Web-based and e-mail surveys are also becoming increasingly popular. A survey contains a predefined list of answers, so it is in effect a multiple-choice questionnaire. The questions embrace several interconnected topics, and the aim is usually to test multiple hypotheses. The answers are then coded, entered into statistical software, and subsequently treated as quantitative data.

Structured interviews are very similar to surveys. Just like surveys, they contain a predefined set of answers. What is different is that a researcher asks the questions rather than gives out questionnaires for respondents to fill in, and has an opportunity to clarify any issues if necessary.

Structured observation (also sometimes referred to as systematic observation) is a technique that emphasizes documenting observed behavior under explicitly formulated rules. This approach differs significantly from unstructured observation, which is common for qualitative research. Rules in structured observation help the researcher to pay attention to and record exactly those aspects of participants' behavior that are relevant for answering the research questions. The resulting data can then be coded in a way similar to that of the survey and analyzed statistically.

Content analysis is an approach to the document analysis that aims to quantify content in terms of predefined categories. Words or phrases can be chosen as the units of analysis. This approach is often used to determine the amount of attention paid to a particular topic in news or other media.

Secondary data are data that have been collected by someone other than a researcher conducting the study—often they come from government or statistical bodies, the media, or other researchers. Sometimes secondary data are used in combination with primary data within the same research project.

Data Analysis

Main methods of quantitative data analysis include univariate, bivariate, and multivariate statistics. In univariate methods, a single variable at a time is analyzed. Frequency tables display the number of observations and the percentage belonging to each category. Bar charts and pie charts are the most popular methods for visualizing frequency tables. Common methods in univariate data analysis include measures of the central tendency (arithmetic mean, median, and mode) that show a typical value for a given distribution; measures of dispersion (such as range, variance, and standard deviation) characterize variation in a distribution of values.

Bivariate analysis explores two variables at a time to establish if they are related. Contingency tables are similar to frequency tables, but they permit analysis of two variables simultaneously. Pearson's correlation coefficient is an important method of bivariate analysis. It indicates the strength and the direction of a relationship between two variables. The coefficient lies between 0 and 1, and the closer it is to 1, the stronger the relationship is. Correlation coefficient does not say anything about causality.

Multivariate analysis refers to statistical techniques that simultaneously analyze more than two variables. Some multivariate techniques are just extensions of univariate (such as distributions) and bivariate methods (such as correlation, analysis of variance, regression). Other techniques, such as factor analysis, are uniquely designed to deal with multivariate data.

See Also: Consumer Surveys; Focus Groups; Management Research; Research Methods: Mixed Methods; Research Methods: Qualitative.

Bibliography. A. Bryman and E. Bell, *Business Research Methods* (Oxford University Press, 2007); John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Sage, 2009); J. Hair et al., *Multivariate Data Analysis* (Pearson Prentice Hall, 2006); P. Tharenou et al., *Management Research Methods* (Cambridge University Press, 2007); Donald J. Treiman, Deirdre D. Johnston, and Thomas J. Grites, *Quantitative Data Analysis: Doing Social Research to Test Ideas* (Jossey-Bass, 2008).

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Reserve Currency

A reserve currency is one in which institutions (mostly central banks, but also financial institutions or individuals) hold their nondomestic-currency reserves. A reserve currency must meet the requirements of an international currency and there must also be sufficient supply of the currency. Over the past decade, the U.S. dollar, euro, yen, and sterling have accounted for about 98 percent of all reserves held in foreign currencies.

An international currency is one that firms use to settle trade or financial transactions with their international clients. International currencies belong to strong, stable, and internationally involved economies that provide convincing assurances that they will not impose exchange controls on the use of their currencies. In addition, users of an international currency must believe that the exchange rates of the currency will not change at the whim of the government. When an international currency belongs to a large economy that can provide sufficient supply of the currency and large financial markets exist in that currency, the currency can be used as a reserve currency.

In addition to the four currencies listed above, the Swiss franc, French franc, Deutsche mark, and Dutch guilder (last three now replaced by the euro) have been used as reserve currencies during the past century. Note that small holdings of an international currency to facilitate transactions—much like a small bank balance in a checking account to facilitate normal operations of a firm or a family—do not constitute a reserve currency.

A reserve currency is different from a reserve asset. Most common of these reserve assets have been gold and Special Drawing Rights issued by the International Monetary Fund. Although historically gold had been a very important reserve asset, its use as a reserve asset declined sharply after the United States withdrew its promise to exchange gold at a fixed dollar price in response to its balance of payments problems in the 1960s. At the end of 2007, gold accounted for less than 10 percent of global foreign reserves.

Since the establishment of the Bretton Woods system in 1944, the U.S. dollar has become the prominent reserve currency. Before World War I and during the 18th and 19th centuries, sterling was the main reserve currency. At the end of 2007, total allocated foreign currency reserves (the portion for which currencies of holdings are known) in the world added up to the equivalent of US$4.065 trillion (currencies breakdown for another $2.3 trillion of foreign currency reserves are not known), of which 63.9 percent were in U.S. dollars, 26.5 percent in euros, 4.7 percent in sterling, 2.9 percent in yen, and the remainder 2 percent in other smaller currencies.

With the introduction of the euro as a currency for all transactions in 2001, however, the prominence of the U.S. dollar may be on a decline. Two factors have led to this decline. First, industrialized as well as developing countries have reduced the share of their foreign currency reserves they hold in the form of dollars. Industrialized countries reduced the share of dollars in their foreign currency reserves slightly from 72.3 percent at the end of 2000 to 69.4 percent at the end of 2007. Developing countries reduced their dependence on the dollar much more—from 69.9 percent to 60.7 percent over the same period. Second, foreign currency reserves of developing countries have grown much faster than those of the industrialized countries. In 1995 developing countries accounted for only 52.5 percent (59.4 percent in 2000) of global foreign currency reserves. By the end of 2007, this proportion had risen to 76.5 percent. The combined effect of these two changes has been to reduce the share of foreign currency reserves held in dollars from 71.1 percent at the end of 2000 to 63.9 percent in 2007.

Why would any country allow its currency to be used by foreigners as a reserve or an international currency? If foreigners hold nontrivial amounts of a country's currency, could they not influence the monetary policy of the country by changing the amounts they hold or destabilize the economy either by dumping the currency in the country or by influencing the currency's foreign exchange rate? In an extreme case, use of a currency in international markets could also become a conduit for introduction of counterfeit currency because unsuspecting foreigners are less likely to be able to distinguish between real and counterfeit bills.

Seigniorage Benefits

While these objections to allowing the use of a currency as a reserve currency are valid, such a use also confers important benefits on the issuing country. First, a reserve currency country is in the privileged position of being able to pay for foreign goods (and services) not by producing goods of equal value, but by merely producing its currency. The cost of producing currency is merely the cost of printing the bills. Governments derive "seigniorage" benefit (the difference between the face value of a bill and the cost of printing that bill) when they issue their currency in the domestic economy. Similarly, countries derive seigniorage benefit when their currency acquires the status of a reserve currency.

The U.S. economy has used this seigniorage benefit over the past few decades. For the period between World War II and about 1995, U.S. current account deficits, a measure of net import of goods and services by the U.S. economy, were financed largely by an increase in the supply of U.S. dollars to the rest-of-the-world dollars. During that period, players in the global economy were happy to acquire increasing volumes of dollars to carry out the increasing volume of international trade and financial transactions between themselves. During the past decade, financing of very large U.S. deficits has been made easier partly by an increase in the dollar reserves that the central banks have been willing to hold. In addition to these seigniorage benefits, use of one's currency as a reserve currency adds to the political prestige of the country.

See Also: Convertibility; Dollarization; Euro; Foreign Exchange Reserves; Gold Standard; International Monetary System.

Bibliography. Claudio Borio, Gabriele Galati, and Alexandra Heath, *FX Reserve Management: Trends and Challenges* (Bank for International Settlements, 2008); Barry Eichengreen, *Sterling's Past, Dollar's Future: Historical Perspectives on Reserve Currency Competition* (National Bureau of Economic Research, 2005); Barry J. Eichengreen and Marc Flandreau, *The Rise and Fall of the Dollar, or When Did the Dollar Replace Sterling As the Leading International Currency?* (National Bureau of Economic Research, 2008).

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Resource-Seeking Investment

Resource-seeking investment is one of the types of foreign direct investment; it mainly focuses on rich raw materials, low-cost unskilled and skilled labor, technological assets, and physical infrastructure. According to the United Nations Conference on Trade and Development (UNCTAD), resource-seeking investment was the most common foreign direct investment (FDI) type in the 19th and 20th centuries, representing the basis of colonial relationships between Europe and other countries. It still remains very significant, but it has been overtaken in importance by other types of FDI in today's more globalized world.

John Dunning defines three groups of resource-seeking multinational companies. The first group looks for physical resources such as oil, minerals, raw materials, or agricultural products. This kind of FDI mostly asks for significant capital expenditure and is relatively location bound. The second group of resource seeker looks for cheap, mostly unskilled labor. The third group wants to acquire technological capacity, management or marketing expertise, and organizational skills. An example of the latter group can be Chinese firms that set up collaborative alliances with U.S. firms in high-technology sectors. The foreign-based multinational companies invest abroad to gain access to resources, for example, minerals, agricultural products, unskilled labor, and so forth, that are either unobtainable or available only at a much higher cost in the home country.

Resource-seeking investment may provide training and enhance skills, create opportunities for employment, and reduce underemployment of labor and resources. On the other hand, resource-seeking investment done by foreign multinational companies can be exploitative if monopolization happens in factor markets, and can also be damaging if long-term contracts are combined with monopolization activities of these companies.

For Rajneesh Narula and Dunning, where a region or a country has an absolute advantage in a given scarce resource, the government of that location is in a strong bargaining position. If this scarce resource is a natural one, then the marginal cost of its extraction to both parties is almost zero. According to David Johnson and C. Turner, while availability and cost of access to natural resources would be the key criteria for foreign-based multinational companies to make investment profitable, countries that own these resources also benefit from these investments as these companies bring technical expertise that is essential in exploration and production; employ skilled and unskilled labor; and use resources that otherwise would not be used.

In the case of raw material, resource-seeking investment is the most important one for developing countries as it acquires absolute advantage in a particular scarce natural resource, such as oil, natural gas, and timber. In the Middle East and Africa, these products provide a strong bargaining-power position to those countries that own them. For example, countries like Nigeria or Iran attract resource-seeking investment in oil carried out by big multinational companies from all over the world, as the countries have rich oil fields and the marginal cost of extracting oil to both parties (to the country and to the company that extracts the oil) is considered very low as both parties benefit from generating economic rent based on locational advantages.

Resource-seeking investment in natural resources can be carried out by companies based in the primary sector (they either invest in resource-poor countries or resource-rich developing countries) or companies based in natural resource–related sectors, like metal manufacturing. Even though it has been generally accepted that multinational companies from developing countries should be able to access natural resources and secure the supply of raw materials for their rapidly growing economies, those companies from countries poor in natural resources have the motive to invest in locations determined by the availability of assets.

It is also commonly known that when international prices of raw materials have risen, the competition between American, Asian, and European companies for this kind of scarce resources, for example in Africa, has dramatically increased as well. However, multinational firms still prefer nonequity agreements with foreign firms or purchase their inputs at arms-length prices.

In the case of low-cost-labor–seeking investment, which Dunning defines as investment by companies from countries with higher labor cost setup, or by those who acquire subsidiaries in countries with lower labor cost, companies seek cheaper labor in the field of manufacturing and service sectors to lower their production costs. However, when the countries develop, the cost of utilizing cheap labor rises, and the labor-intensive production becomes gradually less attractive to foreign investors. For example, countries like China and India can attract foreign investments because of their unskilled labor as they are cheaper, but as the countries become more developed, foreign investors will find it very difficult to compensate for wage increases. Companies whose production extensively depends on raw materials for their products can either move their production to a foreign site where the raw material is located or extract and import the material to their home-country plants.

Other resource-seeking investment types in the context of Dunning's location factor include tourism and construction, which means that investment can take place only in a particular location because it utilizes resources or attributes that are immobile.

See Also: Foreign Direct Investment, Horizontal and Vertical; Internationalization; Locational Advantages; Multinational Corporation.

Bibliography. John Dunning, "The Eclectic Paradigm as an Envelope for Economic and Business Theories of MNE Activity," *International Business Review* (v.9, 2000); John Dunning, *Multinational Enterprises and the Global Economy* (Addison-Wesley, 1993); David Johnson and C. Turner, *International Business: Themes, and Issues in the Modern Global Economy* (Routledge, 2003); Rajneesh Narula and John Dunning, *Globalisation and New Realities for Multinational Enterprise-Developing Host Country Interaction* (University of Oslo, 1998); Rajneesh Narula and John Dunning, "Industrial Development, Globalisation and Multinational Enterprises: New Realities for Developing Countries," *Oxford Development Studies* (v.28, 2000); UNCTAD, *Case Study on Outward Foreign Direct Investment by Indian Small and Medium-Sized Enterprises* (United Nations, 2005); UNCTAD, *Foreign Direct Investment Report 2006: FDI From Developing and Transition Economies: Implications for Development* (United Nations, 2006).

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Retail Capital Markets

Retail capital markets are national and international exchanges, mostly formal though informal in some cases, where individuals can invest or obtain funds; because of the small size of most of these transactions, usually financial intermediaries such as banks or share brokers are involved. Retail capital markets can be broken into two broad segments: (1) debt, which refers to any agreement that obligates a borrower to repay a lender principal borrowed, along with a charge for borrowing the money, typically interest on the principal; and (2) equity, which refers to the issuance of shares in a business enterprise that promises no fixed principal or interest payments but entitles shareholders to the value of the portion of the enterprise that they own. In equity markets, the retail segment will consist largely of investors, each one owning a relatively small number of shares.

With respect to debt, most retail borrowers and investors will use intermediaries such as banks or other nonbank institutions to conduct transactions. Retail customers might be either "lenders" in the sense that they provide funds to intermediaries through deposits or investments in instruments such as certificates of deposit (CDs) or they might be borrowers, taking loans for various purposes such as mortgage loans for residential property purchases or business loans for small business enterprise. The retail segment of the debt market is very heterogeneous from the point of view of lenders, often quite profitable but also potentially very competitive and sometimes quite difficult to assess in terms of borrower creditworthiness.

A very large amount of personal retail borrowing is conducted by individuals through credit card purchases. Total credit card balances in the United States alone were estimated to amount to about US$900 billion in 2007, according to the U.S. Federal Reserve Board. Credit card borrowing offers tremendous convenience to retail customers but if balances are carried the interest charges are generally very high. Much regulation, especially in the United States, focuses on the cost of credit card interest, though not always effectively. There has also been concern about excessive issuance of credit cards to users with poor credit histories and recent turmoil in world financial markets has seen an increase in consumer credit card defaults.

On the equity markets, buying and selling of shares by individuals through brokers engaged in the larger organized stock exchanges in New York, London, and Tokyo is the primary retail activity. In 2005 the U.S. stock market was by far the biggest globally in terms of market capitalization (i.e., total value of shares traded), equalling almost $US17 trillion, or 39 percent of the total of the world's share market capitalization. The Japanese share markets accounted for 11 percent of the total, followed closely by the United Kingdom at 7 percent. Share markets in developing countries, especially in China, have seen rapid relative growth. Individuals may invest directly in shares by creating and managing their own portfolios or indirectly through managed funds (e.g., mutual funds) that take investment increments from individuals and collectively invest and manage those contributions in a portfolio on behalf of the individuals. To a certain degree these collective vehicles, such as pension funds, blur the distinction between retail and wholesale capital markets, indicating that these distinctions, while practical, are not always stable or easy to draw.

The retail activities described thus far are organized and formal and largely done through intermediaries. Retail capital can also be raised individual to individual and outside organized markets. Two simple examples would be a promissory note between one individual lending funds to another individual; or an equity investment by an investor in a small unincorporated business. Data for the scale of these activities is necessarily very sketchy but it could be a sizable amount and for many borrowers the only alternative in securing funds for business, investment, or consumption.

Microfinance and Remittances

In the developing world, two significant retail capital market institutions bear mention. One is microfinance, which refers to the making of very small loans, perhaps the equivalent of a few dollars, to especially impoverished borrowers who are engaging in or starting to engage in very small enterprise. The terms may be preferential but generally commercial, with the intention of making a profit for the lender. In countries such as Bangladesh, where the concept was originated, the default rates have been low and the investments generally successful if the process of lending and credit analysis is carefully managed.

Another important source of retail capital flow globally consists of remittances between individuals across national borders. One particular system, referred to by various terms in different countries but most widely known as *hawala* or *hundi* in south Asia, relies on exchanges of funds in which an expatriate borrower in one country will receive money from an expatriate lender in the same country by having a related party located in the home country draw down a balance in the home country in return for an increase in a balance to the expatriate lender. Done for commission but without formal paperwork and on "trust," the hawala system accounts for considerable but immeasurable transactions across national borders. Technically illegal in many countries, much of the exchange is done for legitimate retail capital raising but some portion of it is used for money laundering and other illicit activities.

See Also: Debt; Equities; Financial Market Regulation; Financial Markets; Markets; Microfinance.

Bibliography. Linda Allen, Gayle DeLong, and Anthony Saunders, "Issues in the Credit Risk Modeling of Retail Markets," *Journal of Banking and Finance* (v.28/4, 2004); Frank J. Fabozzi and Franco Modigliani, *Capital Markets: Institutions and Instruments* (Prentice Hall, 1996); Mohammed El Qorchi, Samuel Munzele Miambo, and John F. Wilson, *Informal Funds Transfer Systems: An Analysis of the Informal Hawala System* (International Monetary Fund, 2003); Standard & Poor's, "Table 1368. United States and Foreign Stock Markets—Market Capitalization and Value of Shares Traded by Country: 1990 to 2005," *Standard & Poor's Emerging Stock Markets Factbook* (Standard & Poor's 2006); U.S. Federal Reserve Board of Governors, "G.19: Consumer Credit" (2007), www.federalreserve.gov (cited March 2009).

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Retail Sector

Retailing involves all the activities used to sell goods and services directly to final consumers for personal nonbusiness use; global retailing represents retailing activities that cross national boundaries.

Over the past several centuries, entrepreneurial merchants have ventured abroad to exchange merchandise and open retail operations. International trading and retail store operations were the two primary economic engines of the colonial firms. For example, over 150 years ago, Dutch-based apparel and accessories chain C&A began expanding throughout Europe; it now has a network of 1,200 outlets, with new expansions planned in Bulgaria in 2009. Deichmann, a German retail shoe chain, began operations in 1913, and now has over 2,200 stores and 32,000 staff in 16 European countries; they sold 122 million pairs of shoes in 2007. Woolworth, founded in 1878 in the United States as a five-and-dime store, began expanding to Europe, Mexico, and South Africa in the mid-20th century, and now no longer exists within the borders of the United States, yet survives in the United Kingdom (UK), Germany, Austria, Mexico, and South Africa.

The Largest Global Retailers

Three (Wal-Mart, The Home Depot, and Target) of the 25 largest businesses in the United States are retailers. Outside the United States, big retailers include Carrefour in France, Tesco in the UK, Metro in Germany, and Daiei in Japan.

Of the top 250 retailers, 104 (41.6 percent) have no international experience at all. The most international retailer is France's Carrefour, which has stores in just 29 countries, compared to multinationals in other industries that might operate in 100 or more countries. Overall, the 10 largest retailers in the world (with country of origin and corresponding sales in U.S. dollars) are Wal-Mart (United States: $348.7 billion), Carrefour (France: $97.86 billion), The Home Depot (United States: $90.84 billion), Tesco (UK: $78.98 billion), Metro (Germany: $75.25 billion), Kroger (United States: $66.11 billion), Target (United States: $59.49 billion), Costco (United States: $60.15 billion), Sears (United States: $53.01 billion), and Schwartz Unternehmens Truehand KG (Germany: $52.42 billion).The top four retailers in each market are as follows: Wal-Mart, The Home Depot, Kroger, and Target (North America); Carrefour, Tesco, Metro, and Schwartz (Europe); Seven and I Holdings, AEON, Woolworths, and Coles Group (Asia/Pacific); CBD Grupo Pao de Acucar, Cencosud, Soriana, and Casas Bahia (Latin America); and Pick 'n Pay, Shoprite Holdings, Massmart, and Metcash Africa (Africa/Middle East).

The predominant retail formats of the top 250 retailers are supermarkets (93), other specialty stores (88), hypermarket/supercenter/superstore (73), convenience store (73), department store (53), apparel/footwear specialty store (49), and discount store (46). Nearly 11 percent (10.6 percent) of these retailers operate in 10 or more countries.

Wal-Mart's approach has not worked in every market, and it now has stores in just 13 countries, including this store in Brazil.

Global Retailing Trends

According to the 2008 Global Powers of Retailing presented by Deloitte, Touche Tohmatsu in conjunction with *Stores* magazine, the total retail sales for the top 250 retailers rose to $3.25 trillion in 2006, up 8 percent from $3.01 trillion the previous year. Most of the growth was attributable to the rapid growth of consumer incomes in the emerging markets economies, where millions moved from poverty to the middle class.

Of the top 250 retailers, 36 experienced decline in sales in 2006, compared to 49 in 2005. The net profit margin for the group was up by 3.6 percent, slightly more than the 3.5 percent in 2005 and significantly better than the 2.7 percent in 2004. Only seven firms reported a net loss in 2006 compared to 15 the year before.

Based on the 2008 Retail Development Index developed by A. T. Kearney Analysis, Euro Money, and the World Bank, the top emerging markets based on four major factors—country risk, market attractiveness, market saturation and time pressure, and the most attractive markets for the next decade—are in Vietnam, India, Russia, China, Egypt, Morocco, Saudi Arabia, Chile, Brazil, Turkey, Mexico, Algeria, Malaysia, Peru, Indonesia, Bulgaria, Ukraine, Tunisia, Colombia, and the United Arab Emirates.

Some of the major trends among the top retailers are an increased emphasis on social responsibility. Because of the growth in mass media throughout the world, more consumers are focused on product safety issues. Moreover, with rapid globalization and reduced trade barriers, more food retailers are becoming more concerned about the safety of their supply chains.

Other trends include the shift away from the United States and toward Asia and other emerging markets. Retailers in the United States and in Europe are likely to face competition in the domestic market and hence seek opportunities abroad. As more countries grow and become affluent like the nations in the European Union, Japan, and the United States, consumer spending on services retailing continues to grow by leaps and bounds. Hence, more and more retailers are selling services related to their core merchandise. For example, Best Buy has Geek Squad, which offers after-market servicing for complicated home electronic products, while Tesco, the UK food retailer, offers many online and financial services.

There is also a trend toward multichannel integration as online retailing continues to take market share away from brick-and-mortar stores. The best retailers are integrating the two formats and enriching the customer experience for distinct customer segments across multiple channels to build brand identity, engaging consumers in dialogue, and obtaining feedback from them. As retailers become more powerful, they continue to develop long-term relationships with them, and develop as world-class marketing entities.

Failures in Global Retailing

Despite the successes of the major global retailers, some have encountered failures as well. After a decade-long effort to win German consumers, Wal-Mart decided to quit in late 2006. It sold its 85 stores to local retailer Metro AG, costing the retailer $1 billion. Earlier, it had to retreat from the South Korean market as well. It now operates in 13 countries around the world, compared to Carrefour, its largest competitor, which operates in 29 countries.

Analysts believed that the company was losing over $250 million a year on turnover sales of about $2.5 billion annually, despite several attempts to turn around the business. The German consumer could not get used to some of Wal-Mart's signature features like employees required to smile and heartily greet the customer, baggers at the checkout, or stores outside the town center. The firm was also frustrated with German shopping regulations, the feared *Ladenschulssgesetz*, which regulates store openings and restrictions on discounting. Other reasons included the fact that many of the stores were not in the best of areas.

Discount retailing as practiced by major firms such as Aldi and Lidl were firmly entrenched by the time Wal-Mart arrived and it had nothing new to add. In the United States, Wal-Mart is the undisputed price leader; Aldi owns that position in Germany. Wal-Mart's conservative management style, which worked in the United States, and involved hiring and firing at will and having everyone toe the company line, did not work in Germany.

Wal-Mart's annual turnover of $285 billion gives it a distinct scale advantage on globally sourced products such as Chinese-made toys and clothing. Yet, the purchasing clout did not extend to regional brands of bratwurst and beer. Wal-Mart's German selection was dominated by European brands from Fischer bicycles to Vernel fabric softener. The company also did not have superior distribution efficiencies because of a lack of strong enduring relationships with local suppliers.

Wal-Mart is now concentrating on expanding in China, India, and Central America. It has been acquiring stores in Brazil and entered a partnership with a retail chain in Central America. After a long struggle, it also boosted its investment in Japan when it gained a major share of Seiyu Ltd.

See Also: AEON; Carrefour; Consumer Behavior; Corporate Social Responsibility; Costco Wholesale; CVS/Caremark; Electronic Commerce; Home Depot, The; Lowe's; METRO; Safeway; Sears Holdings; Supply Chain Management; Target; Wal-Mart Stores; Wholesale Sector.

Bibliography. Nicholas Alexander and Marcelo de Lira e Silva, "Emerging Markets and the Internationalization of Retailing: The Brazilian Experience," *International Journal of Retail & Distribution Management* (v.30, 2002); Mark Carr et al., "The New Era of Global Retailing," *Journal of Business Strategy* (v.19, 1998); Mahmoud Ezzamel and Hugh Willmott, "Rethinking Strategy: Contemporary Perspectives and Debates," *European Management Review* (v.1, 2004); Mahmoud Ezzamel and Hugh Willmott, "Strategy as Discourse in a Global Retailer: A Supplement to Rationalist and Interpretive Accounts," *Organization Studies* (v.29, 2008); Stephane J. G. Girod and Alan M. Rugman, "Regional Business Networks and the Multinational Retail Sector," *Long Range Planning* (v.38/4, 2005); Nirmalya Kumar, "The Global Retail Challenge," *Business Strategy Review* (v.16, 2005); "Leaders: Trouble at Till; Global Retailing," *The Economist* (v.381, 2006); Edwin J. Nijssen and Susan P. Douglas, "Consumer World-Mindedness, Social-Mindedness and Store Image," *Journal of International Marketing* (v.16, 2008); "Overcoming the Hurdles in Global Retailing," *International Journal of Retail & Distribution Management* (v.25, 1997); Stephanie Rosenbloom, "To Save on Gas, Stay Home and Click," *New York Times* (July 19, 2008).

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Reuters

Reuters, the world's largest international multimedia news organization, provides a variety of news-related services including newswires, pictures, video, online syndication, and news graphics. In 2008 the company employed 2,400 journalists reporting from 196 bureaus. In 2007, it filed over 3 million news items in 132 countries. According to company statistics, Reuters' news is viewed by over 1 billion people a day. Following the announcement of negotiations in 2007, Reuters Group plc and Thompson Corporation, the media conglomerate, combined in 2008.

The bulk of Reuters's profits derives from its portfolio of financial news services, which range from lower-tier off-trading floor products to advanced equities trading and analytics. These financial tools facilitate communication among brokers and other financial transaction intermediaries. Reuters conducts brokerage services in global equities to securities industry professionals and supplies trading research for institutional investors. It also provides research and advisory services. Despite competition from a number of other financial information service providers, such as Bloomberg and Dow Jones, Reuters has grown consistently since the 1990s.

Reuters's economic information services, although part of its offerings since the company was established in 1851, were consistently less profitable than its general news services until the 1960s. During the 19th century, Reuters transmitted commercial information via telegraph to and from England and the continental European bourses. These services principally comprised opening and closing prices and did not garner significant revenue. After the advent of shortwave broadcasting in 1923, which permitted the simultaneous distribution of larger news reports to multiple recipients, the company developed a variety of trade and market services. Relying on its existing international ramifications, which had developed in conjunction with its general news services, the company was able, unlike its competitors, to assemble a report of commercial information from markets around the globe. By the late 1960s, Reuters was poised to take advantage of emerging computer technology.

A key to the company's long-term success has been its ability to reinvent itself in the face of revolutions in communications technology. The rapid rise of the internet as a tool and platform for the collection and distribution of news was followed by the company's combination with Thompson Corporation. The advent of point-to-point computer portals enabled the company to reorient its business during the 1980s and to separate itself from ownership by the press. In 1984 the company was publicly floated after being held in trust by British newspaper interests since 1941. The development of a Reuters trust, controlled by British newspapers, was in part a solution to the growing threat that the company's news services faced from radio broadcasting.

Prior to the development of computer technology, the company struggled to meet the needs of its newspaper clientele and consistently make profits. At least until World War II, the company's revenues from the British press were not sufficient to meet the costs of international news gathering. Insufficient profits at home caused Reuters to pursue alternative sources of revenue abroad and to diversify its business. During the 1890s, the company developed a variety of auxiliary services including a remittance business that grew into a full-fledged bank, both of which collapsed with the onset of war in 1914. During the 1920s, the commercial news services replaced these alternative lines of business.

Reuters has always had a large international presence mainly because of its role as the news agency of the British Empire, but its reception abroad has been mixed. During its first 100 years, the company's foreign operations consistently lost money. Its exclusive access to international news, which derived from contracts with other national news agencies in Europe and the United States, sustained Reuters' dominant position abroad. These cartel arrangements, which formed in the 1850s and continued in varying forms until the 1960s, enabled Reuters to exercise significant control over the news circulating throughout the world. The company's position abroad has changed with developments in telecommunications, international trade, and the history of the British Empire. Following World War II, competition reduced Reuters's presence in its traditional imperial strongholds, causing it to focus its attention more on European and North American markets.

See Also: Bloomberg; Media; Multinational Corporation.

Bibliography. Roderick Jones, *A Life in Reuters* (London, 1951); Deborah Orr, "Reviving Reuters," *Forbes* (v.176/1, 2005); Donald Read, *The Power of News: The History of Reuters* (London, 1999); George Scott, *Reporter Anonymous* (London, 1968); George Storey, *Reuters' Century* (London, 1951).

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Revaluation

Revaluation occurs when a government or its central bank increases the official price at which its currency can be bought on the foreign exchange (Forex) market. For example, suppose that the current U.S. dollar (USD)/British pound (GBP) exchange rate was 2:1, meaning that $2 had to be given up for each £1 or, equivalently, that £1 was worth $2. If the GBP was revalued, this would mean that more USD had to be exchanged for each GBP, meaning that GBP had become more expensive in dollar terms.

Revaluation occurs under a fixed exchange rate regime. This was the traditional regime for most countries between 1945 (the Bretton Woods system) and the early 1970s, after which many countries moved to floating exchange rate regimes. Under such a regime, the government is committed to a particular exchange rate and manages its foreign exchange reserves (holdings of foreign currencies and gold) to ensure that this rate is maintained. Because a country's holdings of foreign exchange reserves are closely related to its balance of payments, the extent to which a government is able to maintain a fixed exchange rate is also affected by the balance of payments. For example, a country that had a surplus on its external account would face a positive net demand for its currency as foreigners seek to pay for their net imports. This, in turn, would place upward pressure on the exchange rate and the government would intervene to defend the exchange rate by selling its domestic currency on the Forex markets. This mechanism works in the opposite direction in the case of a devaluation.

The operation of this balance of payments mechanism is not costless: as the central bank increases the supply of domestic currency, inflationary pressures can develop. In more serious cases, and to avoid a conflict between external policy objectives (surplus on external account) and internal policy objectives (price stability), countries can revalue their currency. The advantage of revaluation in this case is that by making the currency more expensive, inflationary pressures are subdued because the central bank now only requires a more limited increase in the supply of its currency to the Forex markets.

Historically, countries that have revalued their currencies have benefitted from relatively higher rates of growth in productivity; this, in turn, has caused significant surpluses on the external account to emerge. This was the case with West Germany in 1961 and 1969. In 1985 Japan revalued in response to U.S. concerns that trade with Japan accounted for almost 50 percent of the U.S. trade deficit during the 1980s. In 2005 China revalued its currency at a time when it had accumulated approximately $700 billion of foreign reserves. It is often the case that heavy international speculation precedes a revaluation. This is because speculators hope to benefit from purchasing a currency at a lower price and selling it after revaluation.

In a global context, revaluation can help to improve relations between the country accumulating substantial foreign reserves and its main trading partners. In the cases of China and Japan referred to above, there were fears that they had adopted a deliberate policy of maintaining their exchange rate at an artificially low level—in direct conflict with Article Four of the Charter of the International Monetary Fund, which states that countries should avoid deliberate manipulation of their exchange rates to secure an unfair competitive advantage. It is also the case that revaluation can help to reduce the concentration of foreign direct investment in countries that have an undervalued currency. This is because it is relatively cheaper for multinational corporations to acquire assets in these countries by purchasing their currencies.

Countries that revalue their currency may incur a number of macroeconomic costs. For example, by making imports cheaper, revaluation will lead to deterioration in the trade balance; revaluation can cause expenditure-switching effects in favor of imports, which will exacerbate domestic unemployment. Finally, revaluation can reduce and/or reverse inward foreign direct investment. This is because acquisition of assets in another country becomes more expensive if that country revalues its currency.

See Also: Currency Speculators; Devaluation; Fixed Exchange Rate; Foreign Exchange Market; Foreign Exchange Reserves.

Bibliography. Richard G. Lipsey and Alec Chrystal, *Positive Economics* (Oxford University Press, 2007).

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Reverse Engineering

Reverse engineering refers to any activity that analyzes a product to determine either how it works or the principles underlying its functioning. Starting from the product itself, an attempt is made to derive an earlier stage in the design and development process; this could be a detailed design, a high-level design, or a functional specification. Conventional engineering starts from some sort of a specification (possibly a design or a set of desired functions) and works to create a product. Reverse engineering is the opposite. It is often used to contribute to a company's research and development activity, supporting the development of new products or the improvement of old products. Products that are analyzed in this way include motor cars, electronic goods, integrated circuits, software, and drugs.

The legality of reverse engineering someone else's product is a complex issue and will depend on many things including the jurisdiction where the activity takes place and the type of product being analyzed. However, when applied to a nonpatented product, it is usually acceptable as long as care is taken not to infringe copyright or trade secret laws. If a product is patented, then the invention, as defined in the patent, cannot be reproduced. However, a patent is unlikely to specify the functionality, but rather the mechanism, for implementing that functionality. So, if reverse engineering can legally reveal the functionality, which is then implemented in a different fashion, this may well be legal. Essentially, copying of any "document" (including program code) and obtaining information in any illegal way are not permitted.

A famous example of reverse engineering formed the basis of the early development of the personal computer (PC) industry. In the early 1980s, IBM introduced its PC. Its rapid success meant that many other companies wanted to market products with the same functionality, but to be successful, such machines needed to be capable of running the same software. The main barrier to entering this market was the PC BIOS—a program embedded in a chip that controls the computer's boot process. Copyright law did not allow copying of the PC BIOS: the only option was to reverse engineer it.

Specifically, copyright law does not allow the expression of an idea (i.e., the actual program) to be copied, but does not restrict the copying of functionality. The BIOS was studied carefully by a team of engineers to determine precisely what it did and to create a specification. Another team, which had no knowledge of the original program, then developed a new BIOS according to this specification. This is known as a "clean room" approach: the second team is not "contaminated" by knowledge of the original program, so they cannot copy it. Using a BIOS developed in this way, many companies were able to market an "IBM-compatible PC." These products have now evolved into the PCs we use today.

Interoperability

The legal issues are particularly complex in the case of software or other digital media, particularly with respect to interoperability. This is the property of different products or systems that allows them to work together—this often means that they must be able to process data stored with the same file structures. From a consumer viewpoint, interoperability is considered to be a good thing as it allows the development and marketing of a wide range of competing products, increasing both choice and value. If a company is unwilling, or unable, to provide details of file structures for interoperability, then it may be possible to obtain them through reverse engineering.

In the United States, the Digital Millennium Copyright Act generally forbids the circumvention of technological protection measures (Digital Rights Management), even when these measures give a product protection beyond the rights specified by law. However, it also specifies very limited circumstances under which a competitor may attempt this in pursuit of interoperability. In the European Union, the Copyright Directive has a similar effect. In this area of law, there is a clear conflict between the rights of consumers and those of intellectual property holders.

Another example of reverse engineering has been in the manufacture of replacement ink-jet printer cartridges. Typically, manufacturers of ink-jet printers include software in the printer which invokes a series of communications (known as "handshaking") with the printer cartridge to recognize the printer as one that they have manufactured. A chip is included in the cartridge that has this capability programmed into it. This makes it difficult for competitors to develop compatible cartridges—a problem of interoperability. This is of particular interest to consumers because in many cases, the cost of a cartridge is as much as a quarter of the cost of the printer itself. Many cartridges have now been reverse engineered and competing products offered at substantially lower prices. The original manufacturers have unsuccessfully taken their competitors to court to find that the reverse engineering of their products was legal under the Digital Millennium Copyright Act.

In addition to the above examples, reverse engineering has been used for generating documentation for products where this has been lost or is nonexistent; creation of illegal copies of products; the manufacture of obsolete parts; and the reduction of product development time.

While reverse engineering is seen by many businesses as a valuable, possibly essential, tool, its legal status is likely to change over time. This status is highly complex because it is determined by a combination of intellectual property, antitrust (or competition), and consumer protection laws. In most jurisdictions, all of these laws are being strengthened, but intellectual property laws tend to be in conflict with the other two. This makes the future status of reverse engineering highly uncertain. However, whatever its status, it is clear that many companies will continue to use it as a way of making themselves more efficient and more competitive in the marketplace.

See Also: Antitrust Laws; Copyright Infringement; Intellectual Property Theft; International Business Machines; Patents.

Bibliography. Jeff Jarvis, *What Would Google Do? Reverse Engineering the Fastest Growing Company in the History of the World* (Harperluxe, 2009); David C. Musker, "Reverse Engineering," www.jenkins.eu (cited March 2009); Vinesh Raja and Kiran J. Fernandes, *Reverse Engineering: An Industrial Perspective* (Springer, 2008); Pamela Samuelson and Suzanne Scotchmer, "The Law and Economics of Reverse Engineering," *Yale Law Journal* (v.45/10, 2002).

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Risk

Risk is a concept that refers to a possibility of occurrence of some undesirable event and is closely related to uncertainty. There is no universally accepted definition of risk. Risk has been considered in many academic disciplines and treated from various points of view. It has been studied as a decisional, behavioral, cognitive, cultural, societal, and emotional phenomenon. It is believed that the notion of risk (similar to the way we perceive it today) first appeared in the Middle Ages in the context of dangers that arise in marine voyages and was used in maritime insurance.

Sometimes risk is defined as a quantity that is characterized both by the probability of the occurrence of a particular event and the magnitude of loss or other undesirable effect resulting from this event. Risk is associated with uncertainty. Sometimes risk and uncertainty are used as synonyms, especially in everyday parlance where risk tends to be a very loose term.

The most famous definition of risk was formulated by Frank Knight, who wrote in the first part of the 20th century when active research and debates on the foundations of probability took place. To understand Knight's definition of risk, it is important to make a distinction between objective and subjective probabilities. According to the objectivists' view, the probabilities of events are real; they can be estimated by statistical analysis or discovered by logic. However, those who support the subjective interpretation of probabilities disagree that probabilities are intrinsic to nature. To them, probabilities do not exist objectively and represent nothing more than human beliefs. Objective probabilities can be obtained either a priori, from inherent symmetries (such as those that exist, for example, with the throw of a die) or statistically by examining homogenous data. Knight called "opinions" what others would describe as subjective probabilities. In Knight's view, probabilities reflect measurable uncertainty, or risk, while opinions describe unmeasurable uncertainty. Thus, Knight made a distinction between risk and uncertainty. The usefulness of such a distinction continues to be a topic of debates.

Some scholars argue that over time, two very important changes occurred in regard to our understanding of risk. At first, the notion of fate, which associated uncertainty with divine intentions and was dominant in the preindustrial epoch, was replaced with the confidence in the human ability to deal with uncertainty by using probability theory and scientific knowledge. Risk assessments based on probability led to the development of insurance, the emergence of a welfare state that provides protection against unemployment, ill health, and other hazards. However, starting roughly from World War II, a so-called risk society has originated—this is the term that sociologists use to describe an industrial society confronted with uninsurable risks such as global warming, the corruption of food chains, a global financial collapse, and so forth. Such risks are worldwide rather than national in nature.

Several academic disciplines have been concerned with decision making in the face of risk. Decision theory is a branch of knowledge developed by mathematicians, statisticians, and economists that studies the choices under uncertainty. Decision theory models people as rational agents who maximize their expected utility by making choices that are consistent with their preferences and objectives. However, problems arise when one attempts to apply these theoretical notions to a practical decision-making context. Psychological research has shown that individuals behave quite differently from the ways their behavior is described in decision theory and mainstream economic literature. There are suggestions that people tend to ignore risk situations that are very remote or highly unlikely, even if they have potentially important consequences. People make different risky choices about the same problem depending on the way it is framed. Another interesting finding is that humans treat absolute gains and losses differently. Low probability but very dramatic events tend to get excessive attention. This behavioral phenomenon has been observed in various contexts, including political decision making. When dealing with risky situations, many individuals prefer to use verbal rather than numerical characteristics of risk.

Types and Measures of Risk

A number of risks are particularly relevant in the business context. For example, the Basel II Framework, which sets capital adequacy standards, establishes that banks should hold sufficient capital to protect themselves against credit, market, and operational risks. Sometimes risk specialists also tend to analyze environmental risks that include natural disasters, political and regulatory changes, as well as changes in social norms and perceptions. Another risk that is becoming increasingly important is a reputational risk—the possibility of damage to a business that occurs as a result of loss of confidence by any group of stakeholders. It is particularly relevant to service businesses.

A special type of risk that has recently received much attention in the academic literature is a so-called systemic risk. This is the risk that an economic shock, such as a failure of a market, institution, or organization, triggers the collapse of a chain of markets or similar entities. The classic example of systemic risk is a bank run. Often, it begins with a failure of a single bank, which then leads to depositors' panic and results in defaults of healthy banks that fail because they are unable to satisfy too many simultaneous requests for cash.

Just as there is no single accepted definition of risk, there is no agreement regarding the way risk should be measured. One popular approach is to measure risk as the probability of the occurrence of a hazard. Another measure, especially popular in finance, is variance (or standard deviation) of the price or return of an asset. There were also some efforts to develop risk models based on semivariance where only negative deviations from a mean were taken into account. Semivariance estimates the average loss of a portfolio or a security. Value at risk (VaR) is another widely accepted measure, which is mostly used for the estimation of market risk. VaR shows the maximum amount of loss that can be incurred with a given confidence level over a given time interval.

In spite of the popularity of VaR, it has been subject to heavy criticism, particularly in the context of coherent measures of risk. This concept serves to formulate a set of axioms that imposes specific mathematical conditions that any risk measure should satisfy. Among the four axioms of coherency, a central role is played by the so-called subadditivity axiom, which, in essence, formulates the risk diversification principle: The risk of a portfolio should be less than risks of individual securities that constitute this portfolio. It has been shown that there are cases when VaR does not satisfy the subadditivity axiom, thus making it an incoherent measure of risk. To address this problem, alternative measures of risk have been proposed. One of them is expected shortfall, which incorporates both the probability and magnitude of the potential loss.

See Also: Capital Adequacy; Credit Ratings; Decision Making; Risk Management; Uncertainty Avoidance; Value at Risk.

Bibliography. Kevin Buehler, Andrew Freeman, and Ron Hulme, "The Tools: The New Arsenal of Risk Management," *Harvard Business Review* (v.86/9, 2008); Dennis I. Dickstein and Robert H. Flast, *No Excuses: A Business Process Approach to Managing Operational Risk* (Wiley, 2009); Global Association of Risk Professionals, *Foundations of Banking Risk and Regulation: An Overview of Banking, Banking Risks, and Risk-Based Banking Regulation* (Wiley, 2009); Dave Hitz and Pat Walsh, *How to Castrate a Bull: Unexpected Lessons on Risk, Growth, and Success in Business* (Jossey-Bass, 2009); Glyn A. Holton, "Defining Risk," *Financial Analyst Journal* (v.60/6, 2004); Luc

Laeven and Ross Levine, *Bank Governance, Regulation, and Risk Taking* (National Bureau of Economic Research, 2008); Games G. March and Zur Shapira, "Managerial Perspectives on Risk and Risk Taking," *Management Science* (v.33/11, 1987); Alexander B. Putten and Ian C. MacMillan, *Unlocking Opportunities for Growth: How to Profit From Uncertainty While Limiting Your Risk* (Wharton School Publishing, 2009); Larry Rittenberg, *Auditing: A Business Risk Approach* (South-Western, 2009); Ben Warwick, ed., *The Handbook of Risk* (Wiley, 2003).

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Risk Management

Human beings have been taking and managing risks for centuries. Peter Bernstein argues that the mastery of risk is what separates ancient from modern times. He attributes the calculation of probabilities, beginning in 16th-century Italy, with our ability to quantify risk and to make informed decisions on the basis of scientific forecasts.

Although risk management has been practiced for thousands of years, it was not until the 1950s that it was articulated and formally developed, by academics working in the field of insurance. Their initial focus was on "pure risk," or "hazard risk," where there is either a loss or no loss. For example, owning a house gives rise to the risk of loss from it burning down or being destroyed by a hurricane or other force of nature. These are risks that have traditionally been covered by insurers. Robert Mehr and Bob Hedges, widely credited as the fathers of risk management, argued that risks should be managed in a comprehensive manner and not simply insured.

Risk can also be classified as "speculative risk" if the source of risk gives rise to the possibility of gain as well as loss. For example, investing in the stock market generates the possibility of a gain if share prices rise or a loss if they fall. Such "financial risks" were of little consequence when interest rates were stable, foreign exchange rates were fixed, and inflation was low. This changed in the 1970s with the abolition of the Bretton Woods system of fixed exchange rates and the oil price increases that arose from cuts in production by the Organization of Petroleum Exporting Countries (OPEC). The oil price shocks led the U.S. Federal Reserve to focus on fighting inflation rather than stabilizing interest rates, with the result that U.S. interest rates became more volatile, leading to a spillover effect on other nations. Thus, financial risks became an important concern for companies and financial institutions, which required products to hedge them.

Most financial risks are hedged using derivative products—forwards, futures, options, and swaps. With the exception of swaps, which are a recent innovation (the first swap transaction, involving currencies, took place in 1981), derivative products based on nonfinancial assets had been in use long before they were adapted to deal with financial risks. However, it did not take long for a wide array of financial derivatives to be developed. An important catalyst was the publication of the Black-Scholes-Merton formula for pricing options. This coincided with the opening of the Chicago Board Options Exchange in 1973, the first exchange devoted solely to options trading, and laid the foundations for a rapid growth in the volume of contracts traded in this new market.

Financial risks can be classified broadly into three categories: market risk, credit risk, and operational risk. Market risk is the risk of a change in the value of a financial position arising from changes in the value of the underlying components on which that position depends, such as stock prices, bond prices, or exchange rates. All entities that own financial assets face market risk. For example, the value of currencies owned by banks depends on exchange rates. The most popular method to measure market risk is value at risk (VaR) which refers to the maximum possible loss from an unfavorable event, within a given level of confidence, for a defined holding period. It was popularized by the investment bank JP Morgan in 1994 when it published a technical document, *RiskMetrics*, to promote the use of VaR among the firm's institutional clients. Before this, VaR was largely unheard of among corporate treasuries and commodity trading firms, but after the publication of *RiskMetrics*, its adoption spread rapidly among both financial and nonfinancial firms.

Credit risk is the change in the value of debt due to changes in the perceived ability of counterparties (borrowers) to meet their contractual obligations (or sustain their credit rating). This failure to meet a contractual obligation could take the form of nonpayment ("default") by the borrower of the principal and/or interest on a loan; hence, credit risk is also known as "default risk" or "counterparty risk." It is faced by banks, by corporate bondholders, and by parties involved in contractual agreements such as forward contracts. Credit risk is assessed by independent credit rating agencies (usually Moody's, Fitch, or Standard & Poor's) in the form of credit ratings, which are opinions on an organization's ability to fulfill its contractual obligations on a timely basis (a probability of default).

Credit Derivatives and Securitization

Credit risk can be managed using credit derivatives or by the process of securitization. Credit derivatives are privately negotiated bilateral contracts between two parties in which the seller provides protection against the credit risk of the buyer in return for a fee. They have emerged as a major risk management tool in recent years as their use has spread beyond banks to insurance companies, mutual funds, hedge funds, pension funds, and corporate treasury departments.

Credit derivatives fall into two categories: funded and unfunded. The former refers to a bilateral contract between two counterparties, where each party is responsible for making its payments under the contract itself without recourse to other assets. Examples include "credit default swaps" and "total return swaps." The fundamental difference between them is that the former provides protection against specific credit events whereas the latter provides protection against loss of value irrespective of the cause, which could be a default or market sentiment causing credit spreads to widen. A funded credit derivative involves the protection seller making an initial payment that is used to settle any potential claims. Examples include "credit linked notes" and "collateralized debt obligations."

Securitization refers to the pooling and repackaging of cash flow producing financial assets (loans) into securities that are then sold to investors. The credit securitization market started in the United States in the early 1970s with the securitization of mortgage loans to create mortgage-backed securities (MBS). Since the mid-1980s, nonmortgage assets, such as consumer loans, car loans, and credit card receivables, have been increasingly securitized. The securitization of U.S. "subprime" (low-quality) mortgages—made to higher-risk borrowers with lower incomes or a worse credit history than "prime" borrowers—led to major liquidity problems ("credit crunch") in the global banking system in 2007–08 as defaults in these mortgages began to occur. As many lenders had transferred the rights to their mortgage payments—and related credit risk—to third-party investors by means of securitization, the purchasers of the resulting MBS incurred significant losses as the value of the underlying mortgage assets declined. As a consequence of this international transfer of risk, stock markets in many countries declined significantly.

Operational Risk

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events. This type of risk applies mainly to banks and other financial institutions and is manifested in such events as mistakes made in carrying out or settling transactions, or the failure to set limits on, or adequately monitor, the activities of traders. Currently, although banks and financial institutions have made efforts to develop models to measure operational risk, none has gained widespread acceptance. To date, insurance is the only means by which operational risk may be managed, although not all insurance companies offer coverage.

The risk of bank failure is reduced by the requirement made of banks by the Basel Committee on Banking Supervision to put aside a minimum amount of capital, equal to at least 8 percent of their risk-weighted assets (Cooke ratio). Whereas the first Basel Accord of 1988 (Basel I) only took account of credit risk, the second Accord of 2004 (Basel II) incorporated market risk and operational risk, and it provides banks with an incentive to develop sound risk management systems so that they can lower the riskiness of their asset base and thereby reduce their regulatory capital charge.

Adopting an overall approach to risk management, by integrating the management of both hazard and financial risks, has led to a relatively new field of study called enterprise risk management. This has emerged as a result of hazard risk managers and financial risk managers reporting to the same individual, usually the treasurer or chief financial officer, leading to the realization that benefits can be achieved by taking a holistic approach to risk management.

See Also: Basel Committee on Banking Supervision; Collateralized Debt Obligations; Collateralized Loan Obligations; Credit Ratings; Financial Hedge; Mortgage Credit Crisis of 2008; Securities Financing; Securitization; Subprime Loans; Value at Risk.

Bibliography. Clark R. Abrahams and Mingyuan Zhang, *Fair Lending Compliance: Intelligence and Implications for Credit Risk Management* (Wiley, 2008); Peter Bernstein, *Against the Gods: The Remarkable Story of Risk* (Wiley, 1996); Ulrich Bindseil, Fernando Gonzalez, and Evangelos Tabakis, *Risk Management for Central Banks and Other Public Investors* (Cambridge University Press, 2009); Fisher Black and Myron Scholes, "The Pricing of Options and Corporate Liabilities," *Journal of Political Economy* (v.81/3, 1973); Kevin Buehler, Andrew Freeman, and Ron Hulme, "The Tools: The New Arsenal of Risk Management," *Harvard Business Review* (v.86/9, 2008); Michel Crouhy, Robert Mark, and Dan Galai, *Risk Management* (McGraw-Hill, 2001); International Risk Management Institute, *Practical Risk Management: The Handbook for Risk and Financial Professionals* (International Risk Management Institute, 2008); Robert Mehr and Bob Hedges, "Risk Management in the Business Enterprise," *Journal of Risk and Insurance* (v.31/2, 1964); Greg Niehaus, *Insurance and Risk Management* (Edward Elgar, 2008); Linda S. Spedding, *The Due Diligence Handbook: Corporate Governance, Risk Management and Business Planning* (CIMA, 2009); Linda S. Spedding and Adam Rose, *Business Risk Management Handbook: A Sustainable Approach* (CIMA, 2008).

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Robotics

Robotics is the design, construction, and use of machines (robots) to perform tasks traditionally done by human beings. Although there is no consensus regarding the definition of the term *robot,* it is commonly defined as a mechanism that can sense its environment, process what it senses, and act upon its environment based on that processing. Robotics requires a working knowledge of electronics, mechanics, and software, and is usually accompanied by a large working knowledge of other subjects. The Robot Institute of America defines a robot as a programmable, multifunctional manipulator designed to move material, parts, tools, or specialized devices, through variable programmed motions, for the performance of a variety of tasks.

Karel Capek (1890–1938) made the first use of the word *robot* from the Czech word for forced labor or serf. He introduced the word *robot* into his play *R.U.R.* (*Rossum's Universal Robots*), which opened in Prague in January 1921. In *R.U.R.*, Capek poses a paradise, where the machines initially bring so many benefits, but in the end bring an equal amount of blight in the form of unemployment and social unrest. The word *robotics* was first used in "Runaround," a short story published in 1942 by Isaac Asimov (1920–92). *I, Robot*, a collection of several of these stories, was published in 1950. One of the first robots Asimov wrote about was a robotherapist.

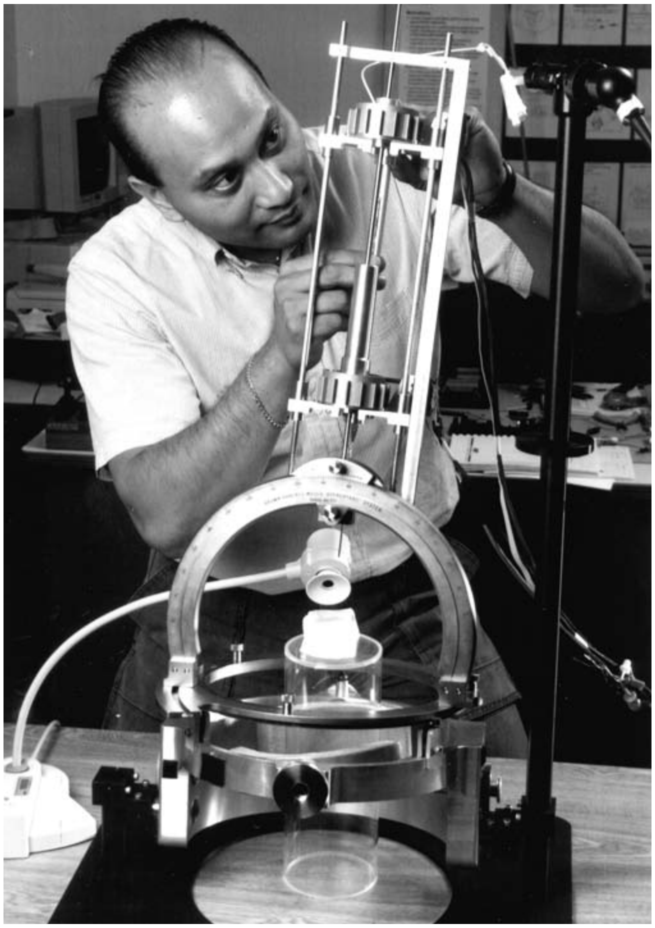
Today, robots are widely used in industries such as automobile manufacturing to perform simple repetitive tasks and in industries where work must be performed in environments hazardous to humans. Many aspects of robotics involve artificial intelligence; robots may be equipped with the equivalent of human senses such as vision, touch, and the ability to sense temperature. These functions vary depending on the purpose and application of the robots. Robots are also used for military purposes, in medicine, and in education, among other applications.

The architecture of robots requires the involvement of different fields of technology; currently those fields include theory of robots, sensors and transducer technology, motors technology (steppers or DC servomotors), motor drive and control, control theory, power semiconductor drive, microelectronics, digital systems, microprocessors, computer systems, and computer interfacing.

Robots are usually classified by the actions or series of actions they can execute for a predetermined purpose; a general classification includes robots as manual-handling devices, fixed-sequence robots, variable-sequence robots, playback robots, numerical control robots, and intelligent robots.

Advantages

Robots offer specific benefits to workers, industries, and countries. If introduced correctly, industrial robots can improve the quality of life by freeing



A NASA scientist at work on a medical robot used to improve the precision of brain surgery.

workers from dirty, monotonous, dangerous, and heavy labor. It is true that robots can cause unemployment by replacing human workers, but robots also create jobs such as robot technicians, salespeople, engineers, programmers, and supervisors.

The benefits of robots to industry include improved management control and productivity and consistently high-quality products. Industrial robots can work tirelessly night and day on an assembly line without a loss in performance. Consequently, they can greatly reduce the costs of manufactured goods. As a result of these industrial benefits, countries that effectively use robots in their industries will have an economic advantage on the world market.

Industrial robots have the following components: physical parts or anatomy, built-in instructions or instinct, and learned behavior or task programs. Their characteristics include lifting power (payload), reach (workspace), repeatability, reliability, manual/automatic control, memory, library of programs, safety interlocks, speed of operation, computer interface, and easy maintenance. Physical parts usually include a mechanical part or manipulator (such as body, arm, or wrist), an end effector (tool or gripper), actuators, controllers (sensors and processor), a power supply, and sometimes a vehicle.

The actuators are the muscles of a robot, the parts that convert stored energy into movement. The most popular actuators are motors, stepper motors (they do not spin freely like DC motors; they rotate in steps of a few degrees at a time, under the command of a controller), piezo motors (ultrasonic motors), air muscles (a device for providing a pulling force by inflating compressed air, it contracts by up to 40 percent of its original length), electroactive polymers (plastics that change shape in response to electrical stimulation), and elastic nanotubes (filaments to deform elastically by several percent).

Robots require some way to manipulate objects: pick up, modify, destroy, or otherwise have an effect. Thus, the "hands" of a robot are often referred to as end effectors, while the arm is referred to as a manipulator. Some effectors-manipulators are grippers (two fingers that can open and close to pick up and let go of a range of small objects), vacuum grippers (pick and place robots for electronic components and for large objects), and general purpose effectors (highly sophisticated devices with as many as 20 degrees of freedom and hundreds of tactile sensors).

The most common forms of locomotion for robots are varieties of wheels. There are different configurations and means for locomotion, for example, two-wheeled balancing or a ballbot (mobile robot that balances on a ball instead of legs or wheels). There are also track robots, flying robots, swimming robots, and more.

A manipulator is constructed of a series of joints and links. A joint provides relative motion between the input link and the output link. Each joint provides the robot with one degree of freedom. Many robots are designed based on human anatomy. Some parts of the robot seek to duplicate human movement, while others add features to extend transportation capabilities: ground, air, water, underwater, space. There are several types of robot joints, and in most cases, robots use a combination of joint types rather than a single designed joint. Joints are characterized by the movement or function they intend to recreate, for example, linear, rotational, twisting, and revolving joints. The arm joints are used to position the end effector, while wrist joints are used to orient the end effector.

Robotic languages range from machine-level to high-level languages. High-level languages are either interpreter-based or compiler-based. In complex applications, high-level languages provide better control and monitoring of actions.

See Also: Manufacturing; Manufacturing Strategy; Productivity; Quality; Technology.

Bibliography. Roman Espejo, *What Is the Impact of Automation?* (Greenhaven Press, 2008); Andrew McWilliams, *Medical Robotics and Computer Assisted Surgery Market* (Business Communications Co., 2003); Lisa Nocks, *The Robot: The Life Story of a Technology* (Greenwood Press, 2007); Jinsong Wang and Xin-Jun Liu, *Parallel Robotics: Recent Advances in Research & Application* (Nova Science Publishers, 2008).

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Roche Group

Roche Group is a Swiss healthcare company operating in more than 150 countries and employing more than 78,000 people worldwide. Roche's operations are focused on two major healthcare areas: diagnostics and pharmaceuticals. In the field of diagnostics, Roche Group positions itself as a world leader in in vitro diagnostics, supplying a wide range of instruments and tests for disease detection and monitoring. In the area of pharmaceuticals, the company concentrates on illnesses for which their products are presumed to be needed the most: cancers, viral infections, metabolic diseases, disorders of the central nervous system, and inflammatory diseases.

The company was created in 1896 by Fritz Hoffmann-La Roche, a pioneering entrepreneur who believed in the future of branded, standardized, industrially manufactured pharmaceutical products. Shortly thereafter, the company opened its first affiliates in several countries of the world, including the United States, Germany, Italy, France, the United Kingdom, and Russia. Descendants of the founding family still own half of the company, while another Swiss pharmaceutical giant, Novartis, owns about a third. The most important and widely recognized Roche products are Xenical, Accutane, Valium, Bactrim, Tamiflu, and Valcyte.

Over the past 100 years, the company grew organically and through both mergers and acquisitions and strategic alliances with other major players in the market. Among the most significant deals in the beginning of the new millennium were the alliance with the Japanese research and development (R&D) company Chugai and the acquisition of Amira Medical of the United States, both completed in 2001. The alliance with Chugai facilitated creation of a leading research-driven pharmaceutical company, and at the same time, helped Roche strengthen its strategic positioning in Japan, the world's second-largest pharmaceutical market. The acquisition of Amira allowed the Roche Group (especially its diagnostics division) to complement its expertise in the all-important blood glucose monitoring sector. Other mergers, acquisitions, strategic partnerships, and alliances—for instance, with NimbleGen (performing genomic analysis and identification of potential drug targets), Transgene (developer of a vaccine against human papilloma virus–mediated diseases), Actelion (inventor of a new compound for multiple autoimmune disorders), and so forth—further enhanced and strengthened Roche's role as the world's leading player in the pharmaceutical market. Among the most recent developments was a merger with Ventana Medical Systems, which should enable Roche to move into a very promising market of tissue-based diagnostics.

With sales of approximately 46 billion Swiss francs (CHF) (US$44.3 billion) and net income of roughly CHF11.5 billion (US$11 billion) in 2007, Roche remains one of the most profitable pharmaceutical companies in the world. Since 2001, Roche has been led by a strong and charismatic leader, Franz Humer. Under Humer's leadership, Roche has been able to diversify its business portfolio of products and services that drove the company's success. This is closely linked to another determinant of the company's great achievements—its profitability. Even though R&D expenses have increased year after year, overall costs increased less than sales; this happened as a result of a variety of measures implemented under Humer. Continuous innovation, streamlined decision-making processes, and different productivity-enhancing methods all contributed to Roche's impressive accomplishments in the past eight years. In 2007 Humer announced that he would be stepping down as CEO to concentrate more on his responsibilities as chairman.

The company is also trying to project an image of a good corporate citizen. Roche's mission statement reflects the company's commitment to patients' needs. The company emphasizes the fact that its products and services bring significant benefits to patients—all from early detection and prevention of diseases to their diagnosis, treatment, and treatment monitoring. Roche prides itself on leading the way in highly customized healthcare solutions and in providing products that are adapted to the requirements of particular patient groups.

In spite of several controversies related to the manufacturing and distribution of anti–human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) drugs in Third World countries, Roche's name is mostly associated with positive deeds. For instance, in 2005 and 2006, the company donated 50 million doses (5 million treatments) of its antiviral drug Tamiflu to the World Health Organization to help combat deadly influenza outbreaks. Also in 2006, Roche announced its partnership with the United Nations Children's Fund (UNICEF), aimed at improving the lives of children affected by AIDS in Africa.

See Also: Novartis; Strategic Alliance; Switzerland; World Health Organization.

Bibliography. CNN, "Fortune Global 500," money.cnn.com (cited March 2009); Roche Company, www.roche.com (cited March 2009).

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Romania

Romania is a middle-income southeast European country with a population of 22 million. The population is 90 percent Romanian with a 7 percent Hungarian minority (mostly in Transylvania) and a 2.5 percent Roma minority. The economy remains on the internal periphery of the expanded European Union (EU). The share of the urban population is low for Europe, at under 60 percent.

Romania achieved its independence from the Ottoman Empire in the mid-19th century. The internal democratic tradition was weak. Romania spent most of the 20th century as an authoritarian state. Like other southeastern European countries, it remained caught between the interests of the great powers. It joined the winning side in World War I, gaining significant territory at the expense of its neighbors. It was less successful in World War II, joining Nazi Germany in 1941. In 1944, an internal coup enabled Romania to switch sides.

After World War II, the Communist regime pushed forward a nationalist industrialization program. It fell out with the Soviet Union in the 1960s as the government favored the local coal industry, iron and steel, and engineering, pushing, as they saw it, Romanian national interests. Romania was courted by the West in the Cold War. However, in the 1980s, under the leadership of the dictator Nicolae Ceausescu, economic difficulties grew. The regime responded with isolation and repression. This led to Romania's acquiring something of a pariah status.

Although the fall of communism involved more bloodshed than in other Soviet bloc states, the amount of political, social, and economic change was initially limited. Key figures and groups in the old regime established strategic positions in the new, pocketing former state assets. Poverty and inequality, already considerable in 1989, intensified and Romania came to be seen as a cause of European concern. Outmigration was considerable.

Romanian industry was inefficient, heavily reliant on "dirty" methods of production that had given rise to major environmental problems. A significant share of the labor force remains trapped in low-productivity agriculture. The economy slumped in 1992, began a weak recovery to 1996, and then slumped again in 1999. Over the decade as a whole, gross domestic product (GDP) growth per capita was negative. However, in the new century recovery and macroeconomic stabilization began, and strong growth has been sustained to date. Inflation was brought under control and reduced to around 6 percent and unemployment to around 5 percent. Romania is divided into 41 counties and the municipality of Bucharest, the capital. There is considerable regional inequality. The country's physical infrastructure needs improvement and the hope is that this can be done using EU structural adjustment and cohesion funds.

Romania's dissident position under communism led to engaging with the wider world economy at an earlier stage. But the difficulties of the 1980s and 1990s led to it falling behind. Romania joined NATO in 2004. It only joined the European Union, with Bulgaria, in 2007. As with a number of other transition countries, the Romanian political class also looked to Washington, strongly supporting the United States in Iraq. Brussels, worried about the levels of corruption and crime, insisted on reform as a condition of EU accession. However, membership of the EU appeared to lead to a degree of relaxation and there were also new sources of funds to contest. Infighting broke out, including a failed attempt to impeach the president. Transparency International still considers that Romania has one of the worst corruption scores in the expanded EU.

Today, Romanian trade is focused on western and central Europe. Seventy percent of exports go to the EU 27, with Italy and Germany taking around a third. Exports include machinery, equipment, metals, textiles, and footwear. However, Romania also has links to the east and southeast. Constantza is the largest Black Sea port and a significant transshipment point for legal and illegal goods.

Foreign investment was weak in the first decade of the transition. It took off from 2004 as the global and local investment climate turned positive. Western companies like Renault, Nokia, Vodaphone, and Carrefour have invested in Romania, as has LUKOIL from Russia and the Indian company Ranbaxy Laboratories. Ford is creating a major base for southeastern Europe in Romania, and Bucharest is the location of Microsoft's Global Support Center.

Ironically, Romania has been forced to present itself as a low-cost competitor within the EU, relying on its low wage costs and low, flat-rate corporate and income taxes to attract multinational investment. To some extent, this is a return to what was once seen as a failed pre-Communist past. Comparative surveys suggest that Romania is now mid-range in terms of the difficulties of new business start-ups. However, whether this is sufficient to sustain the strong and sustained growth necessary to close the gap with the West, even Europe, is doubtful.

Traditional agriculture continues to employ many Romanians, such as this family using a horse-drawn wagon in 2001.

See Also: Communism; European Union; Transition Economies.

Bibliography. Liz David-Barret, Adam Jolly, and Alica Henson, *Romania's Business Environment* (Global Market Briefings, 2008); Tom Gallagher, *Modern Romania: The End of Communism, the Failure of Democratic Reform, and the Theft of a Nation* (New York University Press, 2008); International Business Publications, *Romania Investment and Business Guide* (International Business Publications, USA, 2007); Padraic Kenney, *The Burdens of Freedom: Eastern Europe Since 1989* (Fernwood, 2006); Dimitris Papadimitriou and David Phinnemore, *Romania and the European Union: From Marginalisation to Membership* (Routledge, 2008); Romania National Institute of Statistics, www.insse.ro (cited March 2009); Ramona Samson, *Cultural Integration Model and European Transformation: The Case of Romania* (Copenhagen Business School, 2006); Debbie Stowe, *Romania* (Kuperard, 2008); Kurt W. Treptow, *A History of Romania* (Center for Romanian Studies, 2007); David Turnock, *Aspects of Independent Romania's Economic History With Particular Reference to Transition for EU Accession* (Ashgate, 2007).

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Royal Africa Company

The Royal Africa Company was an English (British after 1707) slave-trading company. It bought slaves on the west coast of Africa and shipped them across the Atlantic. It then transported goods back to Europe. The company was formed from an earlier group of English traders called the Royal Adventurers Trading to Africa (founded in 1660). The Royal Africa Company was granted a monopoly right by the king of England to trade along the African coast in 1672. It lost this right in 1698. It later joined forces with the South Sea Company to sell slaves to the Spanish colonies in the Americas. It ceased trading in 1752 and was replaced with the African Company. Throughout its existence, it shipped thousands of people across the Middle Passage. It maintained a British presence in Africa and helped the state to raise funds. It was one of the major companies that featured in the early London stock market.

The Royal Africa Company was a joint-stock company. A joint-stock company allowed individuals to invest in a business enterprise with limited liability. The company would hold a royal charter permitting it to exist. This was often combined with a monopoly right. The Royal Africa Company was the only English/British company allowed to trade along the African coast. Joint-stock companies could take on existing government debt or lend money to the state in exchange for new rights. (The British East India Company and the Bank of England are famous examples.) Joint-stock company shares were easily tradable. Trading went on in different places such as the Royal Exchange and surrounding coffeehouses. It also occurred in an area of London known as Exchange Alley. This is at the heart of the City (London's financial district).

The Royal Africa Company rented land along the coast of Africa from local kings. It owned forts to hold slaves before they were put on ships. The slaves were brought to the forts by local African traders. The traders would barter for goods or accept different sorts of fiat money, for example, cowry shells or iron bars. The company's main fort was Cape Coast Castle in modern-day Ghana. Many other European nations also had forts and trading posts nearby. Armed conflicts would be fought between European groups to take over forts. The company had to have soldiers and cannon to defend its property. Slave ships were vulnerable to attack from pirates. So the company's ships were heavily armed with guns. The ships often got a Royal Navy escort vessel to protect them. Convoy protection was not easily available in wartime. The Royal Africa Company was struggling to keep trading during the Nine Years War (1688–97). (This war is known under a variety of names including King William's War [1689–97] in North America.)

Independent British traders had been able to break the monopoly. They lobbied the government and the Royal Africa Company lost its monopoly rights. The company was still expected to maintain its forts to protect other British traders. It was supposed to collect fees from other traders, but this was difficult in practice. The obligation to pay fees was revoked in 1712. The British government decided to pay subsidies to the company to maintain the forts from 1730 onward. The Royal Navy reported that the forts were often in disrepair.

The company entered into a contract with the South Sea Company (another joint-stock company formed in 1711). The South Sea Company was granted a monopoly contract by the Spanish crown to send slaves to Spanish colonies in the Americas. The South Sea Company gave its name to a financial market bubble, the South Sea Bubble (1720). Share prices increased to extremely high levels, especially for South Sea stock. Then prices suddenly dropped. Both companies survived the crash and continued to ship slaves. However, the Royal Africa Company had been in a gradual decline for many years. It survived until 1752 when it was replaced by the African Company.

See Also: Africa; British East India Company; Capitalism; City, The; Fiat Money; Ghana.

Bibliography. Kenneth Gordon Davies, *The Royal African Company* (Atheneum, 1970); Larry Neal, *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason* (Cambridge University Press, 1990); William Robert Scott, *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720* (Cambridge University Press, 1911); Richard B. Sheridan, *Sugar and Slavery: An Economic History of the British West Indies, 1623–1775* (Caribbean Universities Press, 1974).

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Royal Dutch Shell

The Royal Dutch Shell Company is a multinational petroleum (oil) company that began in the 1800s from a merger of two companies (1907), one of which was English and the other Dutch. Currently Shell is a private company, the second largest oil company, and one of the six major oil companies in the world. It is, after Wal-Mart and Exxon, the third-largest company in the world. Its headquarters and tax residency is in The Hague, Netherlands; however, it is incorporated in London as well. Its stock is listed as RDS.A on the New York, London, and other stock exchanges.

Petroleum—from exploration to marketing of oil and gas—continues to be its main business. Besides exploration, production, transportation, and marketing of oil, it also has a significant stake in the petrochemical industry. The latter business operations are conducted through its subsidiary Shell Chemicals. With the possibility of most of the world's oil supplies being exhausted in the next century or more, it is also engaged in developing renewable sources of energy.

Shell Oil Company began in 1880 in the Dutch colony of Indonesia when Aeiko Jans Zijlker, a manager with the East Sumatra Tobacco Company, was shown a natural oil seepage. Over 50 natural oil seepages were known in the Indonesian archipelago. By 1885 the first well was producing and the Dutch king William III had granted the company formed to exploit the oil the Royal Dutch Company. When Zijlker died suddenly, he was replaced by Jean Baptiste August Kessler. The great early development of the Royal Dutch Petroleum Company was a result of his diligent efforts.

By 1900 Standard Oil and other oil companies were seeking to take over Royal Dutch. However, it was able to resist these efforts until it merged with M. Samuel & Company of London. The Samuel brothers, Marcus and Samuel, had developed a tanker fleet that had gained access to the British-controlled Suez Canal. Until the advent of the automobile, the oil business was the kerosene business. It was shipped in cans to consumers globally. However, with the development of tankers, the Samuels could ship kerosene in bulk to be dispensed locally in bulk and thereby master transportation costs.

In 1907 the Royal Dutch Shell Company was formed by a merger with the Shell Transport and Trading Company. The Dutch kept 60 percent of the company and the British arm got 40 percent. With the merger of operations, the new company was better positioned to compete with John D. Rockefeller's Standard Oil. The Shell brand was to become one of the world's most famous commercial symbols.

In 2007 Shell celebrated its 100th birthday. It has survived wars, depressions, competitors, and production and marketing challenges to become the second-largest oil company in the world. Today it is an energy company with five main businesses it aims to conduct with environmental care. These businesses are Exploration and Production, Gas and Power, Refining and Marketing, Chemicals, and Trading/Shipping, which operates in more than 100 countries. It is vertically integrated in order to gain the maximum in economies of scale and efficiency production and marketing. Its Shell Oil gasoline stations are seen throughout the United States and the world.

Exploration and production of petroleum is essential for Shell. Oil is its raw material for gasoline and petrochemicals. Because natural gas is often found in oil fields, it is captured and either piped to markets or shipped as liquid petroleum gas (LPG) to markets. The shipping of oil and LPG is a historic part of the company's operations. The use of natural gas as a clean fuel for the production of electricity for power and lighting is a natural outgrowth from its origins as a producer of kerosene lighting fuel.

With political instability in many oil-producing areas, which in the case of Nigeria have generated complaints of human rights violations, Shell has sought diversification into alternative energy production such as nuclear power (with Gulf Oil Company), coal, electrical generation, and with metals. These projects were not successful. Since 2000 it has sought to develop alternatives to fossil-fuel hydrocarbons through investments in solar power, wind-generated electricity, hydrogen fuel cells, and other sources of energy. However, in 2006 it quit the solar power business and in 2008 withdrew from a wind farm venture with London Array. It is currently invested in developing large-scale hydrogen projects.

See Also: Corporate Social Responsibility; ExxonMobil; Indonesia; Netherlands; Nigeria.

Bibliography. Emily Boyle, *A Study of a Dysfunctional Learning Organization: The Case of Royal Dutch Shell in* *the 1990s* (University of Ulster, School of Business Organization and Management, 2001); Stephen Howarth, Joost Jonker, and Keetie Sluyterman, *History of Royal Dutch Shell* (Oxford University Press, 2007); Daniel Litvin, *Empires of Profit: Commerce, Conquest and Corporate Responsibility* (Cengage Learning, 2004); Malcolm McIntosh and Ruth Thomas, *Royal Dutch Shell* (Routledge, 2001); Ike Okanta, *Where Vultures Feast—Shell, Human Rights, and Oil in the Niger Delta* (Sierra Club Books, 2001); Alex Wright, *A Social Constructionist's Deconstruction of Royal Dutch Shell's Scenario Planning Process* (University of Wolverhampton, 2004).

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Royalties

Royalties are compensation paid to a party in exchange for the use of its asset; the transaction is typically called licensing. The most common assets for which royalty payments are made are intellectual property and intangible assets. Examples of intellectual property include trademarks, patents, and copyrighted work such as books, poems, songs, plays, scripts, music, software, and movies. For example, if a movie production company wants to use a song in their movie, they may enter into a licensing agreement with the owner of that song. Royalties are also paid for the right to appropriate gas or mineral deposits. For instance, if a company wants to mine gold from a person's land, the company might negotiate to pay the landowner royalties for every ounce of gold found.

Royalties are usually agreed upon during contract negotiations between the owner (licensor) and the party using the asset (licensee). If the creator has previously sold the intellectual property, the new owner can enter into new contracts for use. Under U.S. law, royalties are personal property and can be transferred to another party contractually or upon death.

Royalties are usually calculated as a flat fee, fixed amount per unit sold, or a percentage of revenue or net profit. Flat-fee royalties can be either assessed at the time of purchase or as a fixed amount paid at regular intervals such as annually. For example, the owner of a baseball team may be compensated $4 million per year for the use of the team's logo on hats. Fixed-amount-per-unit royalties are assessed as a previously negotiated price for each unit of a good sold using the asset. For instance, the baseball team owner may negotiate a $3 royalty for each hat sold. Percentage royalties are assessed as a portion of either the revenue generated by the final products or the net profit. For example, the owner of a baseball team may negotiate a 35 percent royalty for all merchandise sold with the team's logo, based on revenue, or a 45 percent royalty based on net profit. The royalty payment to the owner of the baseball team varies greatly depending on the structure of the agreement and the method of assessing the royalty.

A party may license intellectual property from competitors, paying royalties to both. In this case, the licensee has economic incentive to maximize revenue by only promoting the intellectual property that provides the highest gain over cost (margin). To ensure that the licensee uses the intellectual property, a licensor may stipulate a minimum royalty in addition to a percentage of revenue or amount per unit sold, regardless of the level of sales. This provides incentives to the licensee to promote and use the intellectual property.

The use of royalty payments ensures that creators of intellectual property and intangible assets are compensated for their work. The use of royalties also allows people and firms with valuable intellectual property to expand into new markets despite such barriers to entry as a lack of capital or ownership regulations. Consequently, the ability to obtain royalties for intellectual property and intangible assets encourages international trade.

Intellectual property rights and regulation enforcement vary by country. In the United States and the European Union, if a party uses intellectual property without compensating the owner, the party can be sued for grievances and lost revenue by the creator or owner. This is not the case in countries with weak intellectual property rights such as India and China. The variation in intellectual property rights enforcement reduces the efficacy of royalty-based incentives for intangible asset creation. For example, firms are less likely to do business in countries where management perceives that their assets may be stolen because of lax regulations or poor enforcement. The prospect of lost economic value because of weak regulations has driven some countries to initiate legislation to grant additional intellectual property rights and improve enforcement.

In 1967, the World Intellectual Property Organization (WIPO) was created as a specialized agency of the United Nations to promote intellectual property protection worldwide. Currently, 184 nations are members that meet to establish intellectual property regulations and administer 24 treaties.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Barriers to Entry; Copyright Infringement; Entry Mode; Intellectual Property Theft; Licensing.

Bibliography. Einer Elhauge, *Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?* (John M. Olin Center for Law, Economics, and Business, Harvard Law School, 2008); Internal Revenue Service, "Royalties," www.irs.gov (cited March 2009); John H. Mutti and Harry Grubert, *The Effect of Taxes on Royalties and the Migration of Intangible Assets Abroad* (National Bureau of Economic Research, 2007); Raymond T. Nimmer, *Licensing of Intellectual Property and Other Information Assets* (LexisNexis, Matthew Bender, 2007); Ben O'Hara and Mark Beard, *Copyright, Royalties & Publishing* (Wise Publications, 2006); Rey Sanchez, *Making Cents of Royalties in the Music Publishing Business* (Sound Business Publications, 2004).

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Russia

Russia is the largest country in the world and a major political player, being a member of the United Nations (UN) Security Council, the Group of Eight (G8) industrialized nations, and the Council of Europe. Main industries of the Russian economy include mining and extractive industries producing coal, oil, gas, chemicals, and metals; defense industries and information technology (IT), among others. From 1922 to 1991, Russia, among 14 other countries, was part of the Union of Soviet Socialist Republics (USSR). The USSR or the Soviet Union had the modern world's first centrally planned economy, which developed into the second-largest in the world. During and after the disintegration of the Soviet Union, when wide-ranging reforms including privatization and market and trade liberalization were being undertaken, the Russian economy went through a major crisis as it moved from a centrally planned economy to a free market system. Despite the country's strong economic performance since 1999 and the significant improvement of its international financial position, political, legislation, and management problems still remain. Nevertheless, Russia has a huge long-term potential and is on its way to being a developed country within the 2020–25 time frame.

Russia, officially known as the Russian Federation, is a federation with 89 provincial authorities including a number of semiautonomous republics. It has a land mass of 17,075 sq. km (6,592,800 sq. mi.), covering 11 time zones, and a population of 147 million. It has a rich cultural identity that has been shaped by its distinguished history and vast geography. The official currency in Russia is the ruble. However, it is very common for businesses to make their calculations in U.S. dollars or, more recently, in euros.

Industries

Main industries of the Russian economy include a complete range of mining and extractive industries producing coal, oil, gas, chemicals, and metals. It is the world's leading natural gas exporter and the second leading oil exporter. Thus, Russia remains highly dependent upon the price of energy. However, most such resources are located in remote and climatically unfavorable areas, thus making the exploitation of natural resources more difficult.

Other industries that play a key role in the Russian economy are defense industries including radar, missile production, and advanced electronic components. For instance, Russia has the largest stockpile of nuclear weapons in the world. Russia is the world's top supplier of weapons, a spot it has held since 2001, accounting for around 30 percent of worldwide weapons sales and exporting weapons to about 80 countries.

Moreover, the IT market is one of the most dynamic sectors of the Russian economy. Russian software exports have increased from just US$120 million in 2000 to US$1.5 billion in 2006. Meanwhile, the fastest growing segment of the IT market is offshore programming. Russia is the world's third-biggest destination for outsourcing software behind India and China. It is also worth mentioning Russia's attempt over the last few years to diversify its research and development in emerging technologies. For example, there has been a massive US$7 billion investment program in nanotechnology.

Other significant sectors of the Russian economy include all forms of machine building from rolling mills to high-performance aircraft and space vehicles; shipbuilding; road and rail transportation equipment; and communications equipment. Moreover, other industries comprise agricultural machinery such as tractors; construction equipment; electric power generating and transmitting equipment; as well as medical and scientific instruments.

Economic Reform

The Soviet Union's planned economy constituted the largest and most powerful economy in the world after that of the United States. The nation became among the world's three top manufacturers of a large number of basic and heavy industrial products such as steel, oil, and gas. During and after the disintegration of the Soviet Union, when wide-ranging reforms including privatization, market and trade liberalization were being undertaken, the Russian economy went through a major crisis. This period was characterized by deep contraction of output, with gross domestic product (GDP) declining by roughly 50 percent between 1990 and the end of 1995 and industrial output declining by over 50 percent.

Russia is one of the most industrialized of the former Soviet republics. However, years of very low investment have left much of Russian industry highly inefficient. Russia inherited most of the defense industrial base of the Soviet Union, so armaments are the single-largest manufactured goods export category. Efforts have been made with varying success over the past few years to convert defense industries to civilian use.

The economic reform in Russia comprised the abolition of all Communist planning ministries and bureaucracies, an end to price fixing, establishment of the stock exchange, and encouragement of foreign direct investment (FDI) and joint ventures. There has been a two-stage mass privatization program put in place: "voucher privatization" shares given away to workers, followed by public auctions of key state enterprises. The Soviet economy, moreover, was the most monopolized in the world. Up to a third of all industrial enterprises were absolute monopolies, producing goods that no other company in the Soviet Union produced. Not only in production, but also in the sphere of management, in trade and supply, in research and development, the system was characterized by the supermonopolism of state power. Denationalization would have to be accompanied by demonopolization to stop privatization simply transforming state monopolies into private ones.

The problem in Russia is a lack of a significant quantity of small firms—in capitalist countries the source of technical innovation, competition, and job creation. The main purpose of privatization was to break the dependence of enterprises on the state budget. The destruction of the old monopolies and their corporate dependence on the state not only began to create a capitalist market but also entailed the destruction of the associated bureaucracy in the Russian Federation.

Privatization has transferred over 70 percent of large enterprises into private hands, and most small businesses have been privatized as well. The state is still a large shareholder in tens of thousands of enterprises, but it plays virtually no role in their management. The great majority of new businesses and joint enterprises are to be found in Moscow, St. Petersburg, and Nizhniy Novgorod, whereas traditional industrial areas found it difficult to adjust to competitive market conditions. In Russia, a significant share of private ownership of industrial enterprises has emerged out of privatization efforts. Privatization proved to be one of the most successful policies. By September 1994, some 100,000 enterprises had been privatized and over 80 percent of the industrial workforce was in privatized enterprises. The privatization of large enterprises was subject to voucher privatization. The majority of privatized enterprises were not sold to the public but in elections by the workforce, who, encouraged by their managers, voted for the option that allowed staff to buy 51 percent of the stock at a fixed price. Rather than outside owners coming in and shaking out factories and sacking staff and managers, control remained within the factory gates. However, the privatization process was also heavily criticized for "insider" deals, because many strategic enterprises were practically given away for free to powerful individuals.

In contrast to developed market economies and leading transition economies in central Europe, private owners in the former state-owned enterprises (FSEs) are predominantly insiders. Private owners consist of "insiders" (workers and managers of the given enterprise) and "outsiders" (individuals and enterprises unrelated to the given firm, such as banks, investment funds, and foreign investors). Also, firms in the Russian Federation that have majority outside ownership stakes also have on average very significant insider ownership stakes. Enterprise insiders in Russia are a less promising source of radical new ideas and have less capability to provide investment funds.

Russia has significantly improved its international financial position since the August 1998 financial crisis. A principal factor in Russia's growth has been the combination of strong growth in productivity, real wages, and consumption. The devaluation of the ruble in 1998 made Russian exports far more competitive and at the same time made imports too expensive, thus influencing people to shift back to Russian alternatives. Because of the increased investment in the energy sector as well as sustained demand and high prices for oil and export raw materials (gas, steel), the entire economy was propped up and a large state budget surplus was created.

Despite the country's strong economic performance since 1999, the World Bank lists several challenges facing the Russian economy including diversifying the economy, encouraging the growth of small and medium enterprises, building human capital, and improving corporate governance. Much of the economy is still struggling without cash or reforms. Overall, however, Russia appears to have overcome the crisis relatively well. As of 2007, real GDP increased by the highest percentage since the fall of the Soviet Union at 8.1 percent, the ruble remains stable, inflation has been moderate (11.9 percent), and investment began to increase again.

Russia had an extremely poor record of attracting FDI until very recently. For example, Russia's cumulative FDI stock between 1991 and 2004 was US$4,478 million. In comparison, Poland, being a significantly smaller country than Russia, had a cumulative FDI stock of US$51,906 million over the same period of time. Integrating the Russian economy with the rest of the world through commerce and expanded foreign investment has been a high priority of Russian economic reform. However, a significant drawback for investment is the banking sector, which lacks the resources, capability, and trust of the population that it would need to attract substantial savings and direct it toward productive investments. Russia's banks contribute only about 3 percent of overall investment in Russia.

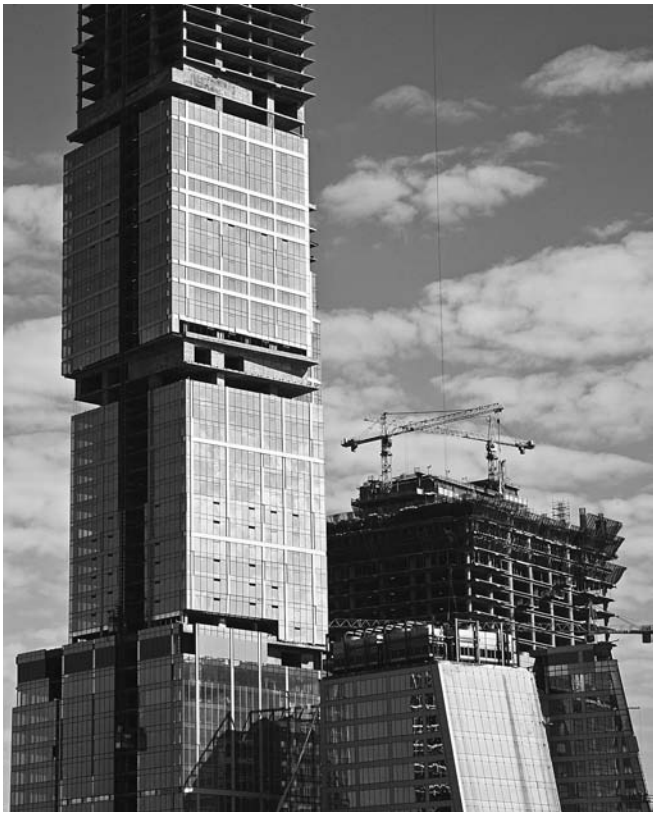
Labor Issues

Labor collective under communism issued the essential benefits to the labor force, but tied workers to the enterprise. The labor system under postsocialism needs a redevelopment of its role. Russian companies tend to mostly focus on core competencies and cannot afford to ensure workers' effective representation. Many of the social provisions are therefore passed on to the local councils who also cannot afford them. Hence, employees in Russian enterprises have few means of representation, and the development of new, independent trade unions is slow.

After the collapse of the Soviet Union, companies in Russia had severe debts to their staff, utilities providers, and materials suppliers. Thousands of companies could not pay their staff in the period 1993–2000. Many thousands of staff left these firms and the country suffered from a high unemployment rate. However, after the turn of the century, the situation was gradually improving and it is less of a problem now, employees generally being paid on time and the unemployment rate decreasing to 5.9 percent in 2007.

Other Developments

There has been an increasing importance of financial-industrial groups (FIGs), which are large holding companies acquiring hundreds of smaller enterprises and are based around a main bank. There has been a remarkable growth of huge business empires. Russia has three multinational corporations in the Fortune Global 500 and a larger number of billionaires than any other country in the world after the United States. While strategic FSEs in oil, gas, metals, and some parts of automobile and aircraft sectors are surviving and prospering, the vast majority of FSEs, on the other hand, are left in a state of slow decay and will eventually collapse.



Moscow skyscrapers under construction. Russia's economy experienced nine years of growth after its 1998 financial crisis.

On the downside, political, legislation, and management problems still remain in Russia today. On the one hand, the end to state planning liberated Russian enterprises: they can choose any sector, products, or strategies they want. On the other hand, they lost their previously guaranteed customers, clients, and most importantly, subsidies overnight. Russian companies were established with quite different environments in mind. Many are located far from their markets, with no customers and no market for their goods. Technologies and processes still remain extremely outdated. Skills development is also troublesome because some educational institutions are still turning out skilled staff whose skills are now redundant.

Even though there have been some successful investments in energy and services, there has been very little investment in technology. Despite software being a major domestic growth sector, there is no high-technology sector in manufacturing. Moreover, conversion of Soviet plants from military to civilian use has been a major disappointment. In addition, there have been very limited reforms of actual management and work systems in Russian companies.

Another major problem in Russia today is that public sector workers are often horrendously underpaid. Local government bureaucrats, police, army, and educational institution workers often do not receive a living wage, thus becoming vulnerable to bribery and corruption.

As for institutional reforms, they remain very slow. Although law and tax reforms are in place, they are not widely trusted and there is a lack of law enforcement in many areas of the economic activity. For example, the Russian state has a very poor tax collection record. In addition, crime has increased costs for both local and foreign businesses. On the positive side, however, Russian businesses are increasingly turning to the courts to resolve disputes.

Russia's leading cities like Moscow, the capital, and St. Petersburg, the second-largest city, are now modern consumer metropolises, but there are massive differences in wealth between the cities and the more traditional countryside. Nevertheless, the middle class has grown from just 8 million people in 2000 to 55 million people in 2006.

Russia is a vast and diverse nation with a rich cultural heritage that after almost seven decades of communism continues to evolve politically and economically. With the world's largest supplies of raw materials, oil and gas revenues heavily support Russia's economy. Recently, within the big cities, a consumer economy has been established. Russia also has a well-educated labor force with substantial technical expertise. Since the turn of the century, rising oil prices, increased foreign investment, higher domestic consumption, and greater political stability have boosted economic growth. The country ended 2007 with its ninth straight year of growth, averaging 7 percent annually since the financial crisis of 1998. In 2007 Russia's GDP was $2.076 trillion, the seventh-largest in the world, and GDP per capita was US$14,600. Although the immediate prospects of the Russian economy appear uncertain, and political, legislation, and management problems still remain, the longer-term potential of the country is enormous.

See Also: Asia; Communism; Eastern Europe; Gazprom; LUKOIL; Nationalization; Outsourcing; Privatization; Socialism; State-Owned Enterprises.

Bibliography. Yuko Adachi, *Building Big Business in Russia: The Impact of Informal Corporate Governance Practices* (Routledge, 2008); Douglas W. Blum, *Russia and Globalization: Identity, Security, and Society in an Era of Change* (Woodrow Wilson Center Press, 2008); Simon Clarke, *The Formation of a Labour Market in Russia* (Edward Elgar, 1999); Federal State Statistics Service, www.gks.ru (cited March 2009); Thomas Gomart and Andrew Kuchins, *EU-Russia Relations: Toward a Way Out of Depression* (Center for Strategic & International Studies, 2008); Thane Gustafson, *Capitalism Russian Style* (Cambridge University Press, 1999); Ted Hopf, *Russia's European Choice* (Palgrave Macmillan, 2008); Andrew Kuchins, Amy Beavin, Anna Bryndza, and Thomas Gomart, *Russia's 2020 Strategic Economic Goals and the Role of International Integration* (Center for Strategic & International Studies, 2008); Katlijn Malfliet, Lien Verpoest, and Evgeny Vinokurov, *The CIS, the EU and Russia: The Challenges of Integration* (Palgrave Macmillan, 2007); Robert W. Orttung, *Russia's Energy Sector Between Politics and Business* (Forschungsstelle Osteuropa an der Univ. Bremen, 2008); Charlie Patel and Oliver J. Dhesi, *Russia: Economic, Political & Social Issues* (Nova Science, 2008); Thomas Rutherford and David Tarr, *Regional Household and Poverty Effects of Russia's Accession to the World Trade Organization* (World Bank, 2008); Peeter Vahtra, *Economic Power and Economic Strategy in Russia* (Routledge, 2008); Tobias Weigl, *Strategy, Structure and Performance in a Transition Economy: An Institutional Perspective on Configurations in Russia* (Gabler, 2008); Stephen White, *Media, Culture and Society in Putin's Russia* (Palgrave Macmillan, 2008).

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RWE

RWE is a power, natural gas, and water resources company based in Essen, Germany. RWE came into existence in 1898 when a contract was signed for a power plant to be built in Essen to provide power for that city. With over 63,000 employees, it is now the second-largest utility company in Germany, behind E.ON. In 2007 its revenue was €42.5 billion, of which €17.7 billion came from outside Germany. Its net profit that year was €2.7 billion. In 2008 it was rated A (Stable Outlook) by Standard and Poor and A1 (Negative Outlook) by Moody's.

RWE is the fifth-largest utility company in Europe and holds a large market share on the continent. The company provides electricity and what it describes as a full range of services. It serves 20 million customers that include private households, commercial operations, and municipal utilities and regional energy suppliers. It ranks number five in Europe and is the number two provider of electricity in Germany and Hungary, and number three in Britain and Slovakia.

RWE's customer base for its gas operations is 10 million customers, making it the number six provider of gas in Europe. It is the third-largest supplier of gas to Germany and Britain and the largest supplier to the Czech Republic. It supplies gas as well as related services, including transportation.

RWE provides water management and waste services. This business activity had RWE engaged in continental Europe, Britain, and the United States, but it has committed to withdraw from this aspect of its business outside Europe. In 2006 it sold its Thames Water division for £8 billion. In the following year RWE planned to sell its American Water Works division (which it had purchased in 2003) but delayed the sale due to uncertainty in American markets. It simply was not a good time to sell and RWE assumed that it could get only 80 percent of what American Water was worth. The sale did go through in April 2008 when it sold 36 percent of its stake in the company. Shares sold for $21.50 each instead of the planned $24. The issues that had caused RWE to delay its offering still existed and RWE received $1.2 billion from the sale, considerably less than it had hoped.

As has been the case with other power and gas companies in the European Union, RWE has had to face scrutiny by both the European Commission and the German Federal Cartel Office. One such case was the Cartel Office's investigation into the charge that RWE had been overcharging for electricity based on improperly factoring in CO_2 charges. The investigation and antitrust activity was dropped when RWE agreed to auction off some electricity from its coal-fired plants.

In 2008 RWE entered discussion with the European Commission to sell its gas transmission network in Germany. As part of its efforts to encourage competition within the EU, the European Commission has been trying to uncouple gas companies from the gas transportation networks. In return for the sale, the European Commission agreed that it would drop its antitrust investigations and would not file a complaint. In a related sale the year before, although this time prompted by action from the Dutch government, RWE sold its gas grid companies in the Netherlands.

Despite these activities that have reduced the reach of RWE in some ways, it has continued to expand, notably in eastern Europe. In 2008 RWE began operations in Turkey and in that same year signed an agreement to purchase a stake in a Turkish electricity-generation company. RWE will eventually assist in the construction of new power plants. In that same year RWE joined a consortium of five other companies from Bulgaria, Austria, Hungary, Romania, and Turkey to construct a gas pipeline from Turkey to Austria. RWE announced plans to expand its gas deliveries to Slovakia. RWE has also partnered with a Swedish corporation to purchase British Energy.

Finally, in a transaction that shows possible changes in RWE's business model, in 2007 it purchased a company, eprimo, that has successfully used a Web-based business model. RWE used eprimo to sell gas through the internet to supplement its current model of sales by direct contact between its regional companies and its customers.

See Also: E.ON; European Union; Germany.

Bibliography. Charles Forelle, "RWE Seeks to Sell German Gas Grid," *Wall Street Journal* (June 2, 2008); Siobhan Kennedy, "RWE Teams up With Vattenfall in the Battle for British Energy," *The Times* (April 17, 2008); RWE, www.rwe.com (cited March 2009).

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Safeway

The third-largest supermarket chain in North America, Safeway, Inc., is also the 10th largest retailer in the United States. It had, as of January 3, 2009, some 1,739 stores in the United States and Canada. The company was formed by Sam Seelig in April 1912, and was initially a grocery store on the corner of Pico and Figueroa Streets in Los Angeles; within 10 years, it was operating 71 stores. In 1924 Seelig left the company to establish a real estate business. The company, in 1925, held a competition that resulted in its change of name to Safeway.

Charles Merrill, of Merrill Lynch, managed to organize a merger on July 1, 1926, of Safeway with 673 stores owned by Skaggs United Stores of Idaho and the Skaggs Cash Stores of California. Marion Barton Skaggs, originally from Missouri, had started the chain in 1915 after buying a grocery store in American Falls, Idaho, from his father, Samuel M. Skaggs, for $1,089. This resulted in the creation of the largest chain of grocery stores in the western states, with Marion Skaggs becoming the chief executive officer of the merged entity, remaining on the board of directors until his retirement in 1941. At that time, Safeway had its headquarters in Reno, Nevada, but three years later, it moved to Oakland, California, and it moved again to a nearby former creamery building, and later to Pleasanton.

Expansion

Financed by Merrill Lynch, Safeway expanded through buying up rival businesses or individual stores. This included many Piggly Wiggly stores, and by 1931, Safeway had 3,527 stores, gradually closing down smaller stores and replacing them with supermarkets.

The company had also begun to expand internationally, and in 1929, it bought nine stores in Canada, which became Canada Safeway. (Most of Safeway's expansion overseas was from the 1960s.) In 1934 it sold its business interests in Hawaii, and expanded those on the mainland United States until 1947, when it posted its first sales figure of more than $1 billion. Four years later, it had achieved sales of $1.5 billion, and in the following year, it adopted the "S" logo, which, with alterations, it has kept to the present day.

Buoyed by increasing sales figures, in 1959, Safeway opened a store in Alaska, its first in that state, and in 1962, Safeway bought 11 stores in Britain that had been run by John Gardner Limited, and these became Safeway (UK). In 1963 the company reentered the Hawaiian market, and in the same year when some of its representatives were in Australia searching for a source for apples, it decided to investigate supermarkets there. It soon purchased three Pratt Supermarkets in Australia; it expanded into Queensland, in the north of the country, when it bought the chain Jack the Slasher, which had 31 branches. It also bought two Big Bar Basat ("Big Bear") stores in Germany, and in 1981, it bought a 49 percent share in Casa Ley, the Mexican retailing business. It sold Safeway Australia in 1985 to Woolworths Limited, and in August 2008, Woolworths announced that it was ending its use of the name Safeway.

During the 1980s, there were a number of takeover bids with Herbert Haft and his son Robert Haft, well-known U.S. corporate raiders, attempting a hostile takeover in 1986. Safeway was helped by the private equity firm Kohlberg Kravis Roberts (KKR), and it went private, but had to assume large debts. To pay these off, the parent company sold the British and West German divisions of the company, as well as many branches in the United States, pulling out of Los Angeles. In 1990 the company went public again, and began to expand. It currently employs about 201,000 people and has revenue of $42.3 billion. As well as the main retail grocery business, it is also involved in manufacturing, processing, and packaging food for these stores and others.

See Also: Costco Wholesale; Merrill Lynch; METRO; Target; Wal-Mart Stores.

Bibliography. Institute of Grocery Distribution, *Safeway Plc: Account Watch* (Institute of Grocery Distribution, 2001); Bill Pratt, *My Safeway Story: Making It Happen* (Brolga, 2006); Andrew Seth, *The Grocers: The Rise & Rise of the Supermarket Chains* (Kogan Page, 2000); Ari Sharp,

In 2009 there were 1,739 U.S. and Canadian Safeway stores. Pictured above is a design for produce departments in U.S. Safeway stores from a 2005 rebranding project that improved interiors and introduced higher-end grocery items like sushi.

"Retailer's Melbourne Story Started With a Little Help From the King," *The Age* (August 23, 2008).

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Salaries and Wages

Wages and salaries are the main forms of payments made to an employee for her/his work or services performed. Salary is a fixed periodical payment paid to an employee for regular labor or services, generally into a bank account, while wages are habitually paid by the day or week for casual work or services that are of a more irregular nature, and are generally paid in cash. However, the terms *wage* and *salary* are generally used interchangeably.

Robert Torrens defines wages as "the articles of wealth which the labourer received in exchange for his labour." Torrens adds that "when the quantity of necessaries and comforts which the labourer receives is large, wages are said to be high; when it is small, they are said to be low."

Pay structures have changed considerably in recent years, with moves away from basic rates to more incentives payments, such as bonuses and fringe benefits such as pension and health contributions. In addition to the basic rate, employees often receive other payments—the most common examples are overtime pay, shift pay, merit, seniority, cost of living allowance, performance-related (such as bonuses), and special additions that are paid to workers during abnormal working circumstances (such as danger).

Minimum Wages

The minimum wage is a statutory and generally legally enforced minimum below which wages are illegal. It was established for the first time in Australia and New Zealand. Minimum wages vary country to country, and also may be restricted to certain industries or limited to workers above a particular age. Most countries have some sort of national minimum wage and it is upgraded periodically.

France introduced the statutory minimum wage with the *salaire minimun interprofessionel garanti* (SMIG) in 1950, and it was designed based on a special survey that identified an hourly rate to cover the basic needs of individual unskilled workers. The SMIG was replaced by the *salaire minimun interprofessionel de croissance* (SMIC), including provisions against inflation, adjustment to the national economic growth, and a national commission composed of equal proportion of government ministers, confederation of employers, and trade union representatives to revise the SMIC annually.

The United States has had a federal minimum wage since the Fair Labor Standards Act (FLSA) in 1938. The FLSA is enforced by the Wage and Hour Division of the U.S. Department of Labor. It establishes minimum wage, overtime pay, recordkeeping, and youth employment standards affecting workers in the private sector and in federal, state, and local governments. According to the latest FLSA signed on May 25, 2007, covered workers are entitled to a minimum wage of not less than \$6.55 per hour effective July 24, 2008, and \$7.25 per hour effective July 24, 2009, to be paid in cash or equivalent. Overtime pay at a rate not less than one and one-half times the regular rate of pay is required after 40 hours of work in a workweek. In the case of the United States, there are two types of coverage:

- Enterprise coverage, in which if a company of more than two employees and a turnover of more than US\$500,000 is covered by the FLSA, then all its employees are entitled to FLSA protections
- Individual coverage, in which even if a company is not covered by the FLSA, individual workers may be entitled to the FLSA protections

There are exceptions to the FLSA in the United States, such as employees working in small-scale construction companies, and small independently owned retail or services businesses.

In economics terms, the minimum wage is a price floor regulation applied to labor markets that makes it illegal to trade a price lower that the set minimum wage. It is widely presented in economics textbooks influenced by George Stigler that if a minimum wage is set above the equilibrium wage, the minimum wage is in conflict with market forces, and it does affect the labor market, and as a consequence, if the minimum wage is increased, employment will decrease.

However, more recent econometric evidence shows that there is no evidence linking an increase in minimum wage and unemployment.

Equal Pay

Equal pay is the principle that the pay for any job should be independent of gender, ethnic origin, religion, age, sexual orientation, or other characteristics; employees are to be free from discrimination in their compensation. Equal pay requires that employees will be given equal pay for work that requires equal skills, effort, and responsibility under similar working conditions in the same establishment. Equal pay for women and men is legally binding and protected with equal pay legislation in countries such as Australia, the United States, and the United Kingdom. Nevertheless, the enforcement of equal pay has been very difficult except when employees have identical employment contracts.

Pay Systems and Pay Practice

Pay has been a key conceptual and analytical human resource (HR) framework, aligned with other HR activities such as recruitment, communication, involvement, work design, and appraisal. In general terms, firms set wages using administered wage policies that emphasize job assignments, seniority, and education. Typically, jobs are rated using job evaluation and analytical schemes and assigned a corresponding wage range. Merit and other performance-related rewards complement the job evaluation. Wages are periodically calibrated to the competition using pay and other market surveys. Nearly universally, wages are nominally downward rigid.

Pay structures are designed to provide internal order and hierarchy of jobs within a specific organization, and provide a clear path for career development. According to Armstrong and Murlis, there are seven different types of pay structures:

1. Graded salary structure, which consists of a series of salary ranges; each of them has a defined maximum and minimum.
2. Individual job range is used where flexibility in response to market pressures or rapid organizational change is required. These are generally used for senior positions or for rapidly growing companies.
3. Progression or pay curves related to competency levels are used when job evaluation and analysis or market rates cannot discriminate between grades. This pay structure links pay to deliverable results with the market rate for specific individuals. It is used mainly in research and development departments.
4. Job family systems are oriented toward market rates for different categories of staff and individual competences.
5. Spot rate is when a specific rate is allocated to a job. Spot rate structures are generally referenced by market rates or by negotiations with trade unions.
6. Pay spine is a type of pay structure that is generally used in the public sector. It consists of a series of incremental point-based scales from the lowest- to the highest-paid jobs within the system.
7. Rate for age scale is an incremental scale in which the pay bracket is linked to the age of the employees in specific jobs. It is considered an out-of-date concept because it contradicts the equal pay principle.

Pay systems are the mechanisms founded on the principles of time and performance. Time-based pay is when employees are paid to work for stipulated periods of time (hourly rate, weekly wage, and annual salary). Performance-based pay is when the pay depends on collective or individual performance linked to a quantifiable and tangible measure such as piecework, commission, individual bonus, profit sharing, individual performance-related pay (IPRP), and employee share ownership schemes.

Rewards management is the process of designing, developing, implementing, and monitoring strategies, policies, and systems for financial and nonfinancial rewards to employees while increasing their motivation and commitment; at the same time being congruent with corporate strategy, values, beliefs, goals, and performance; and anchored in the realities of the labor market in which it operates. The areas in which rewards policies are formulated generally are market rates, flexibility, relationship of rewards to business performance, the level of rewards, equity, performance-related rewards, pay structures, delegation and control, and financial and nonfinancial motivators.

See Also: Benefits; Compensation; Employer–Employee Relations; Holidays; Motivation; Perquisites.

Bibliography. Michael Armstrong and Helen Murlis, *Reward Management: A Handbook of Remuneration Strategy and Practice* (Kogan Page, 1988); George Baker et al., "The Wage Policy of a Firm," *Quarterly Journal of Economics* (v.109/4, 1994); David Card and Alan B. Kruege, *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton University Press, 1995); Martin Feldstein, "Did Wages Reflect Growth in Productivity?" *Journal of Policy Modeling* (v.30/4, 2008); Ian Kessler, "Reward System Choice," in *Human Resource Management: A Critical Text*, John Storey, ed. (Thomson, 2001); Ed Rose, *Employment Relations* (Financial Times, 2001); Joyce P. Simkin, *American Salaries and Wages Survey: Statistical Data Derived From More Than 580 Government, Business & News Sources* (Thomson/Gale, 2007); Robert Torrens, *On Wages and Combination* (T. Brettell, 1834).

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Sales

Businesses rely upon increasing market share, sales revenue, and profit, and the responsibility for maintaining and facilitating this growth and profitability is met by salespeople. A sale is the art of providing a product or service to a customer for a real or perceived monetary value, such that each party recognizes the benefit of the transaction. It is the salesperson's responsibility to maximize the perceived value both to secure the sale and to maximize the profit.

Organizations have evolved through successive stages of market development. Industry in the early 20th century was focused on mass production. At this time, any manufacturer that could provide good-quality goods at a reasonable price could be assured of a sale, predominantly because of the underlying shortage and high demand for the new products. However, businesses that were product oriented had to change to a sales-focused orientation once supply had been met and demand had decreased. A particular trigger point was during the economic Depression of the 1930s. It was during this time that "hard sell" techniques were developed, a practice that still occurs in some industries today.

After World War II, businesses were faced with increased national and international competition in addition to wealthier, more sophisticated, and more demanding consumers. Empowered more recently by digital technologies, the customer's increasingly complex requirements have taken precedence in strategic planning. The sales role has had to evolve to meet these expectations and has done so by combining knowledge from the fields of psychology, communications, and sociology.

Sales Channels

Most organizations sell though parallel channels, some of which involve little or no direct interaction with the customer. Examples include internet and catalog sales where the sales emphasis is either the brand reputation or a low price. Under these circumstances, low price can often be offset by bulk purchase and low fixed costs. Sales situations that may involve some proactive selling include exhibition and retail sales. These generally rely on interested customers selecting the product for purchase with some or no help from the sales assistant. The traditional door-to-door salesperson still exists, but has now largely been replaced by telephone call centers. This traditional "hard sell" approach involves an additional sales challenge in that buyer interest has to be gained within the first few seconds of the telephone call being answered.

Most major organizations will combine some of these sales channels with other direct channels such as sales agents, "missionary" or "new business" salespeople, geographic- (territory) or product-focused salespeople, and key account managers. This ensures that different market segments are targeted according to the frequency and value of orders and each is managed as cost effectively as possible. Other employees such as service engineers, technical support, and customer call center personnel may also be directly or indirectly involved in the sales process even though they may not be identified as part of a sales team. However, each role involves an element of customer interaction and is therefore likely to influence the overall impression of the organization.

Depending on the product or service for sale, sales teams may be focused toward either individual customers in a business-to-consumer (B2C) relationship, or to businesses in a business-to-business (B2B) relationship. The buyer expectations will be different for each scenario and the sales approach will need to reflect this.

B2B sales may be characterized as either transactional, such as the sale of office stationery materials, or consultative, where the salesperson provides added value over an extended timescale, for example, in the sale of manufacturing equipment. A transactional buyer will already be aware of the competitive products' features, benefits, and prices and will be looking for maximal value with minimal administrative effort. A consultative purchase is more likely to require additional information and possibly advice from the salesperson or account manager, particularly if the product or service is complex or expensive. The buyer might also rely on other specialists within his/her organization, and collectively, they would be classed as the decision-making unit (DMU). It is important that the account manager is aware of the composition of the DMU and maintains regular contact with each member. The account manager's role may also demand significant investment of time and resources in complaints handling, but if managed proactively, these will also add value to the relationship and help to secure future business.

The tightest relationship between B2Bs is a strategic alliance or partnership, which is often formed as a result of a previous long-standing consultative relationship. In a strategic alliance, value is added at multiple levels or "touch points" throughout both organizations, but the relationship is managed by a strategic or key account manager. A strategic alliance must provide equal benefit to both organizations and will include more than just sales. For example, confidential information and future budget projections are likely to be shared within the partnership, sometimes resulting in joint product development or service provision.

Salespeople

Salespeople are usually rewarded, in part at least, according to the revenue and/or profitability they generate. This form of financial motivation is known to be particularly effective with young salespeople looking to "make a name" for themselves. There are a number of alternative commission systems; however, most are calculated on three factors: the commission basis, for example, sales revenue or profit; the incremental rate of commission; and the point where commission commences. Thus, a sales agent might be employed with a low guaranteed or base salary and an uncapped steep incremental rate of commission linked to sales achieved over $10,000. A key account manager is more likely to maintain a high level of repeat business and might therefore be given a relatively high basic pay, with financial incentives to successfully conclude certain projects. Typically, sales forecasts are set by the sales manager on the basis of past performance, potential growth, and budget expectations. The achievement of on-target revenue, profit, or numbers of units may result in additional bonuses or awards being given as an added sales incentive. Support personnel such as in-house sales teams and service engineers might be rewarded through team-based commission or bonus systems.

The salesperson requires a wide range of abilities including time management, product knowledge, business knowledge, the ability to sell and communicate, and information technology (IT) skills. These may all be provided with the appropriate training. However, there are also many important personal attributes such as empathy, self-motivation, resilience, integrity, persuasiveness, initiative, and self-confidence that the salesperson must intrinsically have or develop for him-/herself. This combination of attributes is relatively rare and, despite the lure of high rewards, it is common to see a high number of dropouts in the first few months of a sales role.

Sales Processes

The sales process can, however, be taught, even if the experienced sales professional later adapts the process in the light of experience and intuition. The purpose of a sales process is to find a potential customer and negotiate a sale such that both parties are happy with the deal. This is known as a "win-win" situation.

Research has shown that successful selling is associated with asking questions and taking careful notes of the responses, providing relevant information, and where possible, supporting claims with evidence. It is also important to empathize with the customer and wherever possible release tension to make the process as natural as possible. While these tips may be useful, for the new recruit at least, a structured process is also required to maximize the chance of a sale. Fortunately, there are a great many published sales processes and often these form acronyms. A simple model (CAB) reduces the sales process to just three stages: Cognition (awareness), Affect (interest), and Behavior (action). The AIDAS acronym is more detailed and describes the sales process as stages that attract the Attention, Interest, Desire, Action, and Satisfaction. However, the majority of sales processes are based on six stages that guide the trainee salesperson from the first customer interaction through to closing the deal and after-sale follow-up. Throughout any sales process, the salesperson should be looking to differentiate his/her product or service offering by adding perceived or real value to his/her solution. The heaviest time investment should therefore be at the start of the sales process.

Prospecting

In many sales situations such as B2B and nonretail scenarios, the customer first has to be found. This process is called prospecting and will mainly include customers who have not previously bought from the company. New prospects are the lifeblood of any company because they replace those customers who no longer have a need or have taken their business elsewhere. It is also new prospects that guarantee long-term growth because a proportion of these customers may be important buyers in the future.

Prospects may be found by a number of different means. The simplest mechanism for finding prospects is to ask existing customers if they know of any other potential customers. Advertising, direct mail, coupons, and exhibitions will also generate leads or inquiries that can be followed up by the salesperson. The press is a useful source of information, especially when companies are recruiting, because this may identify expansion and potential business. Trade directories, telephone directories, and "bought in" databases also provide a framework for canvassing interest. Cold canvassing also can be performed in busy streets, from door to door, or by telephoning. However, these techniques are not applicable in professional or industrial sales situations where appointments have to be made with buyers.

Once an interest has been established, it requires evaluation or qualification to determine that it is genuine, a budget is available, the time scale is appropriate, and a solution can be provided. This process of qualifying may be performed by a more experienced salesperson rather than the prospector. Once qualified, the new prospect may be reclassified as a lead, and at this stage, the customer is likely to be entered into some form of record system or database.

Sales databases vary in sophistication and scalability, with the most sophisticated systems being integrated into a more comprehensive customer relationship management (CRM) system. CRM systems typically also combine data on campaign management, support services, training, project management, outbound and inbound customer communications, and so forth. These can provide a wealth of information that not only records all the customer interactions with the organization but also provides reporting tools that can help the organization to understand and anticipate customer needs. The sales database contains customer contact details and provides the facility with real-time tracking of leads. Typically, these systems are internet-based and therefore allow for remote working and collation of data across sales teams. Hence, the sales manager can produce up-to-date reports on data such as call rates, lead conversion ratios, likelihood of lead closure, order value, and forecast predictions.

On making the first customer contact, the salesperson should remember the importance of first impressions and aim to project a trustworthy and professional image. The meeting should fully evaluate the customer's needs, with considerations such as purpose, performance specification, size/number/volume, timescale, and price all being discussed. This information is gained through the use of open questions and should be considered carefully as it provides the opportunity for more detailed follow-up or clarification questions. Often, sales can be won or lost at this meeting because the salesperson incorrectly assumes that he/she fully understands the customer's requirements and moves on to the next stage. By doing this, he/she may miss some key features or requirements that other salespeople may identify.

Models such as the SPIN model (Huthwaite) focus on a specific stage in the sales process and subdivide it into a more detailed working framework. The SPIN acronym is a reminder of the sort of questions that salespeople need to ask at the "identifying and developing needs" stage in the sales process. These are Situation, Problem, Implication, and Need payoff questions. This tool is useful in all sales scenarios, but is particularly useful in account management situations where complex needs can be evaluated. Using questions based on this acronym, the buying organization can even be helped by the experienced salesperson in identifying and articulating its own needs.

Presentation, Negotiation, and Closing

Once the customer's needs have been fully established, a presentation of the most appropriate product or service may be made. This provides the salesperson with the opportunity to highlight the unique selling points (USP) of the proposition by explicitly focusing on the customer's stated requirements. These should be presented as benefits to the customer rather than just features. In this way, a potential solution is proposed rather than just a functional product.

The next stage may involve the demonstration of the product to the buyer or the DMU. This is the opportunity for the salesperson to show his/her knowledge, demonstrate the benefits, and generally reduce the "perceived risk" inherent in most purchases. Whenever possible, the DMU should be encouraged to interact with the product as this provides context and familiarity and can also serve as a memory trigger. Demonstrations, however, take time to organize, are time consuming, and can go wrong. Alternatives to demonstrations include "third-party testimony" using satisfied reference customers, or a trial offer possibly as a "sale or return."

Customer objections may come at any stage of the buying process and should be viewed as opportunities to highlight benefits, add value, and to close the deal. The skill of the salesperson is to empathize with the customer and then counter the objections in a positive and helpful way, at the same time overcoming or minimizing their concerns.

Preparation for the negotiation is essential because it will influence the balance of power between the buyer and seller. This power balance is determined by the number and feasibility of alternative options that are available to each party, the "confidential" information that is known about each other's position, the closeness of fit between the requirement and the proposal, and the external pressures on each party to conclude the deal. A salesperson will also be at a relative advantage if he/she is reliably informed about all of the competitor's products, services, and prices, as this provides boundaries for the negotiation. Hence, a noncompetitive technical sale that closely matches the buyer's requirements will put the salesperson in a relatively strong negotiating position.

Both sides in the negotiation will have minimal or "must-have" objectives and ideal or "nice-to-have" objectives. The opening of the negotiation is likely to start at the "nice-to-have" from either the buyer's or seller's perspective. In a negotiation when one side concedes something, it should be traded for something in return. For example, the seller might trade "low cost" but perceived "high value" items, such as training, for higher volumes or guarantees of future business. Experienced salespeople "reluctantly" start negotiating by trading low-value items followed by even-lower-value items, as a large discount or early giveaway immediately devalues the sales proposal. In most negotiating situations, there are many things that can be traded other than price, such as quantity discounts, guarantees of future business, credit terms, delivery times, trade-in values, and so forth. If the negotiation process reaches stalemate, the seller should restate the points of agreement, asking for clarification where necessary and, if required, request "time out" to rethink the strategy.

Closing the sale can occur at any stage with or without a buying signal. There are many closing methods including simply asking for the order, or more subtle approaches such as asking when the customer would like delivery or what color of product they would like. Once the order is placed and the product or service is delivered, it is considered good practice to follow up with the customer to ensure that everything is as expected, thus leaving the door open for future business.

Tendering Processes

Not all sales opportunities fit the typical sales process. Many large contracts are also awarded on the basis of a competitive open tender. These are commonly advertised in the national press or in trade magazines and are also available by subscription through organizations that compile and categorize tender publications. Typically, although not always, tenders originate from the public sector or from major corporations requiring large-value items. The tender process is an expensive one and does not lend itself to lower-value items.

A tender specification document is provided to those who wish to apply, with details regarding the expected format of the reply and the closing date for return. Commonly, the DMU is unknown or unapproachable, so if there was no previous opportunity to influence the tender specifications, the "selling" must be through the retuned document. The tender decision may therefore be based primarily on price rather than value through performance, reliability, reputation, and support. More sophisticated tendering processes require that prospective tender replies are filtered to a smaller number that enter a second round for further detailed questioning and bidding. This process attempts to reduce the number of bids from companies that exaggerate their claims and cannot realistically fulfill the tender requirements.

Laws and Contracts

Regulations are in place to prevent fraudulent and irregular practices through open tendering, the avoidance of corruption, and fairness in bid evaluation. Much of this regulation is to protect the misuse of public sector funds; however, there are also many laws and codes of practice that have come into effect in the last few decades that are designed to protect the consumer. These laws include restrictive trade practices (e.g., collusion), misrepresentation, faulty goods, debt collection, fair trading, unsolicited goods, consumer credit, and cooling-off periods that target not just the seller but also the advertiser. Much of this legislation revolves around the contract of sale.

A contract of sale is legally binding once a deal is agreed on and the terms are accepted. A contract can be verbal or in writing; both are enforceable but detailed written contracts are less likely to lead to a dispute. An important part of the contract are the terms and conditions (T&Cs), which state the circumstances under which the buyer is prepared to purchase and the seller is prepared to sell. T&Cs most commonly cover such things as alterations to orders, warranty conditions, delivery timescale, payment terms, and so forth. International terms of trade are more complex and include the responsibility of the goods in transit from exporter to importer and ownership while on ship (i.e., the bill of lading).

However, a salesperson does not just have to comply with the law, but he/she is also required to conduct business in an ethical manner. A good business relationship is based on trust and the building of value, which means delivering on promises, acting with discretion, not engaging in bribery or other inducements, avoiding the temptation to mislead, and not using undue pressure to conclude a sale. While this may not always be easy to achieve, especially when a salesperson's job or bonus is on the line or the sale is being conducted in an environment where these activities are commonplace, the reputation of both the salesperson and the organization he/she represents relies on it.

See Also: Bill of Lading; Bribery; Business-to-Business; Buying Motives/Behavior; Channels; Concession (in Negotiation); Consumer Behavior; Consumer Needs and Wants; Customer Relationship Management; Gift-Giving; Marketing; Media and Direct Marketing; Pricing; Procurement.

Bibliography. Harry Beckwith, *Selling the Invisible* (Grand Central, 1997); William T. Brooks, *Perfect Phrases for Lead Generation: Hundreds of Ready-to-Use Phrases for Finding New Customers, Keeping Your Pipeline Full, and Growing Your Sales* (McGraw-Hill, 2008); Jeffrey Gitomer, *Little Red Book of Selling: The 12.5 Principles of Sales Greatness: How to Make Sales Forever* (Bard, 2004); Christian Homburg, Mathias Droll, and Dirk Totzek, "Customer Prioritization: Does It Pay Off, and How Should It Be Implemented?" *Journal of Marketing* (v.72/5, 2008); Robert L. Jordan and William D. Warren, *Sales* (West, 1992); V. Kumar, Rajkumar Venkatesan, and Werner Reinartz, "Performance Implications of Adopting a Customer-Focused Sales Campaign," *Journal of Marketing* (v.72/5, 2008); Verne Meyer, Patrick Sebranek, and John Van Rys, *Business and Sales Correspondence: Trait-Based Strategies That Improve Writing and Save Time* (UpWrite Press, 2008); Ken Mondschein, *Advertising, Sales, and Marketing* (Ferguson/Infobase Publishing, 2009); Leslie Pockell, *MBA in a Book: Fundamental Principles of Business, Sales, and Leadership* (Business Plus, 2009); Christopher K. Randolph, *The Sales Edge: Making the Difference Between the Average Salesperson and the Successful Sales Professional* (Business Bookshelf, 2008); Anneke Seley and Brent Holloway, *Sales 2.0: Improve Business Results Using Innovative Sales Practices and Technology* (Wiley, 2009); Zig Ziglar, *Zig Ziglar's Secrets of Closing the Sale* (Penguin, 1985).

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Samsung Electronics

Samsung Electronics is a "national" company in South Korea. The company contributes a great deal to the country's growth and is a major provider of semiconductor, television, mobile phone, and other electronic products in world markets. It has put special emphasis on export, local production, and research and development (R&D).

Founded in 1969, Samsung Electronics is the central company in Samsung, the largest Korean family-owned business conglomerate (*chaebol*) from 2001, which has 59 member companies with assets of 144.4 trillion Korean wons (some US$144.4 billion) as of April 2008. Kun-Hee Lee, the second-generation owner and group chairman, has controlled Samsung since 1987 and also led Samsung Electronics as a representative board member and the chief executive officer. In April 2008, however, Lee resigned from all the managerial positions after the prosecutions for succession and corruption scandals, although he remains the owner of Samsung.

In 2007 Samsung Electronics had sales of some $63.2 billion, 81 percent of which occurred in foreign markets. The sales were the largest among those by the 555 large public companies quoted on the Korean Stock Exchange and more than double the second-largest sales by Hyundai Motor. Also, the company made the largest net profit of some $7.4 billion, which was double the second-largest one by POSCO, the steel company. Samsung Electronics's 2007 sales accounted for 7 percent of the country's gross domestic product (GDP) and its foreign sales made up 14 percent of the country's exports. The company was given the $45-billion export award for the first time in the country. Meanwhile, sales generated in 2007 by Samsung Electronics and its 108 domestic and foreign affiliate companies amounted to more than US$100 billion (US$103.4 billion) for the third time in the industry, following Siemens and Hewlett-Packard, and 80 percent of the sales took place in overseas markets.

Samsung Electronics earned three-fourths of the 2007 sales from three products: mobile phones (29 percent), liquid crystal displays (LCD; 23 percent), and semiconductor or memory chips (21 percent), most of these sales (83 percent, 88 percent, and 95 percent, respectively) being foreign sales. The company also produces "digital media" items (such as televisions and computers) and home appliances (refrigerators and washing machines), and exports nearly half of them. To fully serve world markets, Samsung Electronics had organized a worldwide network of 76 subsidiaries and offices in 49 countries by 2007. There are 23 manufacturing subsidiaries in 12 countries (China, India, Malaysia, Mexico, Indonesia, the Philippines, Thailand, Vietnam, Hungary, Slovakia, Brazil, and the United States), 40 selling subsidiaries in 29 countries (seven in China; four in the United States; two each in Germany and the United Kingdom; 11 in Europe, six in Americas, seven in Asia, and one in Africa), and 13 selling offices in 13 countries. These are supervised by the main headquarters in Korea and eight local headquarters in China, India, Singapore, Dubai, Russia, the United Kingdom, Brazil, and the United States. In the world mobile phone market, Samsung Electronics (14 percent share in 2007) and Motorola (14 percent) are neck and neck, following Nokia (39 percent). In LCD, the company (23 percent share) narrowly competes with LG Philips LCD (21 percent) and AUO (19 percent). In memory chip, Samsung has remained the top brand and, in 2006, had 34 percent share for flash memory and 32 percent for dynamic random access memory (DRAM). And in television, the company had the largest shares in 2006–07 and, in the first quarter of 2008, secured more than 20 percent (21 percent) share for the first time in the industries, surpassing Sony (13 percent) and LG Electronics (11 percent).

Samsung Electronics has increasingly spent more money on R&D to improve quality through new technology: 7.3–7.5 percent of sales in 2001–02, 8.1–8.3 percent in 2003–04, and 9.4–9.5 percent in 2005–07 (some US$5.9 billion in 2007). The company registered 17,377 patents in the United States until 2006 and, in 2006, 2,665 patents, the second-largest number among those by the patentees. R&D is carried out by 35 domestic institutes and 10 organizations in seven countries (three in China; two in the United States; five in Japan, India, Israel, Russia, the United Kingdom). Also, the company has made strategic alliances with competitors (including Nokia and Sony) and other market leaders concerning technology, design, marketing, and raw materials.

See Also: Chaebol; Hyundai Motor; Korea, South; LG; Nokia; SK; Sony.

Bibliography. Se-jin Chang, *Sony vs. Samsung: The Inside Story of the Electronics Giants' Battle for Global Supremacy* (Wiley, 2008); B. J. Lee and George Wehrfritz, "Dark Days for the Empire," www.newsweek.com (cited March 2009); Tony Michell, *Samsung Electronics and the Struggle for Leadership of the Electronics Industry* (Wiley, 2008); Samsung Electronics, www.samsung.com/us (cited March 2009); Samsung Electronics, *The 2007 Annual Report*, dart.fss.or.kr (cited March 2009).

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Samurai Bond

A samurai bond is a yen-denominated debt security that is issued by a non-Japanese company on the Japanese bond market. These bonds enable the issuer to have access to Japanese capital, which can be used either for local investments or to finance existing operations outside Japan. The main advantages of samurai bonds include access to a diversified and deep pool of capital with comparatively lower interest rates. Also, American and European companies that enjoy a certain level of prominence usually have a relatively easy time in raising capital through samurai bonds. Unfortunately, there are continued concerns in the United States about the taxation of these securities, as well as grave concerns relating to the complexity of emitting these bonds that have progressively slowed use of this financial debt tool.

Samurai bonds were formally created in 1970; at the time, only governmental entities could issue them, but this privilege was later extended to large "blue chip" corporations in 1978. The bonds are subject to Japanese regulations and are akin to Yankee bonds in the United States (which are bonds traded in the U.S. foreign bond market). Recent trends have shown an increase in the issuance of samurai bonds; in 2007, issuances tripled to ¥2.2 trillion from ¥741 billion in 2006, but this is expected to be considerably lower from 2008 onward.

Historically, corporations from the United States have been the major issuers in the samurai market. This is mainly because of their high name recognition in Japan and elevated credit ratings. A credit rating of at least A is required to emit bonds on the Japanese market. In recent years, there have been pools of issuers that included companies from Europe, South Korea, Thailand, Australia, and New Zealand, but these are a minor fraction of the current market.

While samurai bonds were originally intended to create an opportunity for foreign companies so that they could raise money for their operations in Japan, many of the funds raised are now immediately converted into other currencies and exit the Japanese capital market to finance international operations.

Advantages and Disadvantages

Samurai bonds have the following advantages. Because they are issued in Japan, it is easy for Japanese institutional investors to invest in them. Also, samurai bonds do not have to be left in the custody of securities companies or other institutions. Japan possesses a large capital market and offers a deep pool of debt capital. Hence, it is an interesting market for larger companies seeking to diversify sources of funding. Also, companies usually find that interest rates are lower in Japan, so foreign companies find it advantageous to emit bonds in this market. As for Japanese institutional investors, foreign firms are very popular because of their high name recognition and good investment rating; as many of these funds are very conservative, they prefer to invest in larger companies with international presence.

The Japanese debt market is partially insulated from the world debt markets and is not always subject to the same variation and influences. It is resistant to outside phenomena, such as the U.S. subprime rout of 2007–08. Hence, it is not subject to the same variations and market swings as the U.S. and European markets, giving companies an alternative financing source during economic downturns. Nonetheless, high taxation and an uncertain fiscal environment related to samurai bonds is a strong deterrent to widespread usage. Continued changes in how the U.S. Internal Revenue Service (IRS) taxes these bonds has considerably shifted usage from U.S. companies. In the past, 60 to 80 percent of the samurai bond market was driven by U.S. firms. Although there are some arrangements to circumvent taxation, they were due to lapse at the end of 2008. Even if both countries continue to negotiate to further harmonize taxation, the lack of a constant policy remains a serious concern of U.S.-based companies.

Also, companies that have issued samurai bonds have found that there are high administrative burdens placed upon issuing companies, and there is a lack of flexibility in the choice of terms and conditions of issuance that create restrictive elements for usage of these bonds. Concurrently, easier issuing procedures and lighter taxation in the European markets (which offer a similar debt security environment) have made the Japanese bond market far less attractive to issuers, and it continues to grow slowly.

See Also: Bonds; Japan; Securities Financing.

Bibliography. Jose A. Lopez and Mark M. Spiegel, *Foreign Bank Lending and Bond Underwriting in Japan During the Lost Decade*, Federal Reserve Bank of San Francisco Working Paper Series (Federal Reserve Bank of San Francisco, 2006); Mitsuru Misawa, *Current Business and Legal Issues in Japan's Banking and Finance Industry* (World Scientific Publishing, 2006); Roderick Seeman, "Samurai Bonds," *Japan LawLetter* (December, 1987); Kazuo Tatewaki, *Banking and Finance in Japan* (Routledge, 1991).

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S&P 500 Index

The S&P 500 Index or the Standard & Poor's 500 Stocks Composite Index is a market value–weighted index of 500 leading U.S. large market capitalization or large cap stocks. The S&P 500 Index is widely regarded as the principal indicator of overall stock market activity in the United States and commonly serves as a proxy for the entire U.S. equity market. The S&P 500 evolved in various stages from 26 original industrial indices comprised of 233 stocks that were first developed by Standard & Poor's Corporation in 1923 to 416 stocks representing 72 industrial indices in 1941. The sample of stocks was increased from 416 to 500 in 1957 to create the S&P 500. Initially, three broad economic sectors were included in the index: 425 industrial companies, 60 utilities, and 15 railroads. In 1976 the index was revised to include some NASDAQ-listed companies, primarily insurance companies and commercial banks, resulting in an index composed of 400 industrial companies, 40 utilities, 40 financial companies, and 20 transportation companies. In 1988 the number of economic sectors represented in the index was expanded to become more representative of the U.S. economy. In May 2008 the economic sector breakdown of the index, based on the Global Industry Classification System (GICS), which includes 10 economic sectors, was as follows: Financials (92 companies); Consumer Discretionary (86); Information Technology (71); Industrials (56); Health Care (51); Consumer Staples (40); Energy (36); Utilities (31); Materials (28); and Telecommunication Services (9). In May 2008, 423 of the 500 stocks in the index were listed on the New York Stock Exchange, representing 84.1 percent of the index's market capitalization. The remaining 77 firms were listed on the NASDAQ.

An eight-member S&P Index Committee comprised of Standard & Poor's staff meets monthly to maintain the index and consider additions and removals of constituent companies according to published criteria. Eligibility criteria for a company's selection to the index include: (1) market capitalization of US$5 billion or more; (2) market liquidity for its shares as evidenced by a ratio of annual share turnover to market capitalization of 0.3 or more; (3) U.S. incorporation or otherwise considered a U.S. company; (4) public float, or shares available for trading, of at least one-half of shares outstanding; (5) contribution to the index's economic sector balance based on GICS, which includes not only 10 economic sectors, but also 24 industry groups, 67 industries, and 147 subindustries; (6) financial viability, commonly measured as four consecutive quarters of profitability; (7) publicly traded for 6 to 12 months; and (8) an operating company as opposed to, for example, a holding company or investment vehicle. Companies can be deleted from the index for failure to meet the above eligibility criteria, including violations that result from corporate restructuring.

As a value-weighted index, the S&P 500 Index is calculated by (1) multiplying each stock share's current price by the number of float-adjusted shares outstanding or shares outstanding that are available to investors; (2) summing each of these 500 products based on current share prices; (3) then multiplying each stock share's base price in the base period by the number of outstanding shares in the base period; (4)

summing each of these 500 products from the base period; (5) dividing the sum of the 500 products based on current share prices by the sum of the 500 products in the base period; and (6) multiplying this result by the beginning index value or base value, which in the calculation of the S&P 500 Index is 10. The S&P 500 uses a base period dated from 1941 to 1943. Should a company have multiple classes of stock, S&P uses only one of them, commonly the most liquid class, in its calculation of the index. Changes to the index are made when needed and are announced two to five days before their implementation.

Researchers have discovered that a company's inclusion in the S&P 500 results in positive abnormal returns on the stock. Among the explanations for this phenomenon are new demand pressures from large block orders for the stock, improved liquidity in the market for the stock as the result of increased institutional investor ownership, increased monitoring of the firm leading to improved operating performance, and increased investor awareness about the stock as a result of its inclusion in the index.

The S&P 500 Index is widely used as benchmark for performance for fund and portfolio managers, individual investors, and financial analysts. "Beating the market" commonly is a reference to earning returns exceeding those reported by the S&P 500 in any given time period. Fund and portfolio managers' performance in the equity markets for any period is often measured in comparison to the return in the equivalent period on the S&P 500 Index. The return on the S&P 500 Index often serves as the proxy for the return on the overall U.S. equity market in the determination of individual firms' cost of equity capital in capital budgeting and firm valuation calculations. Equity and credit analysts rely upon financial ratios calculated for the S&P 500 Index or its constituent economic sectors as a basis on which to compare and assess individual companies' performance.

The S&P 500 Index also serves as one of 10 leading economic indicators released monthly by the Conference Board. The rationale for its inclusion is that as a broad measure of U.S. equity markets, it reflects both investor beliefs and interest rate movements, which are viewed as future economic activity indicators.

See Also: Dow Jones Index; Economic Indicators; Equities; Interest Rate Swaps; Liquidity (or Market Liquidity).

Bibliography. Conference Board, *Business Cycle Indicators Handbook* (Conference Board, 2005); William B. Elliott, Bonnie F. Van Ness, Mark D. Walker, and Richard S. Warr, "What Drives the S&P 500 Inclusion Effect? An Analytical Survey," *Financial Management* (December 2006); Jack C. Francis and Robert Ibbotson, *Investments: A Global Perspective* (Prentice Hall, 2002); Frank K. Reilly and Keith Brown, *Investment Analysis and Portfolio Management* (Thomson South-Western, 2005); Standard & Poor's, *S&P 500* (Standard & Poor's, 2007); Standard & Poor's, *S&P U.S. Indices: Index Methodology* (Standard & Poor's, 2007); Standard & Poor's, *Understanding Sectors* (Standard and Poor's, 2005); Standard & Poor's Indices, "S&P 500 Month End Data," www2.standardandpoors.com (cited March 2009).

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Sanofi Aventis

Sanofi Aventis is one of the world's leading pharmaceutical companies. It is headquartered in France and ranks as the number one pharmaceutical company in the European market. As a result of more than 100 years of accumulated experience in the pharmaceutical industry (through its two legacy companies, Sanofi-Synthelabo and Aventis), the firm is active in many medical disciplines and its business includes two main activities: pharmaceuticals and human vaccines through Sanofi Pasteur. In their pharmaceutical activity, major therapeutic areas include cardiovascular, thrombosis, metabolic disorders, oncology, central nervous system, and internal medicine. It is a major employer with approximately 100,000 employees worldwide and an impressive sales force of 35,000 medical visitors. It is also present in 100 countries throughout five continents, but its products can be found in more than 170 countries through local distributors.

Performance features include consolidated sales of approximately €25 billion, whereas more than €4 billion dedicated to research and development promises further growth. A manifestation of the firm's commitment to research and development is the establishment of 30 research centers that can be found in the French regions of Toulouse or Vitry/Alfortville, in other European countries such as Germany, the

United Kingdom, and Italy, and in countries such as the United States and Japan. Manufacturing of products is equally dispersed geographically, since 72 industrial sites of the firm can be found in such countries as France, Hungary, Italy, Germany, or the United States, whereas more can be found in Canada, China, Thailand, or Argentina (for the operations of Sanofi Pasteur). Last but not least, the firm enjoys a 5.3 percent market share in the global pharmaceutical industry with countries such as the United States (33.8 percent of net sales), France, Germany, Italy, and Japan generating most net sales.

Primary customers include wholesale drug distributors, independent and chain retail drug outlets, hospitals, clinics, managed care organizations, and government institutions. In order to reach these distribution channels, the company is dependent upon its medical sales representatives who assist health practitioners' work by providing updated information on drugs and their properties. Promotional channels include a variety of advertising, public relations, and promotional tools such as advertisements in medical journals and active presence at major medical congresses. In some countries, traditional, massive promotional channels such as television, newspapers, and radio are also used in order to promote brands directly to patients (primarily with regard to OTC healthcare products).

A major means Sanofi Aventis uses to market its top-selling brands is the use of strategic alliances with other firms such as Bristol-Myers Squibb, Procter & Gamble, and Teva Pharmaceutical Industries. The alliance agreements include marketing and financial arrangements that vary depending on the country in which products are marketed. Options include co-marketing the products independently under each one's own brand names, exclusive marketing, or co-promotion under a single brand name. Such a strategic marketing decision may offer commensurate benefits such as expanded distribution network and extended promotional coverage but is also subject to several risks. For example, the firm cannot ensure that collaborating partners will perform as expected with regard to operational management or promotion of own brands instead of promoting co-marketed brands. Additional risks the firm faces that potentially can be turned into dangers include the high levels of uncertainty of its investment in research and development (since the turnover may not counterbalance accumulated costs), its over reliance on the U.S. market, its dependence on third parties for the manufacture and supply of a substantial portion of raw materials and specialized components, and the problem of counterfeit products.

However, in the challenging market of pharmaceuticals, the major threat stems from the changing competitive environment, which is partly due to the multiplicity of laws regulating the healthcare environment and the number of sophisticated players active in the market. There is a constant need for product innovation, expansion of the product portfolio, and an extended presence in all geographical areas of the world for the company to sustain further profitable growth and stay ahead of competitors. Major competitive forces include the ever-increasing competition for research and development of new patented products and new therapeutic conditions and competition between generic products. In this respect, major competitors of Sanofi Aventis include Abbot, Astra Zeneca, Eli Lilly, GlaxoSmithKline, Merck & Co., and Novartis. The future will show which of these firms will optimally co-align its competencies and resources with these environmental contingencies and maintain a sustainable position in the global pharmaceutical industry.

See Also: France; GlaxoSmithKline; Pfizer; Novartis; Strategic Alliance.

Bibliography. Helen Carmichael, "Sanofi-Aventis Opens for Business," *Chemistry World* (v.1/12, 2004); Sanofi-Aventis, www.sanofi-aventis.com (cited March 2009).

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Sarbanes-Oxley

On July 30, 2002, President George W. Bush signed the Sarbanes-Oxley Act (SOX) into law. SOX and the regulations passed by the Securities and Exchange Commission (SEC) pursuant to its mandate are the most dramatic and wide-ranging rules to apply to U.S. public companies since passage of New Deal–era financial legislation. SOX was passed in response to several corporate governance scandals involving improper financial reporting at U.S. companies such as Enron and Worldcom and remains a controversial piece of legislation.

All companies publicly raising funds in the United States must comply with SOX, whether the company is based in or does business in the United States. SOX seeks to increase the monitoring of U.S. public company managers by parties such as directors, auditors, and attorneys. SOX requires each director on the board's audit committee to be independent, which means that the director can provide no other services to the company and cannot receive fees other than for serving as a director. SOX also requires the audit committee to include a financial expert. In addition, the New York Stock Exchange (NYSE) and the NASDAQ stock market, in response to SOX and a request by the SEC to review their corporate governance requirements for listed companies, enacted rules requiring a majority of the directors on a board to be independent.

SOX also prohibits external auditors from providing any nonaudit services to issuers and prohibits lead auditor partners from providing services to the same company for more than five years. SOX established the Public Company Accounting Oversight Board (PCAOB), which is responsible for overseeing, investigating, and disciplining auditors. The PCAOB also took over the role of promulgating auditing standards for external audits of public companies from the American Institute of Certified Public Accountants.

SOX imposed new duties on company managers to improve the financial reporting process. Section 404 of SOX mandates that managers maintain, evaluate, and report on internal control over financial reporting. Internal control is a system to provide reasonable assurance to investors that a company's financial statements are reliable and comply with generally accepted accounting principles. Pursuant to Section 404, managers are responsible for completing an annual report about internal control that discloses any material weaknesses. An outside auditor must also provide an independent evaluation of management's assessment of internal control.

Under SOX, top managers have a particularly heightened responsibility regarding internal control and financial reporting. SOX requires the chief executive and chief financial officers to annually certify the truth of the company's financial and nonfinancial disclosures and publicly disclose any significant changes in internal controls. SOX also requires attorneys working for the company to report any violations of securities laws or breach of fiduciary duty up through the corporate hierarchy. In addition, SOX increased criminal liability for violations of the federal securities laws, enabled the SEC to prohibit persons from serving as directors and officers if they are found "unfit" to serve, and prohibited companies from making loans to directors or executive officers. The SEC also implemented regulations pursuant to SOX to reduce potential conflicts of interest between securities analysts, who provide third-party research about companies, and their employers, who may have investment banking or other relationships with the same companies.

Impact

The reaction to SOX was swift and is ongoing. What is indisputable is that the direct costs of complying with SOX have been substantial and that the burdens are the greatest for smaller public companies. According to Financial Executives International, in 2007 U.S. public companies spent an estimated average of $1.7 million and 11,000 man-hours complying with Section 404 alone. Supporters of SOX argue that despite its compliance costs, the law was necessary to improve financial reporting, restore investors' confidence in American capital markets, and prevent the types of abuses that occurred at companies such as Enron and Worldcom, which could be more costly in the long run.

Critics of SOX have raised several objections. They point out that SOX was rushed through Congress with little deliberation and that it improperly increases the role of federal corporate governance mandates at the expense of flexible rules from the states. Controversy over SOX has also centered on whether the law's "one-size-fits-all" prescriptions can universally improve governance given the diverse characteristics of U.S. public companies and whether SOX decreased the competitiveness of U.S. capital markets.

Evidence of public companies increasingly going private, staying private, or choosing to publicly list and raise capital in non-U.S. jurisdictions may indicate that

SOX imposes more costs than benefits. Evidence that the U.S. cross-listing premium (the additional amount investors are willing to pay for public companies governed by U.S. law) has decreased post-SOX, at least for some types of companies, suggests that SOX made U.S. financial regulation less valuable. However, U.S. capital markets were already losing their competitive edge as non-U.S. jurisdictions have continued to develop, making the exact impact of SOX difficult to isolate. Some also argue that even if SOX made U.S. markets less attractive, it did so only for poorly governed firms.

The events leading up to SOX and its fallout undoubtedly increased global attention to corporate governance issues. Several nations such as Japan and Germany modeled reforms after SOX, while the United Kingdom (UK) took steps to prevent SOX from applying to UK-listed firms.

See Also: Board of Directors; Corporate Governance; Disclosure Requirements; Regulation; Securities and Exchange Commission.

Bibliography. Stephan M. Bainbridge, *The Complete Guide to Sarbanes-Oxley: Understanding How Sarbanes-Oxley Affects Your Business* (Adams Media Corporation, 2007); Dimitris N. Chorafas, *IT Auditing and Sarbanes-Oxley Compliance: Key Strategies for Business Improvement* (CRC Press, 2009); James Hamilton and Ted Trautmann, *Sarbanes-Oxley Manual: A Handbook for the Act and SEC Rules* (CCH Incorporated, 2008); Michael F. Holt, *The Sarbanes-Oxley Act: Costs, Benefits and Business Impacts* (CIMA Publishing, 2008); Sean D. Jasso, *The New Corporation: Aristotle, Sarbanes-Oxley, and the Future Manager* (VDM Verlag, 2008); Robert R. Moeller, *Sarbanes-Oxley Internal Controls: Effective Auditing With AS5, CobiT and ITIL* (John Wiley & Sons, 2008); Robert A. Prentice and David B. Spence, "Sarbanes-Oxley as Quack Corporate Governance: How Wise Is the Received Wisdom?" *Georgetown Law Journal* (v.95/6, 2007); Roberta Romano, "The Sarbanes-Oxley Act and the Making of Quack Corporate Governance," *Yale Law Journal* (v.114/7, 2005); M. Babajide Wintoki, "Corporate Boards and Regulation: The Effect of the Sarbanes-Oxley Act and the Exchange Listing Requirements on Firm Value," *Journal of Corporate Finance* (v.13/2–3, 2007).

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Saudi Arabia

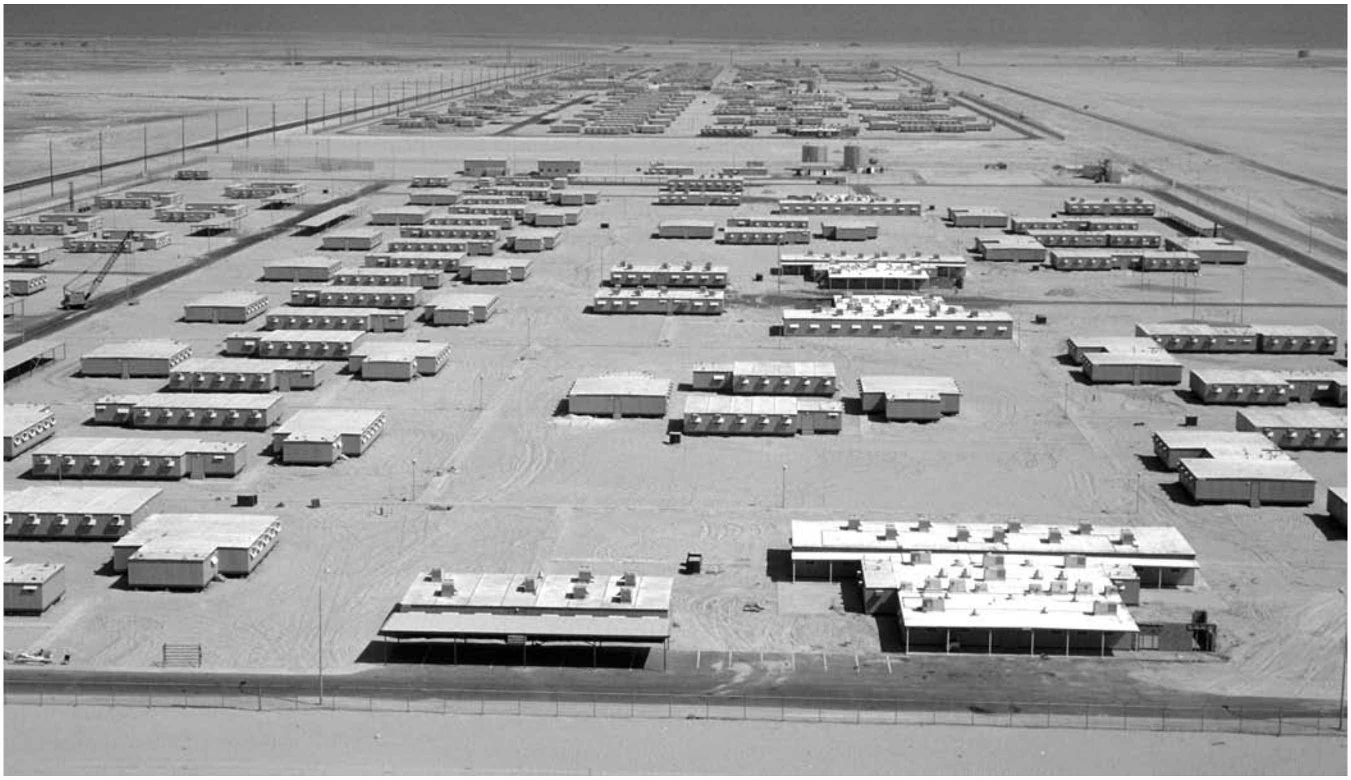
The Kingdom of Saudi Arabia is in southwestern Asia and occupies about four-fifths of the Arabian Peninsula, covering a land area of 2.24 million sq. km., and having a population of 24.7 million. The per capita income of US$11,770 is high compared to global standards.

As the world's largest oil producer, Saudi Arabia is riding a wave of prosperity buoyed by record-high crude prices. With the windfall that fills its national coffers, Saudi Arabia has paid off debts and driven economic growth to its fastest pace for nearly three decades. Saudi Arabia now has a free market economy with liberal trade policies. There are no exchange restrictions except items such as pork and alcohol that are banned because of religious restrictions. The reform process, initiated in 1998, aimed at privatization of some of the biggest companies, tackling unemployment, modernizing financial markets, and attracting more foreign investments.

The economic development is based on five-year development plans that started in 1970. The current economic policies are based on utilizing the oil profits for infrastructure and human resource development. Economic diversification is being attempted to move the country away from excessive dependence on oil and gas. There is emphasis on stronger private sector participation. Within, there are efforts to create a more balanced economy with all-round regional economic development in this geographically vast country.

The Saudi Arabian budget for fiscal year 2008 was the largest in its economic history. The salient feature of the budget was the government's continued commitment to increase spending to support development programs while adhering to fiscal prudence in an environment characterized by rising inflation, high monetary supply, and robust oil revenues. Long-term infrastructure was the cornerstone of the budget. With expenditures estimated at US$109.3 billion and revenues of US$120 billion, the resulting budget surplus is US$10.6 billion.

Saudi Arabia is a member of several international and regional organizations such as the United Nations (UN), World Trade Organization (WTO), International Monetary Fund (IMF), International Atomic Energy Agency (IAEA), Organization of Petroleum



Saudi Arabia brings in an estimated 6 million expatriate workers to staff its industrial facilities, such as this massive processing complex in the desert, and to fill low-level positions throughout the country.

Exporting Countries (OPEC), and Gulf Cooperation Council (GCC). It is also a signatory to many international agreements. In a milestone in its economic history, Saudi Arabia joined the WTO in 2005, initiating a process of aligning itself more closely with the global economy. In the process of preparing for membership to the WTO, Saudi Arabia enacted 42 new trade-related laws, created nine new regulatory bodies, and signed 38 bilateral trade agreements over a period of 12 years.

The currency of Saudi Arabia is Saudi riyals, 1 riyal being divided into 100 halalas. The exchange rate of the riyal has been pegged to the U.S. dollar since 1986 at the rate of 3.75 riyals to US$1. The official calendar of Saudi Arabia is the Islamic *Hijrah* calendar. The weekly holidays are observed on Thursdays and Fridays. The official language of Saudi Arabia is Arabic. English is widely understood in business circles. The legal system is based on the sharia and on royal decrees promulgated by the Council of Ministers known as the *Majlis Shoura*. There is free education and healthcare for citizens.

The central bank is called the Saudi Arabian Monetary Agency, which deals with monetary policy and currency. The stock exchanges use a trading system called *Tadawul* for real-time trading, clearing, and settlement of shares through electronic order routing. The International Finance Corporation includes the Saudi Share Market index in the emerging stock markets database. The Saudi Securities and Exchange Commission protects investors' interests and implements orderly securities dealing to regulate and develop capital markets.

Among the prominent industries existing in Saudi Arabia are the petroleum and gas reserves, petrochemicals, plastics, packaging, mining, food processing, power generation and transmission, construction and building products, healthcare, transportation, water treatment and desalination, agriculture, and travel and tourism. There is a growing information and communication technology, and telecommunications industry.

Saudi Arabia adopts a policy of *Saudization* that favors companies with local participation in investments, majority local holdings, and training and employment of locals. It should be noted that Saudi Arabia hosts a large number of expatriate workers estimated to be about 6 million. At the same time, unemployment among local youth is high, creating an anomalous situation. This happens because of various reasons, including the poor skill levels, reluctance to take lower-end jobs, and high expectations of locals. On the other hand, there is ample availability of a cheap, skilled expatriate workforce.

The economic challenges facing Saudi Arabia include unemployment and dependence on migrant labor, inequity in distribution of wealth, lack of investment in social and physical infrastructure, burgeoning population, aquifer depletion, and lack of long-term planning. As well as increasing liberalization, there is a need for broader labor reforms and continual investments in education, skill development, health, and social welfare.

See Also: Chevron; Company Profiles: Middle East; Emerging Markets; Middle East.

Bibliography. Abbas Ali, *Business and Management Environment in Saudi Arabia: Challenges and Opportunities for Multinational Corporations* (Routledge, 2009); Wayne H. Bowen, *The History of Saudi Arabia* (Greenwood Press, 2008); Arthur P. Clark, Muhammad A. Tahlawi, William Facey, and Thomas A. Pledge, *A Land Transformed: The Arabian Peninsula, Saudi Arabia, and Saudi Aramco* (Saudi Arabian Oil Co., 2006); Joshua Huband, *The Kingdom: Saudi Arabia and the Challenge of 21st Century* (C. Hurst & Co. Publishers, 2008); Jamal A. Al-Khatib, Avinash Malshe, and Mazen Abdulkader, "Perception of Unethical Negotiation Tactics: A Comparative Study of US and Saudi Managers," *International Business Review* (v.17/1, 2008); Andrew Mead, *Saudi Arabia: The Business Traveller's Handbook* (Interlink Travel, 2008); Tim Niblock, *Saudi Arabia: Power, Legitimacy and Survival* (Routledge, 2006); Tim Niblock and Monica Malik, *The Political Economy of Saudi Arabia* (Routledge, 2007); Igor S. Oleynik, Natasha Alexander, and Karl Cherepanya, *US–Saudi Arabia: Economic and Political Cooperation* (International Business Publications, 2006); Samba Financial Group, *Saudi Arabia and the WTO* (Samba Financial Group, 2006).

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Scenario Analysis

Scenario analysis attempts to capture the nonlinearity, complexity, and unpredictability of turbulent environments by incorporating techniques for eliciting and aggregating group judgments, specifically through Delphi techniques and cross-impact matrices. The Delphi technique involves asking an anonymous panel of experts to estimate individually the probability that certain events will occur in the future. The panel members have several opportunities to revise their initial estimates. They look at the anonymous responses from other experts on the panel to gauge how much their individual estimates deviate from other estimates. While Delphi forecasting can be described as constrained guesswork, its probability estimates are statistically sound because panelists selected are experts in their respective fields. Cross-impact analysis (CIA) is a complex technique sometimes performed by hand, as in the procedure pioneered by General Electric (GE), and increasingly by computer. Its output is a matrix showing the favorable or unfavorable interaction of likely developments generated earlier by the Delphi panel.

The origin of scenario analysis is claimed by theorists from many countries. Nicholas C. Georgantzas and William Acar attest that scenarios were introduced to planning literature by Herman Kahn who worked on military scenarios for the U.S. government in the 1950s. In the 1960s H. Ozbekhan of the Wharton School (of the University of Pennsylvania) used scenarios in an urban planning project for Paris, France. Pierre Wack asserts that it was a group of strategic planners at Royal Dutch Shell who came up with the idea of using scenario analysis for strategic planning in the 1970s.

Ansoff and other strategy theorists state that the 1970s witnessed the transformation of product markets into a global perspective. Changes in the external sociopolitical environment became pivotal in strategy making. Environmental challenges, many of them novel, also became progressively numerous. Combined with the geographical expansion of markets, they increased the complexity of managerial work. They rendered the managerial capability developed during the 1960s inadequate. Today, environmental challenges are developing progressively faster. Their novelty, complexity, and speed have increased the likelihood of strategic surprises.

Often regarded as the father of scenario analysis, Herman Kahn's method underlies the type of "systems analysis" represented in *On Thermonuclear War*, although it became more explicit as a methodology in Kahn's later futurological research, embodied in his book with Anthony Wiener published in 1967, *The Year 2000*.

For Kahn, scenarios were hypothetical sequences of events constructed for the purpose of focusing attention on causal processes and decision-points. They are designed to answer two kinds of questions: (1) How might some hypothetical situation come about, step by step? and (2) What alternatives exist, for each actor, at each step, for preventing, diverting, or facilitating the process? Kahn used scenarios to understand the alternative worlds represented by the year 2000. His method involved the sequence of steps described below.

The analyst first identifies what he/she takes to be the set of basic long-term trends. These trends are then extrapolated into the future, taking account of any theoretical or empirical knowledge that might impinge on such extrapolations. The result is called the surprise-free scenario. The surprise-free scenario becomes the base from which variations on the scenario or alternative futures are derived by varying key parameters in the surprise-free scenario. Kahn made no claim that scenarios were predictive. Instead, he was adamant that no one scenario is more probable than the other. The Kahnian approach was taken in 2002 by the Hudson Institute to investigate the possible impact on business of consumer fears post-9/11.

The value of scenarios for planners comes from a feeling of greater preparedness and flexibility in the face of high-velocity environments, as well as the "a ha!" moments created by combining key parameters from the surprise-free scenario that might be counterintuitive. Three examples provided below are drawn from the classic experience of Royal Dutch Shell and GE in writing scenarios for strategic planning purposes, and the scenarios generated by Peter Drucker to understand the impact of balance of payments deficits on national and world economies.

Examples

The team of Pierre Wack, Ted Newland, and Napier Collyns became critical to the success of scenario-driven planning at the Royal Dutch Shell group of companies. During the 1972 energy crisis, only Shell was ready for the change among oil firms. The firm's executives and managers responded together and responded fast, changing Shell's strategic posture as well as the company's market results. Formerly one of the weaker of the seven oil majors, Shell had become second only to Exxon in size and first in profits. Shell's senior planners were no longer concerned about forecasting, but now focused on liberating management insight and inspiring a long-term view through scenario-driven planning. Scenario-driven planning enables managers to reperceive a strategic issue and to discern their assumptions about the issue so that they can improve decision quality. Shell's scenario experience produced both promising results and methodological innovations. Betty Flowers, editor of global scenarios for Shell, describes a recent scenario development round for Shell called Geographies of Connection, a frame of reference through which managers explore a scenario from one of four positions: how people are connected globally; how nations are connected; how the globally connected edges of nations are connected to their own heartlands; and how we are connected to the earth through our environmental policies and practices.

Beginning in the 1960s, GE drew together into a single framework a variety of forecasting tools including Delphi expert panel to detect critical variables and indicators, as well as trend-impact and cross-impact analyses to assess the implications of the interactions among variables and indicators. The output of these techniques was used to develop probable future scenarios. GE's procedure entails an initial determination of the key trends by the planning analysts, followed by constrained expert guesswork by one or several panels of outside experts. Cross-impact analysis follows. Its output is a matrix showing the favorable or unfavorable interaction of likely developments generated earlier by the Delphi panel.

While the Kahnian, Shell, and GE scenarios were strategic in intent, the last example here, the Drucker scenarios, represents a macro-level environmental scenario exercise. Although Drucker introduced his scenarios in the 1980s, the environmental scenarios have increasingly become an input to the computation of strategic scenarios and represent one of the few ways strategic managers can account for the overriding, pervasive issues of business and the economy.

In addressing a world economy composed of the "real" economy of goods and services and the "symbolic" economy of money, Drucker considered a total of five environmental scenarios based on the outcome of continuing overall budget and trade deficits and the impact of deficits on investor (including foreign investor) confidence.

See Also: Dependency Theory; General Electric; Management Science; Royal Dutch Shell; Trade Balance.

Bibliography. Christopher L. Culp, *The Risk Management Process: Business Strategy and Tactics* (Wiley, 2001); Betty Flowers, "The Art and Strategy of Scenario Writing," *Strategy & Leadership* (v.31/2, 2003); Nicholas C. Georgantzas and William Acar, *Scenario-Driven Planning: Learning to Manage Strategic Uncertainty* (Quorum Books, 1995); Barry B. Hughes, *International Futures: Choices in the Face of Uncertainty* (Westview, 1999); Amit Kapur, "The Future of the Red Metal-Scenario Analysis," *Futures* (v.37/10, 2005); J. Robinson, "Future Subjunctive: Backcasting as Social Learning," *Futures* (v.35/8, 2003); Ronnie Söderman, *Maximum Loss Calculation Using Scenario Analysis, Heavy Tails and Implied Volatility Patterns* (Swedish School of Economics and Business Administration, 2000); Philip W. F. Van Notten, Jan Rotmans, Marjolein B. A. Van-Asselt, and Dales S. Rothman, "An Updated Scenario Typology," *Futures* (v.35/5, 2003); Robert R. Werner, *Designing Strategy: Scenario Analysis and the Art of Making Business Strategy* (Praeger, 2004).

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Scheduling

Scheduling is the allocation of resources over time to perform a collection of tasks, while taking all constraints into account, so that input demands are met in a timely and cost-effective manner. Most typically, this involves determining a set of activity start and end times, together with resource assignments, which satisfy all temporal constraints on activity execution, satisfy resource capacity constraints, and optimize some set of performance objectives to the extent possible. The result of scheduling is a schedule, which can be defined as a plan with reference to the sequence of and time allocated for each item or operation necessary to its completion. For example, time is the scarcest resource and scheduling could help us making the most of a limited amount of time. Effective scheduling can lead to due date performance that results in meeting the company's customer service goals, and reducing work in process inventories and production lead times.

Scheduling has been primarily studied from a mathematical point of view in a discipline called operations research. In the last 40 years, operations research has produced over 20,000 publications about scheduling problems. From this body of research, we now understand that it is often difficult to make a single schedule for the whole task system of an organization. Therefore, the task systems are often decomposed into a hierarchically organized planning and control structure to reduce the complexity of the scheduling problem. This approach is also known as hierarchical production planning (HPP), which is characterized by detailed, direct, restricted, and sustained control on the tasks, available materials, and capacity. Besides HPP, some other useful scheduling tools include the Gantt chart, Excel, heuristics, constraint programming, (integer) linear programming, and Advanced Planning System.

There are three general models in scheduling: time-line model, order-centric model, and resource-centric model. A time-line model slices time and duration for each task, using the greatest common divisor of the activities' duration as a base. It is generally used when a resource can be described in simple terms. An order-centric model studies a chain of activities per order by assigning resources to these activities. It considers three constraints: the supplier/consumer dependencies, the resource constraints, and the transition constraints. It is generally used for an order-driven production with a small number of alternatives and simple resource constraints. A resource-centric model deals with a sequence of activities per resource, with the focus on "what the resource can process" rather than "how to satisfy the order." It is generally used when the resource constraints are complex, with nonordered production.

The classic view on scheduling is to treat it as a problem-solving activity, that is, given problem constraints and objective criteria, scheduling is to figure out how to best cover the capacity over time surface with operations. The research goal of the classic view is to specify new problems and provide new optimum solutions. However, current researchers realized that practical problems can rarely be formulated as static optimization tasks. In reality, scheduling is an ongoing iterative process situated in a larger problem-solving context in a dynamic, unpredictable environment. Thus, scheduling is an ongoing process of responding to change. Based on this observation, the research goal of the modern view is to build schedules that retain flexibility and promote localized recovery with incremental rescheduling techniques and self-scheduling control systems.

In practice, scheduling is tightly coupled with an individual, that is, the scheduler. Although there is a large variety in responsibilities and roles that are fulfilled by schedulers, it is possible to mention some common characteristics. Often, a scheduler is someone who almost naturally assumes responsibility for the progress and timeliness of tasks, regardless of formal responsibilities. This feeling of being responsible is strengthened by the fact that the scheduler is an essential source of information for many colleagues, customers, and suppliers. Usually, only a small portion of the time of the scheduler is spent on constructing an initial schedule, whereas a large portion of the time is spent on monitoring the execution of the schedule. The aim of the monitoring activities is to identify problems, which are often solved by the scheduler, using a variety of skills such as communication, negotiation, and intuition. Schedulers also try to anticipate possible problems, with varying success. Thus, many practitioners in operations management are convinced of the fact that manual scheduling is to a great extent subject to improvement.

See Also: Manufacturing Strategy; Monochronic/Polychronic; Operations Management; Optimization; Time Orientation; Working Hours.

Bibliography. M. Aarup, Monte Zweben, and Mark Fox, *Intelligent Scheduling* (Morgan Kaufmann Publishers, 1994); Kenneth R. Baker, *Introduction to Scheduling and Sequencing* (Wiley, 1974); M. I. Dessouky, N. Moray, and B. Kijowski, "Strategic Behavior and Scheduling Theory," *Human Factors* (v.37/3, 1995); V. B. Gargeya and R. H. Deane, "Scheduling Research in Multiple Resource Constrained Job Shops: A Review and a Critique," *International Journal of Production Research* (v.34/8, 1996); Nicholas George Hall, Lei Lei, and Michael Pinedo, *Supply Chain Coordination and Scheduling* (Springer, 2008); Joanna Jozefowska, *Just-in-Time Scheduling Models and Algorithms for Computer and Manufacturing Systems* (Springer Science+Business Media, 2007); Pamela M. Sanderson, "Towards the Model Human Scheduler," *International Journal of Human Factors in Manufacturing* (v.1/3, 1991); Elizabeth Szelke and Roger M. Kerr, "Knowledge-based Reactive Scheduling," *Production Planning & Control* (v.5/2, 1994).

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Schwartz Value Theory

Schwartz's value theory originated in the psychology literature and has now been used in business research as well. Based on data collected in the 1980s and 1990s from 60,000 respondents in 64 countries, Shalom H. Schwartz identified 57 items that represented 10 value types on an individual level and seven value orientations on the cultural level. The Schwartz Value Survey (SVS) avoided ethnocentric cultural bias by including questions from all world religions and all areas of the globe, including Africa and Asia.

The SVS questionnaire consists of three parts: two value lists and one list of demographic questions. The 57 value-list items are rated on how important they are for the respondent as a guiding principle in life on a scale between "0" (not at all important) and "6" (very important). Additionally, outstanding values, which are either opposed to the respondent's principles or which are regarded "of supreme importance," are scored as -1 and 7 respectively on the scale.

The basis for the value theory is that values direct people's individual choices and can be ranked in the order of importance. The 10 motivationally distinct values can be further organized around two bipolar dimensions: openness to change versus conservation and self-transcendence versus self-enhancement. This illustrates that the goals are in conflict with each other, e.g., individual versus collective goals. The 10 dimensions are defined as follows:

- Power: attainment of social status and prestige, and the control or dominance over people and resources
- Achievement: demonstrated competence in terms of what is valued by the system or organization in which the individual is located
- Hedonism: pleasure or sensuous gratification for oneself. It is derived from physical needs and the pleasure associated with satisfying them
- Stimulation: excitement, novelty, and challenge in life. Thrill seeking can be a result of strong stimulation needs
- Self-direction: independent thought and action in choosing, creating, and exploring. It comes from a need for autonomy and independence
- Universalism: understanding, appreciation, tolerance, and protection of the welfare for all people and for nature
- Benevolence: preserve and enhance the welfare of people with whom one is in frequent personal contact
- Tradition: respect, commitment, and acceptance of the customs and ideas that one's culture or religion imposes on the individual
- Conformity: restraint of action, inclinations, and impulses likely to upset or harm others and violate social expectations and norms
- Security: safety, harmony, and stability of society or relationships, and of self

Based on the above individual level values, Schwartz further identified three polar dimensions of culture:

- Conservatism (Embeddedness) versus Autonomy: The former emphasizes social relationships and tradition, while the later implies finding meaning in one's own uniqueness and being encouraged to express one's attributes. Autonomy can further be of two types: intellectual (self-direction, creativity) or affective (pursuit of stimulation and hedonism).
- Hierarchy versus Egalitarianism: legitimacy of hierarchical role and resource allocation versus transcendence of self interests and promoting others' welfare.
- Mastery versus Harmony: mastering the social environment via self-assertion (success, ambition) versus being "at peace" with nature and society. Organizations are viewed as a part of the broader social system.

There appears to be a slight overlap between Schwartz's typology and that of Hofstede. The "autonomy" in Schwartz's model appears to be synonymous with the individualism/collectivism dimension of Hofstede, whereas "hierarchy" is close to Hofstede's power distance. "Mastery" is similar to masculinity in that both emphasize goal achievement. "Harmony" and uncertainty avoidance are fairly close, and finally Schwartz demonstrated strong positive correlation between "egalitarianism" and femininity.

See Also: Confucian Work Dynamism; Culture-Specific Values; Hofstede's Five Dimensions of Culture; Individualism/Collectivism.

Bibliography. Adrian Furnham and Halldór Valgeirsson, "The Effect of Life Values and Materialism on Buying Counterfeit Products," *Journal of Socio-Economics* (v.36/5, 2007); Imm Ng, Julie Anne Lee, Geoffrey N. Soutar, "Are Hofstede's and Schwartz's Value Frameworks Congruent?" *International Marketing Review* (v.24/2, 2007); David A. Ralston, David H. Holt, Robert H. Terpstra, and Yu Kai-Cheng, "The Impact of National Culture and Economic Ideology on Managerial Work Values: A Study of the United States, Russia, Japan, and China," *Journal of International Business Studies* (v.39/1, 2008); Shalom H. Schwartz, "Are There Universal Aspects in the Content and Structure of Values?" *Journal of Social Issues* (v.50, 1994); Shalom H. Schwartz, "Evaluating the Structure of Human Values With Confirmatory Factor Analysis," *Journal of Research in Personality* (v.38, 2004); Shalom H. Schwartz, "Values and Behavior: Strength and Structure of Relations," *Personality and Social Psychology Bulletin* (v.29, 2003); Shalom H. Schwartz and A. Bardi, "Moral Dialogue Across Cultures: An Empirical Perspective," in *Autonomy and Order—A Communitarian Anthology,* E. W. Lehman, ed. (Rowman & Littlefield, 2000); Shalom H. Schwartz and A. Bardi, "Value Hierarchies Across Cultures," *Journal of Cross-Cultural Psychology* (v.32/3, 2001); Shalom H. Schwartz and K. Boehnke, "Evaluating the Structure of Human Values With Confirmatory Factor Analysis," *Journal of Research in Personality* (v.38, 2004); Shalom H. Schwartz et al., "Extending the Cross-Cultural Validity of the Theory of Basic Human Values With a Different Method of Measurement," *Journal of Cross-cultural Psychology* (v.32/5, 2001);

Guangping Wang, Wenyu Dou, and Nan Zhou, "Consumption Attitudes and Adoption of New Consumer Products: A Contingency Approach," *European Journal of Marketing* (v.42/1–2, 2008).

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Sea Piracy

Crime in the form of sea piracy is on the rise in the 21st century. A steady flow of reports in commercial journals and newspapers has reflected the increasing incidents of piracy that are burdening merchant fleets and their corporations and threatening sea resources and ecologies. Estimates of losses to piracy and maritime fraud run as high as $16 billion a year. Pirates regularly attack or attempt to board oil tankers, along with a great variety of ships, in the Malacca Strait, in the South China Sea, off the east coast of Brazil, and along the east coast of Africa, especially Somalia. Reports of other attacks include locations on the coasts of India, Bangladesh, West Africa, Haiti, Jamaica, Peru, in the Gulf of Aden, and in the Caribbean. The pirate attacks on the cruise ship *Seabourn Spirit* off the coast of Somalia in November 2005 and a French luxury yacht in 2008, as well as the Maersk cargo ship in April 2009 are reminders that no type of seagoing vessel is immune to pirates.

There are four common strategies in pirate attacks. The first involves simple theft at sea, whereby pirates board and rob the vessel and its crew, then depart with their loot, much like a typical land robbery. A second approach is to kidnap crew or passengers and hold them for ransom. A third targets the cargo in the ship's

A U.S. Navy officer watches as a U.S. helicopter surveils a cargo ship filled with Ukrainian T-72 tanks that was being held by pirates off the coast of Somalia on September 30, 2008.

hold. This may involve holding the vessel for some time while the cargo is off-loaded or transferred to another ship. The fourth is to steal the ship itself. Vessels are given new names and flags, then either sold or used to hijack cargo from unsuspecting shippers.

Among critical pirate targets have been the oil and gas tankers that form the lifeline for Japan and other east Asian states, aid vessels carrying grain and supplies in relief missions, and increasingly, cruise and other passenger ships and sailing vessels.

There are a variety of costs to this resurgence of sea crime. First, there is the human toll. Crews are killed, passengers and resort patrons have been raped and robbed, and many people have been injured. In other cases, the crews simply disappear. Second, and at a more mundane level, employees are lost. Businesses have to replace, train, and give experience to new crew members. Third, sea piracy insurance, covering crew for injuries and with compensation for families, is an increasing burden as the number of incidents rises and the abilities of pirates to attack more and larger ships in more diverse settings grow. Insurance is now more often required and the premiums are rising. Fourth, there are losses of both carriers and their cargo. Cargo, including oil, is often taken and sold in black markets that are rampant in the South China Sea region. Everything from toys to television sets to cars to packaged homes can be bought on the black market and in coastal towns in Asia and Africa. Fifth, pirates also attack pleasure boats, killing or kidnapping crew and passengers and discouraging this form of tourism. This has become a particular problem as the pirates have begun to merge with terrorist groups in southeast Asia and the Middle East.

The most critical piracy problems today are the strategic ones. These include the interruption of oil and natural gas supply lines, the disruption of food supplies, and the possible destruction of a major port facility if a hijacked oil tanker were to be exploded by terrorists.

See Also: Africa; Asia; Bangladesh; Black Market; Brazil; China; India; Malaysia; Peru; Risk; Risk Management; Smuggling; Terrorism; Transportation.

Bibliography. Eric Frécon, *The Resurgence of Sea Piracy in Southeast Asia* (IRASEC, 2008); ICC International Maritime Bureau (IMB), www.icc-ccs.org (cited March 2009); William Langewiesche, *The Outlaw Sea: A World of Freedom, Chaos, and Crime* (North Point Press, 2004); Peter Lehr, *Violence at Sea: Piracy in the Age of Global Terrorism* (Routledge, 2007); Gal Luft and Anne Korin, "Terrorism Goes to Sea," *Foreign Affairs* (v.83/6, 2004).

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Sears Holdings

Sears Holdings (Sears Holdings Corporation) is a retailing chain operating in the United States and Canada through its subsidiaries. As the parent company, Sears Holdings operates Kmart and Sears Domestic specialty retail stores (in the United States) and Sears Canada specialty retail stores. Sears Holdings was incorporated in 1916 and now employs around 330,000 people (as of January 1, 2008). Sears Holdings is an Illinois-based company, formed by the merger of Kmart Holding Corporation and Sears, Roebuck and Company in 2005. Its headquarters is located in Hoffman Estates, Illinois. Sears Holdings is quoted in the New York Stock Exchange with the ticker symbol of SHLD. It has approximately 22,000 shareholders (as of January 1, 2008).

Sears Holdings generates its revenues through three business divisions: Sears Domestic (55 percent of its revenues in 2007), Kmart (35 percent of its revenues in 2007), and Sears Canada (10 percent of its revenues in 2007). The Kmart segment operates stores that offer general merchandise, including products sold under various labels, such as Jaclyn Smith, Joe Boxer, and Martha Stewart Everyday. It also offers home appliances, including Kenmore-brand products, and groceries, as well as operates in-store pharmacies. The Sears Domestic segment operates stores that offer a range of products, including, but not limited to, consumer products, home appliances, household products, consumer electronics, casual clothing and accessories, footwear, fashion products, and beauty products in the United States and Puerto Rico. In addition, this segment provides retail-related residential and commercial product repair services. The Sears Canada segment conducts retail operations in Canada, and offers apparel and other consumer products. Thus, the company's key products and services include the following: (1) products: appliances, auto, baby, clothing, electronics and computers, fitness and sports, home products, health and wellness, jewelry, lawn and garden-related products, shoes, tools, toys and games, and flowers; (2) services: car rental, hearing aid centers, home improvement, Sears photos, portrait studio, product repair services, carpet and air duct cleaning, and garage door installation.

Sears Holdings operates 2,317 full-line and 1,100 specialty retail stores in the United States through Kmart and Sears Domestic and about 380 full-line and specialty retail stores in Canada through Sears Canada Inc. (as of February 1, 2008), in which Sears Holdings owns a stake of 70 percent as a subsidiary. Sears Holdings has numerous subsidiary companies. Some of these companies include Big Kmart, Kmart Corporation, Kmart Little Caesar's Pizza, Land's End, Orchard Supply Hardware, Sears Canada, Kmart Holding, Kmart Management, Sears brands, Sears Financial Holdings, Sears Holdings Management, Sears Reinsurance, and Sears, Roebuck and Co.

Historically, Sears Holdings was developed through two separate entities as Kmart Holding and Sears, Roebuck and Co. Kmart Holding was originally formed in Delaware in 1912, as the successor to Five and Ten Cent Stores, a company founded by S. S. Kresge in 1897. The company name changed to Kmart Holding in 1977. In 2003 Kmart and its U.S. subsidiaries and affiliates filed for Chapter 11 reorganization process in the U.S. Bankruptcy Court. Sears Roebuck was established as a mail-order business in 1886. In 1953, it formed a joint venture with the Canadian merchandising company, Simpsons, to form Simpsons-Sears (now known as Sears Canada). In 2004 Sears Roebuck acquired ownership and leasehold interest of off-mall stores from Kmart and Wal-Mart. In 2005 Kmart Holding and Sears Roebuck were merged under the name of Sears Holdings.

A strength of Sears Holdings is its differentiated products. The company offers a broad range of products through its different divisions. These wide product offerings differentiate the customer base; therefore, they serve as a market entry barrier and help Sears Holdings compete with rivals. Sears also has a balanced brand mix. By blending self-owned private labels and outside brands, Sears Holdings decreases the chance of the occurrence of unsuccessful products and balances revenue growth and margins. Also, the company's market positioning is another strength. Its strong market presence in the United States and Canada boosts revenues, enhances its bargaining power, and increases the brand image of the company.

See Also: Electronic Commerce; Target; Wal-Mart Stores.

Bibliography. Jonathon J. Bean, "Julius Rosenwald: The Man Who Built Sears, Roebuck and Advanced the Cause of Black Education in the American South," *Journal of American History* (v.94/2, 2007); David Collins and Kelley Rainwater, "Managing Change at Sears: A Sideways Look at a Tale of Corporate Transformation," *Journal of Organizational Change Management* (v.18/1, 2005); Economist, "Business: In the Wake of Wal-Mart; American Retailers," *Economist* (v.373/8402, 2004); Noushi Rahman and Alan B. Eisner, "Kmart-Sears Merger of 2005," *Journal of the International Academy for Case Studies* (v.13/4, 2007); C. Ranganathan, Analini Shetty, and Gayathri Muthukumaran, "E-business Transformation at the Crossroads: Sears' Dilemma," *Journal of Information Technology* (v.19/2, 2004); Sears Holdings, www.searsholdings.com (cited March 2009); Transportation Business Journal, "Sears Holdings Corporation: Sears.com Expands Its Online Shopping Experience With Massive New Assortment of Automotive Parts and Accessories," *Transportation Business Journal* (December 7, 2008).

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Seasonality

The term *seasonality*, by its semantic meaning, is rooted from *seasonal*, which means something that is happening or needed only at a particular time of year. That is, seasonality refers to the rise and fall in prices or in demand according to the various times of year. For example, the price of heating oil rising in winter is an effect of seasonality. Seasonality occurs in a wide range of industrial and agricultural sectors. It can be defined as a cyclical pattern that more or less repeats itself each year, and usually refers to a temporal imbalance in the demand. Seasonality also has a market characteristic in which a product or service becomes very popular for a period of a few months each year and then drops off significantly. Examples of seasonality would be Valentine's Day candy, swimming suits, winter ski chalets, or Halloween costumes.

Causes

Seasonality makes demand fluctuation occur not only yearly, but also daily, weekly, and monthly. The causes of seasonality incorporate two basic elements: natural and institutional. The first relates to regular temporal variations in natural phenomena, particularly those associated with climate (temperature, rainfall, snowfall, sunlight, and the like) and the period of the year. The second cause depends on social factors and policies concerning specific customs and legislated holidays. They include school schedules, industrial and public holidays, festivals (religious and cultural), and other events. Richard Butler added three more causes of seasonality: social pressure or fashion (e.g., taking waters at spas or hunting on country estates among the privileged elites), sporting season (e.g., snow skiing or surfing), and inertia or tradition (referring to the tendency of business operators to accept the status quo). For example, some family business owners might actually prefer to close for part of the year.

Put simply, climate or weather are generally held responsible for seasonal fluctuations in demand, but social customs, and especially holiday periods, exacerbate the tendency for summertime peaks in the Northern Hemisphere and wintertime peaks in tropical destinations. In addition to these two main factors, seasonality can also be influenced by business customs and calendar effects such as special events. The supply side is also a potential cause, such as where constraints in labor availability and the alternative uses of facilities lead to closures or altered target markets.

Much of the literature on seasonality focuses on the examination of destination-specific demand patterns and the consequent problems. Among various types of businesses, such as automotive, construction, food stores, hotels and motels, restaurants, department stores, retail stores, rental properties, and utilities, it is argued that hotels and motels, restaurants, food stores, department stores, and retail stores are most affected by seasonality. For instance, demand variability exists at a more micro level in terms of differences between midweek and weekend occupancy in business operations and between breakfast and lunch service in many hotels. Such variation has social as well as practical consequences and historically has been the justification of split shifts within the sector, itself an alleged contributory cause of alcoholism among hospitality employees. The sector also caters for extremes in demand in areas such as banqueting where demand may be occasional or erratic and where the management response is generally to employ an army of casual or agency staff as and when demand dictates.

Advantages and Disadvantages

Seasonality is often perceived negatively. Possible disadvantages include declining returns on investment and problems caused by recruiting and employing full- and part-time staff, the temporal effects related to the efficiency and the capacity of the facilities and to the management of public goods and services such as infrastructures, public safety, public health, and natural resources. Furthermore, a reduction in the quality of the services may occur because of congestion, overbooking, or saturation with subsequent reduced satisfaction level, when the demand exceeds the capacities of supply.

In addition to negative perception, seasonality can be viewed positively. For example, ecological impacts are occurring because of the concentration of visitors during the peak season at a destination. The negative effects include congested roads, disturbance of wildlife, physical erosion of footpaths, and litter problems. The off-season period provides such benefits as time for environmental reclamation and resident recovery. Moreover, some researchers argue that maintenance work on buildings or attractions is typically scheduled for the off-peak periods and supports construction jobs and specialist trades.

Seasonality of demand is typically caused by institutional and/or natural factors with the pattern usually remaining stable over many years. This predictability of seasonality makes it possible for businesses, lenders, and investors to anticipate many of its impacts as well as react to them. The literature suggests that employment, cost, and facilities are the three areas in which operations can adjust to counter seasonality. Facilities can be closed during off-peak seasons, staff can be laid off, and costs therefore can be reduced.

To lessen the impact of seasonality, some strategies are also suggested, such as (1) extending the season or introducing additional season(s) by holding some events and festivals; (2) identifying new market segments, which helps to increase demand outside the peak season; and (3) introducing a flexible pricing policy. In general, promotional pricing is effective in increasing demand over low or off-peak seasons.

See Also: Business Cycles; Consumer Behavior; Forecasting; Holidays; Hospitality Sector; Market Development; Scheduling.

Bibliography. R. Bar-On, "Seasonality in Tourism: A Guide to the Analysis of Seasonality and Trends for Policy Making," *The Economist Intelligence Unit, Technical Series* (1975); Tom Baum and Svend Lundtorp, eds., *Seasonality in Tourism* (Pergamon, 2001); R. Butler, "Seasonality in Tourism: Issues and Problems," in *Tourism: The State of the Art,* A. V. Seaton, ed. (Wiley, 1994); Miquel Clar, Juan-Carlos Duque, and Rosina Moreno, "Forecasting Business and Consumer Surveys Indicators: A Time-series Models Competition," *Applied Economics* (v.36/20, 2007); Oscar Claveria, Ernest Pons, and Raul Ramos, "Business and Consumer Expectations and Macroeconomic Forecasts," *International Journal of Forecasting* (v.23/1, 2007); Karl H. van Donselaar, Rob J. Hyndman, Ton G. de Kok, and Pim Ouwehand, *A State Space Model for Exponential Smoothing With Group Seasonality* (Monash University, Department of Econometrics and Business Statistics, 2007); Phillip G. Gould et al., *Forecasting Time-Series With Correlated Seasonality* (Monash University, Department of Econometrics and Business Statistics, 2004); SooCheong (Shawn) C. Jang, "Mitigating Tourism Seasonality: A Quantitative Approach," *Annals of Tourism Research* (v.31/4, 2004); Javier Capó Parrilla, Antoni Riera Font, and Jaume Rosselló Nadal, "Accommodation Determinants of Seasonal Patterns," *Annals of Tourism Research* (v.34/2, 2007); Robert P. Roney, *Bounded Chaos in Equity Markets: Seasonality, Information Effects and the SEC Filings* (Soenen, 2003).

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Securities and Exchange Commission

The Securities and Exchange Commission (SEC) is an independent agency of the U.S. federal government, charged with the regulation of the securities industry and its markets, and with the enforcement of federal securities laws. The Commission consists of five commissioners, appointed by the U.S. president with the approval of the Senate, and about 3,800 employees. The commissioners serve terms of five years, staggered so that a term ends every year; commissioners cannot be fired, ensuring their independence. As they are often appointed from among the ranks of Congress, no more than three of them at any given time may belong to the same political party.

The SEC was established by the 1934 Securities Exchange Act, which came amid a flurry of New Deal banking and finance legislation, and was a direct response to the stock market crash precipitating the Great Depression in 1929. A considerable body of subsequent legislation has shaped the SEC, notably 1940's Investment Company Act and Investment Advisers Act, and the Sarbanes-Oxley Act of 2002. The most recent SEC-related legislation was the Credit Rating Agency Reform Act of 2006, which redefined the Nationally Recognized Statistical Rating Organization qualifications for credit rating agencies; the new rules were implemented in June 2007.

Seven of the SEC's 18 offices are in Washington, D.C.; the remainder are regional offices throughout the country. The Commission's operations and duties are divided among four divisions: Corporate Finance, Investment Management, Trading and Markets, and Enforcement. The Corporate Finance division operates EDGAR, the Electronic Data Gathering, Analysis, and Retrieval system, accessible online by investors in search of information about publicly traded companies—who can also file complaints and tips about potential violations of securities law. EDGAR has been in use since 1996. Corporate Finance is also responsible for overseeing company transactions and disclosures. The Investment Management division monitors investment advisers and mutual funds and administers the laws related to such.

The Trading and Markets division oversees investment houses, all brokerages and securities dealers, and the self-regulatory organizations like the Financial Industry Regulatory Authority (FINRA, to which much of T&M's duties are delegated) and the Municipal Securities Rulemaking Board (MSRB).

The Enforcement division coordinates with the other divisions and all offices in the investigation of reported or suspected violations. The SEC can compel the production of documents and testimony in the course of an investigation, but lacks criminal authority. Criminal matters are referred to state or federal prosecutors, while civil actions are brought by the SEC in U.S. District Courts or administrative proceedings.

Apart from the regional offices and the SEC's main headquarters in D.C., there is the Office of the General Counsel, representing the SEC in federal appellate courts and providing legal advice to the rest of the Commission; the Office of the Chief Accountant, responsible for the accounting and auditing policies set by the Commission; the Office of Compliance, Inspections, and Examinations, conducting the Commission's general inspections; the Office of Economic Analysis, which keeps track of the costs and benefits of SEC regulations; the Office of International Affairs, liaising between the SEC and foreign powers; and the Office of Investor Education and Advocacy.

In the wake of the 2007–08 economic crisis, the SEC has been criticized for, and acknowledges, deep and multiple failures in the Bernard Madoff case. For years, Madoff operated a Ponzi scheme (paying old investors with the incoming funds from new investors) that by his own account represents a loss of at least $50 billion. Investigation of Madoff began in 1992 when a feeder fund that only invested with Madoff promised unlikely returns, but the investigation was never followed up, despite numerous tips over the years; Madoff was only finally arrested when the economic calamities of the day led to too many investors attempting to cash out, prompting a confession to family, who turned him in. In the subsequent criticism of the SEC, critics have alleged that the Commission was "too close" to Madoff, pointing out that his niece—a compliance attorney in his firm—is married to a former SEC compliance officer.

See Also: Company Profiles: North America; Financial Market Regulation; Regulation; Sarbanes-Oxley; Securitization; Stock Exchanges.

Bibliography. Barbara Black, "Should the SEC Be a Collection Agency for Defrauded Investors," *Business Lawyers* (v.63/2, 2008); Gretchen Morgenson, "Deafened by the SEC's Silence, He Sued," *New York Times* (May 28, 2006); Liz Moyer, "Could SEC Have Stopped Madoff Scam in 1992?" *Forbes* (December 2008); Joel Seligman, *The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporate Finance* (Aspen, 2003); David Serchuk, "Love, Madoff, and the SEC," *Forbes* (December 2008); K. Fred Skousen, Steven Glover, and Douglas Prawitt, *Introduction to the SEC and Corporate Governance* (South-Western College Publishing, 2004); Linda Chatman Thomsen and John W. White, *The SEC Speaks in 2008* (Practising Law Institute, 2008); United States, *Securities and Exchange Commission: Programs and Operations* (Nova Science Publishers, 2008).

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Securities Financing

Securities financing is the provision of new funds to a firm whereby the firm either sells new debt instruments or equity or some combination of both. For governments, it entails the sale of short- and long-term bonds to raise additional revenue, usually through an auction.

Methods used to carry out sales of equity or new debt differ among countries and classes of securities. The general approach can nonetheless be described in terms of broad categories that span different countries and jurisdictions, private sales, or public offerings and auctions. Securities in this context are any intangible assets the value of which is a claim to future cash accruing to the holder, referred to as an investor. They date back to the 1600s when equity was traded in Antwerp and Amsterdam. Options and futures, called time bargains then, traded on the Amsterdam bourse in 1611. Firms have always needed external funding since then. The amounts have grown bigger and the list of instruments much longer.

Payments are typically fixed for debt instruments such as bank loans and bonds issued by governments and corporations. For equity instruments, on the other hand, the issuer of the financial asset has an obligation to pay the investor on the basis of residual earnings after all investors in debt instruments have been paid their fixed amounts. Both governments and companies can obtain external funding by offering securities to a small number of investors, a given class of investors such as current shareholders of a firm or the general public. For a company, the external source can be an individual investor, a venture capitalist, an institutional investor, a corporate investor, or the public at large.

The other source of funds can be venture capitalists. A venture capital firm is a limited partnership that raises funds specifically for investment in young firms. The limited partners in such firms are often institutional investors like pension funds, bonds, insurance companies, hedge funds, or mutual funds. The firm is run by the general partners, known as venture capitalists. By being limited partners in venture capital firms, the participants are able to diversify their investments. This is in addition to benefiting from the expertise of general partners that they work with in the venture capital firm. The institutional investors can invest indirectly through venture capital or directly into private firms.

There are a variety of forms for public issues. Securities can be offered for sale at a stated fixed price or auctioned off to the highest bidder.

Initial Public Offering (IPO)

An IPO occurs when common stock offerings are issued by companies that have not previously undertaken any sales of common shares to the public. Although not a necessary condition, such public offerings are almost always listed on an organized exchange, such as the New York Stock Exchange (NYSE). IPOs are mostly motivated by the desire of firms to access a higher and more diversified array of financing options. Specifically, public offerings enable firms to reduce expenses on bank lending and enhance their ability to utilize equity as an acquisition currency. Many private firms are heavily dependent on their banks for financing. Case studies confirm that there is value in public listing. Having public funds in the end improves the firm's relationship with banks, customers, and suppliers. This is partly attributed to the dramatic increase in the flow of information about the firm as a result of going through the process of an initial offering.

With respect to acquisition, when a firm wishes to purchase an existing firm thereby exchanging shares, the purchasing firm faces a binding constraint if it is not publicly traded. Its shares are then not registered and are sold only to exempt buyers rather than to the general public. The resulting lack of liquidity in the stock renders the firm's shares unattractive as a means of financing acquisitions. Firms that intend to make extensive takeovers find it advantageous to have their shares publicly traded.

Going public entails a procedure whereby an investment banker, a firm specializing in raising capital for companies, is consulted to initiate a formal IPO process in the first instance. Second, a document is produced for the public and for registration with stock market regulatory authorities—the prospectus—disclosing pertinent information regarding the security and its issuer. During this second phase, a choice is made of the broad type and terms of the public offering, out of four different types. In a best efforts offering, the shares are sold by the investment banker by way of an agency agreement undertaken to do its best without guarantee of success, being paid an amount for each share sold. In a firm commitment offering, the investment banker or underwriter purchases the new securities from the issuer at a set price and guarantees the sale of a certain number thereof. In the case of a bought deal, an underwriting arrangement is made whereby an investment bank or group of such banks (syndicate) offers to buy an entire issue of shares from the issuer. This is often even before the preliminary prospectus is drafted. The other option is a standby or rights offering whereby common shares to investors are offered at a discount to investors who already own shares.

Regardless of the type chosen, standard underwriting clauses are included, providing the issuer the authority to issue the securities, requiring it to prepare a prospectus, preventing it from issuing any other securities while the underwriting is still under way, and obligating it to pay the underwriter. The third phase is the waiting period during which the investment banker and issuer wait for final clearance from regulatory authorities to sell the securities.

Seasoned Equity Offering (SEO)

An SEO is the offer of new shares for sale by a public company. In the event of growth opportunities that cannot be fully financed from retained earnings after an IPO, the firm returns to equity markets to put up new shares for sale. The mechanics of an SEO are essentially the same as those of an IPO. The only distinction here is that there already exists a market price for the stock so that the process of price setting and discovery is not required. The SEO takes on two forms, namely, a cash offer and a rights offer. Whereas the firm offers the new shares to all investors in a cash offer, it offers new shares only to existing shareholders in the case of a rights offer.

Auction Procedure

In auction arrangements to raise external funds used by both private firms and governments, would-be buyers make submissions of both the price and quantities in their orders. The motivation for using auctions partly hinges on the relative advantages with respect to possession of information by investors at large compared to the information the firm and its advisers may have. For companies in some industries, the most relevant source of risk and uncertainty is the general environment under which they function. In such circumstances, it is preferred to pool the views of more investors by carrying out an auction of securities. This is in contrast with the case of industries where the success of the firm depends mainly on the specialized and strategic leadership such that management is better placed to assess and value its stock. A disadvantage of the auction approach is that there may be some sensitivity of the selling price to collusion by buyers. One way to deal with this problem is to adopt a fixed-price offer for sale, whereby the seller determines the price of the securities.

In the conduct of securities auctions, participants do not have an opportunity to revise their initial bids because they get to submit sealed bids. The auctioneer determines the pricing and allocation rules, leading to a choice of auction mechanism. The most common mechanisms are the discriminatory auction and the uniform price auction. In both mechanisms, bidders are able to submit multiple bids and the securities go to the highest bidder.

In uniform-price auctions, all the winning bidders pay one price, which is the lowest winning bid price and constitutes a market clearing price. In the discriminatory auction, the winning bidders each pay the price they put in their respective bids. In the end, this is a form of discriminating monopoly where the seller allocates securities so as to enable each bidder to pay the highest price affordable until all securities have been sold off.

See Also: Debt; Debt (Securities); Financial Market Regulation; Securitization.

Bibliography. Laurence Booth and Sean Cleary, *Introduction to Corporate Finance* (Wiley, 2008); Robert F. Bruner, *Case Studies in Finance: Managing for Corporate Value Creation* (McGraw-Hill, 2007); Frank J. Fabozzi and Frank P. Jones, *Foundations of Markets and Institutions* (Prentice Hall, 2009); Frank J. Fabozzi and Vinod Kothari, *Introduction to Securitization* (John Wiley & Sons, 2008); Stewart Myers, "Financial Architecture," *European Financial Management* (v.5/2, 1999); K. G. Nyborg and S. Sundaresan, "Discriminatory Versus Uniform Treasury Auctions: Evidence From When Issued Transactions," *Journal of Financial Economics* (v.42, 1996); C. Smith, "Investment Banking and the Capital Acquisition Process," *Journal of Financial Economics* (v.15, 1986).

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Securitization

Securitization is the process of creating securities from other assets by pooling and repackaging them. Assets are combined into a pool that is split into shares, ideally structured in such a way as to reduce credit risk and improve profit, though securitized assets are indeed considerably more volatile than many other types because of the amortizing cash flows that back them and the possibility of debt-backed securities being at risk when that debt is defaulted upon.

Mortgage-based securities are a common securitized asset, their risks amply demonstrated by the subprime mortgage crisis. But the advantage is just as clear: the value of a mortgage is too large for a single investor to take on, just as a company is too large for a single investor. Pooling mortgages and dividing them into shares creates an investment opportunity as flexible as the stock market. Investment banks generally structure securitized assets, either of their own origination or more commonly on behalf of the originator.

Securitization is one of the main processes of structured finance, which has become an important part of the finance industry in the 21st century, using various financial and legal instruments to manage risk. Assets that are securitized are generally structured in other ways as well. After being pooled together, they are sold to a special trust called a special purpose vehicle (SPV), which exists for the purpose of funding and issuing the security. At that point they are generally tranched. Tranching is the diversion of cash flow from an underlying asset to the investors who own the structured notes backed by it. Tranching in turn is served through credit enhancement, in order to create a credit-rated security from unrated assets or a security with a higher rating than the average rating of the assets backing it.

Tranching is accomplished by dividing—*tranche* comes from the French for “slice”—the pool into related securities with different ratings, offered as part of the same transaction. Those with first lien on the underlying assets are the senior tranches, the least volatile and usually highest rated. Senior tranches often form part of the portfolio of pension funds and other risk-averse investment groups. Second-lien or no-lien tranches comprise the junior notes, much higher risk and appealing to high-risk/high-return investors like hedge funds and structured finance specialists.

A special type of SPV is the master trust, which is formed for the purpose of pooling credit card balances for securitization. These must be structured and handled somewhat differently from other debt-backed securities because of timing concerns; while credit card–backed securities may not mature for years, the underlying receivables pay off faster than that. Credit card–backed securities are usually structured with a revolving period (when cardholders’ payments are used to purchase receivables), an accumulation period (when payments are diverted to a separate account), and the amortization period (when payments are passed on to the investors of the notes).

Securitization began with mortgage-based securities in the 1970s, and in the 1980s was first applied to car loans, with other debt-based securities following shortly after and growing in popularity through the 1990s to become a significant part of investor activity in the 21st century. Forms of structured assets include collateralized debt obligations backed by corporate bonds or leveraged bank loans; collateralized fund obligations backed by private equity and hedge funds assets; collateralized mortgage obligations; and credit derivatives.

See Also: Collateralized Debt Obligations; Collateralized Loan Obligations; Investment Banks; Mortgage Credit Crisis of 2008; Risk; Securities Financing; Structured Notes; Subprime Loans.

Bibliography. Satyajit Das, *Credit Derivatives: CDOs and Structured Credit Products* (Wiley, 2005); Andrew Davidson, Anthony Sanders, Lan-Ling Wolff, and Anne Ching, *Securitization: Structuring and Investment Analysis* (Wiley, 2003); Frank J. Fabozzi, *Handbook of Structured Financial Products* (Wiley, 1998); Frank J. Fabozzi and Vinod Kothari, *Introduction to Securitization* (Wiley, 2008); Vinod Kothari, *Securitization: The Financial Instrument of the Future* (Wiley, 2006); Arnaud de Servigny and Norbert Jobst, *The Handbook of Structured Finance* (McGraw-Hill, 2007); Janet M. Tavakoli, *Credit Derivatives and Synthetic Structures: A Guide to Instruments and Applications* (Wiley, 2001).

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Selection

Employee selection is the process by which an organization identifies the candidate(s) in a pool of applicants who is likely to exhibit the highest performance in a specific job. Although selection practices differ widely among organizations, employee selection is one of the most important functions performed by a company because of the influence it has on the success of the organization. If organizations are incapable of attracting and selecting the most competent individuals, they will be unable to compete in an increasingly competitive global market. Because of its potential impact, an organization’s selection system should only be chosen after carefully considering the properties of each selection measure and the legal environment within which the system will operate.

Although the employment interview is the most common method of selecting employees, a number of alternative practices are also available. Among these alternatives are cognitive ability tests, personality tests, work samples (i.e., individuals perform tasks they would perform on the job), and integrity tests. An important concept to understand when choosing a selection measure is predictive validity. The predictive validity of a tool refers to the degree to which the inferences that are drawn from that test are justifiable. As an example, a valid selection test would be a good predictor of performance on the job it is used to select for.

Extensive research has been conducted on the validity of a wide range of selection tools and has generally shown that some predictors are more useful than others for hiring employees. For example, research consistently shows that cognitive ability is one of the best predictors of success for moderate to highly complex positions. The consensus among organizational researchers is that intelligent individuals are more adept at learning to perform work tasks and solving problems that arise in the work environment. However, because even the most capable individual will perform poorly if he or she is not motivated to do well, measures of personality are also commonly used.

A personality trait known as conscientiousness has been shown to be one of the strongest predictors of job performance for a variety of jobs. Conscientiousness refers to an individual's relatively enduring pattern of dependability, industriousness, and self-control. Despite the validity of conscientiousness for predicting performance in most jobs, other personality traits have been shown to predict performance in jobs where the behavioral manifestation of the trait closely aligns with the requirements of the position. As an example, extraversion (i.e., an individual's propensity to be outgoing, talkative, and to seek out social interaction) is a good predictor of performance in sales positions.

Another useful concept is the utility or practicality of a tool. Because of the cost and relative efficiency of their use, some tests may be more practical than others. For example, cognitive ability tests cost less and have higher validity than structured (i.e., standardized) interviews. In contrast, although work samples have higher validity than cognitive ability tests, they can be used with only applicants who have prior experience on the job. The testing medium can also influence the utility of an assessment. Because of the increasingly global economy, the use of unproctored internet tests is growing, providing organizations with a cheaper and more efficient method for selecting employees from multiple locations around the world. Despite these advantages, managers are concerned about the potential effects of cheating on these tests.

Choices between selection measures should also be influenced by the legal environment within which the company operates. Although there may be some similarities, each country will have a different set of laws governing hiring practices. In the United States, Title VII of the Civil Rights Act of 1964 prevents companies from discriminating against any person on the basis of race, religion, sex, color, or national origin. Subsequent court cases, and modifications to the Act in 1991, have clarified the meaning of discrimination and the responsibilities of the organization. As an example, *Griggs v. Duke Power Company* (1971) required an employer to demonstrate the validity of a selection tool if its use resulted in the disproportionate hiring of majority group members relative to a minority subgroup. With the passing of similar laws in other countries (e.g., South Africa), it is now a requirement for professionals implementing selection systems to be aware of the legal and political context in which they operate.

See Also: External Labor Market; Internal Labor Market; Legal Environments; Recruitment; Staffing Levels.

Bibliography. Jesus F. Salgado et al., "Predictors Used for Personnel Selection: An Overview of Constructs, Methods and Techniques," in *Handbook of Industrial, Work and Organizational Psychology,* Neil Anderson et al., eds. (Sage, 2001); Frank L. Schmidt and John E. Hunter, "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings," *Psychological Bulletin* (v.124/2, 1998); Ibraiz Tarique and Randall Schuler, "Emerging Issues and Challenges in Global Staffing: A North American Perspective," *International Journal of Human Resource Management* (v.19/8, 2008).

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Self-Employed Women's Association, India

The Self-Employed Women's Association (SEWA) is an association founded in 1971, and based in Ahmedabad, Gujarat, India. It was officially registered as a trade union in 1972. SEWA's founder was Ela Ramesh Bhatt. SEWA was specifically created to protect self-employed poor women, who represent that sector of the labor force that does not enjoy the same welfare benefits of other workers. In India, poor women in the unorganized sector who earn their living handling small business are estimated to be a relevant portion of the actual labor force, but they have no voice, and their dignity as well as their rights are usually not recognized. SEWA was created with the specific purpose of helping and supporting these women through several initiatives. SEWA's main purpose is to organize women workers for full employment by allowing them to buy their own means of production. SEWA is not simply a trade union, as its history clearly shows. In fact, SEWA declared itself to be a *sangam*, or combination of three movements: the labor movement, the cooperative movement, and the women's movement.

SEWA originated from the women's wings of the Textile Labour Association (TLA), which was organized in 1920 by Anasuya Sarabhai, a Gujarati woman close to Mahatma Gandhi. SEWA is still very much ideologically linked to Gandhi's spirituality, and the principles followed by its members are clearly inspired by concepts like nonviolence and nondiscrimination. The guidelines of SEWA are truth, nonviolence, integration of all faiths and all people, propagation of local employment, and self-reliance.

Despite being part of the TLA, SEWA started, since the beginning, a number of independent initiatives to favor the emancipation of poor women workers. It promoted several activities in the field of money-lending specifically designed for poor women. One of the main problems that SEWA had to face was the urgent necessity of giving credit to poor women engaged in small businesses. In the 1970s, following an agreement with the Indira Gandhi government, the Bank of India provided poor workers with credit. In spite of the government's good intentions, the agreement did not work that well in practice, as SEWA soon realized, and poor women were often cut off from the credit because of their illiteracy and incapacity of dealing with the banking system. To overcome the difficulties related to the credit system, SEWA founded its own bank in 1974. The main goal was to give financial assistance to poor, illiterate women and establish a net of microcredit to sustain their activities. The new bank responded to the practical needs of dozens of women who were in need of money to continue their own independent work. The successful experience of SEWA in Gujarat prompted its promoters and leaders to expand the activities to other Indian states.

In 1981 SEWA and the TLA split, and the former became totally independent. The deterioration of relations between the two had begun some years before, when it had become clear that SEWA's interests and goals were often in conflict with those of the TLA, which represented workers in the organized sector. Since the 1980s, the number of SEWA initiatives grew remarkably; new cooperatives were created and new services were provided. In addition, SEWA started campaigns outside Gujarat and rooted itself in many other parts of India. Nowadays, SEWA is active not only on the Indian subcontinent but also internationally, having established a number of collaborative projects with nongovernmental organizations in Asia and Europe.

See Also: Cooperatives; India; International Labour Office/International Labour Organization; Microfinance; Microfinance Institution; Nongovernmental Organizations.

Bibliography. Ela R. Bhatt, *We Are Poor but We Are So Many: The Story of Self-Employed Women in India* (Oxford University Press, 2006); Neera Burra, Joy Deshmukh-Ranadive, and R. K. Murthy, eds., *Micro-credit, Poverty and Empowerment: Linking the Triad* (Sage, 2005); Ila Patel, *Curriculum and Content of the Jeevan Shala Programme of the Self Employed Women's Association (SEWA) India* (Institute of Rural Management, 2007); Catherine A. Robinson, *Tradition and Liberation: The Hindu Tradition in the Indian Women's Movement* (Curzon, 1999); Kalima Rose, *Where Women Are Leaders: The SEWA Movement in India* (Zed, 1992); S. Selliah, *The Self-Employed Women's Association, Ahmedabad, India* (International Labour Office, 1989).

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Seoul Composite Index

The Seoul Composite Index—the Korea Composite Stock Price Index (KOSPI)—is a weighted index that reflects the price of stock on the Seoul Stock Exchange in South Korea's capital. The Korea Stock Exchange (KSE) was established on March 3, 1956, to help raise capital for companies, three years after the end of the Korean War. At that time, it was a small operation. After six years, on April 1, 1962, it was reorganized into a joint-stock corporation, and on May 8, 1963, it became a government-run, nonprofit corporation. The current Korea Exchange was created in January 2005 through a merger of the KSE, the Korea Futures Exchange, and the Korean Securities Dealers Automated Quotations (KOSDAQ). In late 2005, the Korea Exchange ranked 15th in terms of market capitalization, but ninth in terms of trading value, among the exchanges that make up the World Exchange Federation.

Although local businesses had used the KSE to raise funds, and local investors had used the South Korean stocks, it was not until January 1, 1972, that the KSE started publishing its composite stock price index for the first time. In 1975 a continuous trading system replaced the call trading system, and on January 4, 1983, the KOSPI was launched with the initial value of 100. The launching of a computerized order-routing system on February 1, 1983, helped the value of KOSPI to be published more easily. The KSE Automated Trading System launched on March 3, 1988—two days after the KSE was privatized and incorporated into a membership organization—allowed KOSPI to be published in real time.

During the 1980s, there was widespread international interest in the stocks on the exchange, partly because of the performance of the South Korean economy at the time and partly because of the increased exposure to the country in the lead-up to the 1988 Seoul Olympics. While some pundits expected the South Korean economy to boom as had the Japanese economy in the 1960s and 1970s, some foreign investors wanted to balance their investments and a group of them established the Korea Fund in August 1984, whereby money was invested in a range of shares, with good results—the shares in the fund being listed on the New York Stock Exchange. However, industrial problems in South Korea regularly led to changes in the stock prices, and the situation was often made worse by tensions along the South Korea–North Korea border. There were also queries over corruption with the chief of the stock market watchdog being arrested in June 1996 for allowing companies he favored to obtain a quick listing on the KSE. In December 1997 there were also problems when Dongsuh Securities, the fourth-largest brokerage company in South Korea, collapsed, causing the stock exchange index to reflect the lowest prices in 11 years, the market having already been battered by the effects of the Asian economic crisis in July 1997. Indeed, on June 15, 1994, the KOSPI 200 started to be published by the KSE, reflecting the prices of the major 200 companies whose stock was listed by the KSE—again, starting from a base level of 100.

To try to increase investor confidence, in June 1998 the South Korean government designated 55 companies as unviable and sought to implement regulatory changes. In September 1999 the government sought to try to reduce the power of the major industrial conglomerates—in particular the 10 largest *chaebols*—which it felt had too much influence on the stock market and the composite index. During this period, the Financial Supervisory Commission spent much of its time chasing leads to prevent fraudulent trade in shares. In May 2000 the workers on the KSE went on strike when plans were introduced to end their lunch hour, which would force brokers to eat while trading shares—some 70 percent of all investors were individuals who dealt with specific brokers.

Soon afterward, a number of other KSE indices were published including the KOSDAQ Star Index on January 26, 2004 (with the values on January 2, 2003, equaling 1,000 points), and after the establishment of the Korea Exchange on January 27, 2005, the KRX 100 was published from October 28 of that year.

See Also: Asia; Chaebol; Company Profiles: East Asia; Korea, South.

Bibliography. Don Kirk, "Korean Stocks Feel Pinch From Troubles in US," *New York Times* (October 9, 2002); Korea Exchange, eng.krx.co.kr (cited March 2009); Samuel Len, "Korean Conglomerates Remain Entrenched," *New York Times* (September 21, 1999); Samuel Len, "Korean Traders Want Their Lunch and Time to Eat It, Too," *New York Times* (May 20, 2000); James Sterngold, "Korea Boils as Economy

Cools," *New York Times* (May 11, 1990); Stephanie Strom, "Korea Puts 55 Companies on 'Death List,'" *New York Times* (June 19, 1998); Anise C. Wallace, "A Stock Fund Bets on 'the Next Japan,'" *New York Times* (September 8, 1985).

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Service Expectations

Many definitions of service are argued with a common theme of intangibility and simultaneous consumption. James Fitzsimmons defines service as a time-perishable, intangible experience performed for a customer acting in the role of coproducer. This argument suggests the importance of customers' participation in the service process. Furthermore, the term *expectation,* by its semantic meaning, is defined as the "belief that something will happen or be the case" in the *Concise Oxford Dictionary*. Thus, service expectations can be understood as customers' beliefs regarding the level of service or their desire for service.

In services, unlike in manufacturing, a distinction can be made between inputs and resources. While inputs are the customers themselves, resources are the facilitating goods, employee labor, and capital at the command of the service manager. To make service function well, there must be interaction with the customers as participants in the service process. Customers normally arrive at their own discretion and with unique demands on the service system. For customers, service is an experience occurring in the front office of the service facility, and the quality of service is enhanced if the service facility is designed from the customers' perspective. Therefore, matching service capacity with demand is a challenge.

Service expectation is also related to service quality and customer satisfaction. A. Parasuraman and his colleagues have determined that customer expectations regarding the level of service offered are associated to their level of satisfaction with the shopping experience. Comparing the perceptions of service received with expectations of service desired, customer satisfaction can be identified. When expectations are exceeded, service is perceived to be of exceptional quality, even to be a pleasant surprise. When expectations are not met, however, service quality is deemed unacceptable. When expectations are confirmed by perceived service, quality is satisfactory.

For instance, people have different service expectations of different restaurants while dining out. When customers go to a fast-food restaurant, their expectations of the level of service are rapid ordering and accurate service delivery as well as a consistency in food quality compared with their past experience. The customers would not expect wait staff to come to dining tables to ask if any further assistance is requested. However, in a fine restaurant, guests expect to be well taken care of. Put simply, the higher the expectation, the higher the service level must be for customers to feel satisfied with the service. When expectations are low, customers tend to be satisfied with low levels of service.

Five principal dimensions that customers use to judge service quality are reliability, responsiveness, assurance, empathy, and tangibles. Reliability is the ability to perform the promised service dependably and accurately. Responsiveness is defined as the willingness to help customers and to provide prompt service. Assurance is known as the knowledge and courtesy of employees as well as their ability to convey trust and confidence. Empathy refers to the provision of caring, individualized attention to customers, which includes approachability, sensitivity, and efforts to understand the customer's needs. Tangibles are the appearance of physical facilities, equipment, personnel, and communication materials. The condition of the physical surroundings is tangible evidence of the care and attention to detail that are exhibited by the service provider. For example, a dust-free dining room gives the impression and implication of a high level of hygiene in the kitchen.

Understanding what consumers expect from a service organization is important because expectations provide a standard of comparison against which consumers judge an organization's performance. That is, service expectations serve as a salient reference point to customers when evaluating the current consumption experience or as equated to "predictions" of service quality.

Various studies have been conducted to incorporate the determinants of service expectations. It is suggested that customers formulate their expectations on the basis of a number of sources: advertising, firm image, implicit and explicit promises, past experience with the firm and its competitors; personal needs; personal background in terms of education, values, and so forth, and communications with friends as well as word of mouth. That is, expectations account for all the information present before, during, and/or after a service encounter.

Thus, these attributes can be categorized into four dimensions: (1) what customers have experienced in the past (i.e., past experience); (2) what customers have been told about the service provided by others (i.e., communications with friends and word of mouth); (3) what customers' personal needs are (i.e., personal needs in both mental and material forms); (4) what service providers have communicated to customers (i.e., advertising, firm image, and implicit and explicit promises).

Previous research studies suggest that customer service experience is influenced rationally and emotionally by functional clues (technical quality), mechanical clues (sensory and presentation), and human clues (behavior and appearance of service personnel). They advocate that designing and managing these clues is a critical management responsibility.

With expectations serving as a prediction of future events, they are also described in terms of desired (i.e., "should") or ideal (i.e., "will") standards, normative expectations of future events. Various possible levels of service expectations, from low to high, can be listed as minimum tolerable expectations, acceptable expectations, experience-based norms, normative should expectations, ideal expectations.

Compared to will expectations, which are associated with specific transactions and are therefore transient, the ideal/should standard exhibits much more stability over time, reflecting the way things "ought to be." In other words, will expectations stand for the minimum level of service a customer will accept, which normally are the lowest or adequate service expectations. On the contrary, should expectations represent the highest or desired service expectations, which customers believe service providers can and should be delivered.

Separating the desired service level (i.e., should service expectations) from the adequate service level (i.e., will service expectations) is a zone of tolerance. The zone of tolerance expands and contracts like an accordion. It can vary from customer to customer and, potentially, from one situation to the next for the same customer. The literature suggests that customers' adequate service expectations seem to be influenced more by specific circumstances, the number of service alternatives, for example, and are therefore more changeable than their desired service expectations. Thus, if customers perceive that they have alternative service providers, their zone of tolerance is likely to be smaller than if they do not feel they have this flexibility. When customers' options are limited, they take the best they can get. Their expectations are not necessarily lower, but their tolerance level is higher.

To understand customer service expectations, a careful study is needed. Surveys, focus groups, evaluation forms, and market research are all useful approaches to obtaining a better understanding of

Service expectations, such as quick, free shipping from online retailers, are influenced by a company's overall image.

expectations. Some practical techniques to collect and listen to customer service expectations include transactional surveys; mystery shopping; new-, declining-, and lost-customer surveys; focus group interviews; customer advisory panels; service reviews; customer complaint, comment, and inquiry capture; total market surveys; employee field reporting; employee surveys; and service operating data capture.

In addition to the awareness of service expectations, another big challenge is to actually meet these expectations. Five service imperatives, including define the service role, compete for talent (and use it), emphasize service teams, go for reliability, and be great at problem resolution, are suggested in relevant literature.

To conclude, service expectations play an important role in achieving high customer satisfaction. Service expectations are changeable from customer to customer or from time to time. Service providers need to constantly investigate and observe their customers' expectations for service by applying various survey methods. Useful information to improve service quality is collected not only from customers themselves but also from the competitors. Finding the gap between service expectations and perceived service determines the quality of services and enhances customer satisfaction.

See Also: Consumer Needs and Wants; Consumer Surveys; Market Research; Quality; Service Level.

Bibliography. Sunmee Choi and Anna S. Mattila, "Perceived Controllability and Service Expectations: Influences on Customer Reactions Following Service Failure," *Journal of Business Research* (v.61/1, 2008); James A. Fitzsimmons and Mona J. Fitzsimmons, *Service Management: Operations, Strategy, Information Technology* (Irwin, 2007); A. Parasuraman, Leonard Berry, and Valarie A. Zeithaml, "Understanding Customer Expectations of Service," *MIT Sloan Management Review* (v.32/3, 1991); A. Parasuraman, Valarie A. Zeithaml, and Leonard Berry, "SERVQUAL: A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retail* (v.64/1, 1988); V. Ann Paulins, "An Analysis of Customer Service Quality to College Students as Influenced by Customer Appearance Through Dress During the In-store Shopping Process," *Journal of Retailing and Consumer Services* (v.12/5, 2005); Kien-Quoc Van Pham, "U.S. and European Frequent Flyers Service Expectations: A Cross-Cultural Study," *Business Review* (v.6/2, 2006); Martin Reimann, Ulrich R. Luenmann, and Richard B. Chase, "Uncertainty Avoidance as a Moderator of the Relationship Between Perceived Service Quality and Customer Satisfaction," *Journal of Service Research* (v.11/1, 2008).

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Service Level

The concept of a service level balances the clients' expectation of immediate service fulfillment and the imperative of loading the capacity of service providers to meet the objectives by means of accounting figures. The basic problem is simply illustrated by a stochastic process of upcoming service orders, for example, customers arriving at a supermarket checkout or inbound telephone calls arriving at a call center. The process of service requests is usually a Poisson process, or if different qualities of services are considered, a multivariate Poisson process.

The number of operators who are active in a time unit determines the costs as well as the capacity of the system. If the operators are busy when a new service request arrives, the client has to wait for the service. The service level expresses the percentage of clients who do not have to wait longer than a given threshold: the acceptable waiting time. The arrival rate of service calls in the system is called λ (intensity of the Poisson process), and β is the intensity of handling and providing the service ($\beta = \mu^{-1}$).

The simplest system is modeled by an Erlang-C system. If there is an average of one call per time unit (i.e., on average, one customer enters the checkout zone of a hypermarket in a minute): $\lambda = 1$, the checkout takes about six minutes: $\beta = 1/4$, and if, in this example, there are six checkouts serving the customers, one would expect that none of the customers has to queue at the checkout, because the capacity is 90 customers per hour, but only 60 are arriving. However, the arrival process is a random process, and therefore the time intervals between the customers' arrivals are not fixed. Assume the waiting period of 30 seconds would be acceptable to the customers.

Solving this Erlang system mathematically now yields the interesting result that only a fraction, 78 percent of the clients, will get the service within the 30 seconds. Thus, the service level is 78 percent.

Defining an appropriate service level is relevant in various management tasks. The design of physical service systems is straightforward, for example, checkouts in retail outlets or check-ins at airports. A more prominent application domain is the configuration of information processing systems. For instance, database retrieval might be acceptable within 20 to 30 seconds, in the case of a hotel booking system or a flight reservation system. However, in the control of hospital intensive medical care, a response is needed within fractions of a second. Beyond these technical applications, human resource planning of many companies should be governed by the aim of reaching the appropriate service level. In outsourcing projects, mutual signing of a service level agreement (SLA) is common practice. During the negotiation of these projects, the partners discuss service level requirements (SLR), which address the same contents, but are not noncommittal contractually.

The service level has advanced to one of the most assessed aspects of service quality in technical disciplines, and has recently been receiving increasing attention in general management studies. This can be traced back to three modern management developments:

- The dominance of the service process perspective in the redesign of business process literature at the end of the 1990s: For instance, the balanced scorecard concept of Robert Kaplan and David Norton, which has been widely adopted in business practice, is grounded in the idea of separating business processes and assigning process responsibilities to individual employees.
- The ascendancy of supply chain management systems in business practice and research literature: The service level enables defining quality criteria for the replenishment of all kinds of physical goods at the point of sale. Criteria based on service level are superior to criteria concerning the periods of out of stock in a wide range of scenarios.
- The paradigm shift in marketing science: Starting with the seminal contribution of Stephen L. Vargo and Robert F. Lusch in 2004, marketing scientists, practitioners, and consultants are reconfiguring their marketing strategies and related performance metrics. The core contribution of Vargo and Lusch highlights the relevance of services rather than the products in conventional marketing mix management. Consequently, the service level advances to a key concept for deriving quantitative performance metrics for this innovative marketing gestalt.

The mathematical formalism to calculate the service level is implemented in standard business process software systems, such as SAP.

However, the concept of the service level has a serious drawback: No further information concerning the not-served clients is derived. Here, the critical question is their *actual* waiting time in addition to the *accepted* waiting time. More sophisticated performance metrics are derived from the stochastic Erlang model, but their adoption is restricted to technical applications.

Another problem is the determination of an appropriate service level. This task is comparatively easy in the replenishment application, if strategic goals are neglected. In this case, the costs of increasing the service level need to balance the profits from additional sales in an accounting calculus for determining the optimal service level. If additional strategic goals are considered, for example, differentiation from competitors by means of service offers, calculations are more complicated.

See Also: Call Center; Consumer Needs and Wants; Marketing; Outsourcing; Service Expectations; Supply Chain Management.

Bibliography. Brad Cleveland and Julia Mayben, *Call Center Management on Fast Forward: Succeeding in Today's Dynamic Inbound Environment* (Call Center Press, 1997); Andrew Hiles, *E-Business Service Level Agreements: Strategies for Service Providers, E-Commerce and Outsourcing* (Rothstein Catalog on Service Level Books, 2002); Robert S. Kaplan and David P. Norton, *The Balanced Scorecard: Translating Strategy Into Action* (Harvard Business School Press, 2008); Ger Koole, *Redefining the Service Level in Call Centers* (Vrije Universiteit, 2003); Management Advisory Services & Publications Consulting Group, *How to Prepare Service Level Agreements (SLAs) for Application Service Pro-*

visioning (ASP): Checklists and Guidelines (Management Advisory Services & Publications, 2001); John McConnell and Eric D. Siegel, *Practical Service Level Management: Delivering High-Quality Web-Based Services* (Cisco, 2004); Rick Sturm, Mary Jander, and Wayne Morris, *Foundations of Service Level Management* (Sams, 2003); Stephan L. Vargo and Robert F. Lusch, "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing* (v.68/1, 2004).

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Settlement Date

Settlement date, also known as delivery date, is the final date by which the parties involved in a trade must complete the transaction. The designated date itself varies with the type of assets being traded. For illustration, we consider futures contracts and foreign exchange settlements, which are adequately representative.

A futures contract is an agreement between a buyer and a seller whereby the buyer undertakes to receive delivery of something at a specified price at the end of a designated period of time. The seller undertakes to make delivery of the "something" at a specified price at the end of the designated period. At entry into the contract, no one actually buys or sells anything. The parties' undertakings are all with reference to a future date. The price at which the parties agree to transact is called the futures price, while the designated date is the settlement date. The "something" the parties undertake to exchange is called the underlying asset. An investor agreeing to buy at a future date is said to have taken a long position, while one agreeing to sell will have taken the corresponding short position. Regardless of the positions taken, futures contracts typically have settlement dates in March, June, September, or December.

In practice, most futures contracts entered into do not culminate in the delivery of the underlying asset because many of them are closed out early. For those that do, however, the decision as to when to deliver is made by the party with the short position. After the decision, the investor's broker issues a notice of intention to deliver to the exchange clearing house. The notice specifies the number of contracts to be delivered, and when the underlying assets are commodities, it also specifies the location of the delivery and the grade of commodities. A party with a long position is then chosen by the exchange to accept delivery. The usual rule is to pass the notice of intention to deliver to the party with the oldest outstanding long position. There are three important days with respect to delivery. The first notice day is the first day on which notice of intention to deliver can be submitted to the exchange. The last notice day is the last day for the submission. The last trading day is typically several days before the last notice day.

In foreign exchange trades, the settlement date refers to the maturity date of a forward contract in currency. Foreign exchange transactions have both a trade date and a settlement date. The settlement date, also called the value date, is the forward banking (business) day common to both countries. On this day, parties to the transaction make currency payments with the expectation that they will receive the full amount that they are entitled to receive. Settlements in currencies can be made only on banking days. Bank holidays do not coincide in all countries, so some precision is required in fixing value dates.

Traders in foreign exchange settle according to standardized conventions. For a spot transaction in the interbank market, delivery and payment between banks usually take place on the second business day. Forward exchange rates, on the other hand, are normally quoted for value dates of one, two, three, six, and 12 months. Other arrangements for a different number of months can be made.

On the value date, most dollar transactions in the world get settled through the computerized Clearing House Interbank Payments System (CHIPS) in New York. There are four settlement dates for all foreign exchange futures traded on the International Monetary Market (IMM), a division of the Chicago Mercantile Exchange. They also apply to those traded on the Finance Instrument Exchange (FINEX), a division of the New York Board of Trade. The dates are the Wednesday following the third Monday of March, June, September, and December.

See Also: Clearing House Automated Payment System; Clearing House Interbank Payment System; Clearing Houses; Forward Market; Futures Markets.

Bibliography. Frank J. Fabozzi et al., *Foundations of Financial Markets and Institutions* (Prentice Hall, 2002); Gabriele Galati, "Settlement Risk in Foreign Exchange Markets and CLS Bank," *BIS Quarterly Review* (December 2002); John C. Hull, *Options, Futures and Other Derivatives* (Pearson Wiley/Prentice Hall, 2009); John W. McPartland, "Foreign Exchange Trading and Settlement: Past and Present," *Chicago Fed Letter* (v.223, 2006).

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Shanghai Composite Index

The Shanghai Composite Index is an authoritative set of statistical indicators adopted by domestic and overseas investors in measuring the performance of the Chinese security market. The Shanghai Stock Exchange (SSE) Indices are price indices including the SSE 180 Index, SSE 50 Index, SSE Dividend Index, SSE New Composite Index, SSE Composite Index, Sector Index, SSE Fund Index, SSE Government Bond Index, and SSE Corporate Bond Index. The SSE Composite Index is the earliest one compiled.

The Shanghai Composite Index includes all listed stocks at the SSE. It includes A shares and B shares. The base day for the SSE Composite Index was December 19, 1990. The base period is the total market capitalization of all stocks on that day. The base value is 100. The index was launched on July 15, 1991. Companies are weighed according to their size in terms of market capitalization (calculated as the total number of outstanding shares multiplied by the market price per share). Market capitalization represents the total market value of all companies listed on the exchange.

The SSE New Composite Index comprises listed stocks that have completed split-share reform. The base day for the index was December 30, 2005. The index was launched on January 4, 2006.

The SSE 180 has made major improvements in methodology by taking China's current financial market situation into consideration and integrating international experience. Thus, the index represents the Shanghai market situation and forms a performance benchmark index. The SSE 50 is an index of good-quality and large-scale stocks. The SSE Government Bond Index and the Corporate Bond Index were launched in 2003. Thus, SSE Indices reflect overall price changes of stocks listed at the SSE from different perspectives. They provide investors with benchmark systems for different investment portfolios.

There are two major stock exchanges in mainland China: the SSE and the Shenzhen Stock Exchange. Both offer A shares and B shares of common stock issued by Chinese companies. B share listings all carry the same rights as A share listings and receive the same dividends. A shares are restricted to China's citizens residing on the mainland and are denominated in renminbi (RMB). B shares were initially restricted to non-Chinese nationals. In February 2001, the Chinese government allowed Chinese residents to purchase B shares. B shares are not convertible to A shares and are traded in U.S. dollars in the Shanghai stock market. The Chinese authorities allow dividends and capital gains from B shares to be sent abroad. Foreign securities houses can serve as dealers of B shares and if they are designated as qualified foreign institutional investors (QFIIs), they are allowed to trade and invest in A shares. QFIIs are foreign financial institutions that meet certain requirements and are permitted to invest in local currency and use the specific accounts investing in the local securities markets.

With the exception of the stock exchange in Hong Kong, the SSE is the largest stock exchange in China. It is based in the city of Shanghai, with a market capitalization of almost US$3 trillion in 2007. The number of listed companies is around 900 and the SSE is fifth largest in the world. Daily average turnover in 2006 was US$54 billion. Total turnover for stock was around US$8 trillion in 2006. In conclusion, the SSE Indices have become an indicator of China's economy. The current exchange is directly managed by the China Securities Regulatory Commission. Trading hours are 9:30 A.M.–11:30 A.M and 1 P.M.–3 P.M., Monday through Friday.

The Shanghai Securities Exchange began to operate in December 1990. From a base of 100, the Shanghai Composite Index reached 1,500 in February 1993, but fell to 340 in July 1994, possibly as a result of the implementation of company law in July 1994, whereby listed companies must provide financial and nonfinancial information to the public and false disclosure constitutes a criminal offense. The Composite Index reached 1,258 on December 12, 1996, and the

The Shanghai Stock Exchange, based in this building, is the second-largest stock exchange in China after Hong Kong's.

daily transaction value increased to US$2 billion on the Shanghai market, which was larger than the Hong Kong market at that time. The index rose again in February 1997 and reached a record high in April 1997. It seems that the Chinese stock market was not influenced by the financial crisis in East Asia that began in summer 1997. Government intervention in the stock market halted the rise in mid-1998. In mid-1999, state-owned enterprises were allowed to buy their own shares on the market, thus there was a sharp rise in the index for two months. In early summer 2001, the government started checking the source of the funds invested by firms on the stock market and the price collapsed.

See Also: China; Hang Seng Index.

Bibliography. Joshua Seungwook Bahng and Seung-myo Shin, "Do Stock Price Indices Respond Asymmetrically?: Evidence from China, Japan, and South Korea," *Journal of Asian Economics* (v.14/4, 2003); Thomas C. Chiang, Edward Nelling, and Lin Tan, "The Speed of Adjustment to Information: Evidence From the Chinese Stock Market," *International Review of Economics & Finance* (v.17/2, 2008); Eric Girardin and Zhenya Liu, "The Chinese Stock Market: A Casino With 'Buffer Zones?'" *Journal of Chinese Economic and Business Studies* (v.1/1, 2003); Ming-Ming Lai and Siok-Hwa Lau, "The Profitability of the Simple Moving Averages and Trading Range Breakout in the Asian Stock Markets," *Journal of Asian Economics* (v.17/1, 2006); K. Thomas Liaw, *Investment Banking and Investment Opportunities in China* (Wiley, 2007); Shanghai Stock Exchange, "SSE Indices," www.sse.com.cn (cited March 2009); Steven Shuye Wang and Michael Firth, "Do Bears and Bulls Swim Across Oceans? Market Information Transmission Between Greater China and the Rest of the World," *Journal of International Financial Markets, Institutions, and Money* (v.14/3, 2004); C. K. Xu, "The Microstructure of the Chinese Stock Market," *China Economic Review* (v.11/1, 2000); Hongquan Zhu et al., "Causal Linkages Among Shanghai, Shenzhen, and Hong Kong Stock Markets," *International Journal of Theoretical and Applied Finance* (v.7/2, 2004).

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Shareholder Activism

Shareholder activism is the proactive attempt by equity investors, usually large financial institutions, to change some aspect of firm behavior or governance. While the goals of activist shareholders vary, they primarily revolve around monitoring and attempting to bring about changes in firms believed to be pursuing goals that are not shareholder wealth maximizing. The move to shareholder activism, especially in the United States during the 1990s, is arguably an outcome of the weakening of an active market for corporate control in the 1970s and 1980s through anti-takeover stratagems and legislation, modifications in executive remuneration schemes and the requirement for shareholder approval, and changes in the attitudes and motivations of traditionally passive institutional investors. Shareholder activism can take any number of forms, but typically includes proxy battles, publicity campaigns, shareholder resolutions, litigation, and negotiations with management.

The fundamental basis for shareholder activism, and one reason for the apparently wide variation in activity around the world, is differences in corporate governance mechanisms. In the Anglo-American model (exemplified by the United States, United Kingdom, and Australia), corporate governance emphasizes a well-developed stock market, strong investor protection, substantial disclosure, and arms-length banking relationships. In contrast, the Germany-Japan model (prevalent in Germany and continental Europe, Japan, and parts of Asia) assigns a greater role to long-term manager-investor and firm-bank relationships, concentrated ownership, and cross-shareholdings among firms and between firms and financial institutions. The latter clearly favors entrenched management and leaves little room to maneuver for independent activist shareholders.

Motivation

The primary motivation for shareholder activism rests on the principal-agent relationship between shareholders and firm managers arising from the separation of ownership and control. Assuming that managers are rationally interested in furthering their own ends, the central problem for shareholders is how to motivate the managers to act in shareholders' interest, not their own; typically, in terms of shareholder wealth maximization. A variety of mechanisms provides incentives for managers in this regard. First, the market for corporate control disciplines managers to better shareholder interests or risk their position because of the hostile takeover of an underperforming firm. Second, the market for managerial talent entails incentive compensation in the form of stock options and performance-related pay. Last, the active monitoring of management decisions in compliance with shareholder wealth maximization. Primarily, this is through the firm's board of directors, but also institutional and block shareholders, and indirectly through banks and other debt holders. If any or all of these mechanisms break down or are compromised, shareholder activism may take place.

The question naturally arises that if a firm is underperforming in terms of shareholder wealth maximization, why do investors not simply sell their shares ("vote with their feet") and avoid the anticipated information gathering and legal costs associated with shareholder activism. While institutional investors especially engage in some monitoring of the firms they invest in by analyzing financial and strategic statements, and occasionally meeting with and questioning management, to go beyond and try to control management (by acting directly to influence the structure, processes, or decisions of the board) would appear to be prohibitively expensive in relation to the potential return. One answer lies in the notion of exit and voice and the influence of two types of information. The first type of information, speculative or value-neutral information, is backward looking and has no direct bearing on the firm's future decisions. Holders of this information will have little incentive to attempt to monitor and control the firm and may choose exit as a cost-effective means of coping with poor performance.

The second type, performance or value-enhancing information, is information that bears on the optimal wealth-maximizing course of action for the firm and is naturally forward looking. Investors with this information may engage in active monitoring and attempt to exert control, formally through the composition of boards or voting at general meetings, or informally through shareholder activism if denied avenues are more formal. For these investors, the anticipated benefits of activism outweigh the costs, especially in investor-focused governance systems that increasingly provide a variety of cost-effective means to discipline management. Concomitantly, in recent decades the proportion of firm ownership held by institutional investors (especially pension, mutual, and hedge funds) has steadily increased, reducing the free-rider effect of monitoring, and making it harder for block investors to deal with problems simply by selling because of investment illiquidity and the impact on market value.

While the primary motivation of shareholder activism is economic, nonfinancial concerns may also compel investors. These may include disinvestment from countries with a record of human rights abuses, the adoption of environment- and labor-friendly policies, and the avoidance of particular products or services, like tobacco, alcohol, gambling, uranium, and weapons. Thus, at least some episodes of shareholder activism link with the broader push toward socially responsible investment—investment strategies that attempt to maximize both financial return and social good, primarily practiced by socially responsible mutual funds. These efforts may include initiating conversations with management on issues of concern, submitting and voting on proxy resolutions, and engaging in publicity campaigns that bring together similarities of interest held by shareholders and other stakeholders.

Proposals

Shareholder activism in the United States currently employs two main approaches. These are presenting (or threatening to present) a shareholder proposal on a corporate governance issue, and petitioning the firm's managers or board of directors to achieve a change in management or strategy. For the former, the most common proposals concern the removal of poison-pill provisions and staggered board terms, the abolition of share classes (so that all ordinary shares have the same voting rights), separating the positions of chairperson and chief executive officer (CEO), making shareholder voting confidential, and other antitakeover measures, along with proposals to sell the company.

In the United States, shareholder proposals are typically under Securities and Exchange Commission (SEC) Rule 14a-8—Proposals of Security Holders. This entails a recommendation or requirement that the company and/or its board of directors take action after approval at an annual or special meeting of shareholders. If the proposal is on the company's proxy card, the company must provide proxy means for shareholders to choose between approval or disapproval (or abstention). To be eligible to submit, the shareholder must have continuously held at least $2,000 in market value or 1 percent of the company's securities for at least one year before the date of submission of the proposal. The company may exclude the proposal, however, for the following reasons. It would cause the company to violate law, it employs false or misleading statements, it entails a personal grievance or special interest not shared by other shareholders, is not significantly related to the company's business, or the proposal deals with a matter concerning ordinary business operations. The main advantage of this approach is that the shareholder can avoid the expense of making a proxy statement and soliciting its own proxies; the main disadvantages are the limits applying to the types of proposals made and that proposals must be submitted at least six months before the meeting.

CalPERS

Perhaps the earliest and most well-known example of institutional shareholder activism in the United States is the California Public Employees Retirement System (CalPERS). CalPERS—the largest public pension fund in the United States with assets totaling more than $235 billion and some 1.5 million members—set in place an organized program of institutional shareholder activism with the establishment in 1984 of the Council of Institutional Investors (CII), an umbrella organization for U.S. institutional investors. Membership of this body now includes more than 140 public, union, and corporate pension funds with combined assets in excess of US$3 trillion, with members using proxy votes, shareholder resolutions, and pressure on regulatory bodies, discussions with companies, and litigation to change firm governance.

CalPERS itself compiles a list of focus firms each year from the fund's internal portfolio where it has concerns with their stock and financial performance and corporate governance practices. It uses a variety of mechanisms to screen the nearly 2,000 U.S. corporations initially assessed, including long-term stock performance and economic value-added (EVA). For example, the five focus firms selected in 2008 (11 firms in 2007 and 6 in 2006) comprised Standard Pacific Corporation, La-Z-Boy, Invacare Corporation, Hilb Rogal & Hobbs Company, and Cheesecake Factory Incorporated. CalPERS highlights its particular concerns with the focus firms in fact sheets made publicly available on the fund's Web site. For instance, La-Z-Boy (with 7 percent of market capitalization held by CalPERS) was targeted for severe stock underperformance relative to the market and industry benchmarks, deteriorating trends in revenue growth and operating margins, and a lack of board accountability for permitting a classified or "staggered" board structure (arguing that annual elections for directors provided greater accountability for shareholders). However, under pressure from CalPERS, the firm had already agreed to remove supermajority voting requirements and adopt a majority vote standard for director elections.

Investment Funds

While early efforts at activism, like the CalPERS focus list, focus on governance issues more broadly by attempting to make the market for corporate control work better, recent efforts have aimed to intervene directly in strategic decision making and the selection of company managers. These include specialist engagement funds targeting a small number of relatively poorly performing firms where governance or strategic change could conceivably improve shareholder value. Indeed, CalPERS itself was an early investor in one of these funds, Relational Investors, in 1996. Other activist investment funds include Icahn Management, Santa Monica Partners, and Opportunity Fund.

Unlike the broader activism exemplified by CalPERS and the CII where the low exposure to individual firms brings with it a sizable free-rider problem, the engagement fund approach increases exposure (and hence the return from any improvement) to the targeted investment. Probably the most well known of these funds is the Hermes UK Focus Fund (HUKFF) established as a joint venture between Hermes (the British Telecom Pension Fund) and the U.S.-based LENS Fund. HUKFF takes significant positions (about 5 percent) in a small number of underperforming companies (four to eight each year) it believes it can successfully engage with, expecting to receive at least 20 percent more value than the current share price (after which it divests). For the most part, HUKFF's engagements include the sale of noncore divisions of diversified firms and the sale of noncore assets or the stopping of diversifying acquisitions. In nearly half of its engagements, HUKFF has been involved in replacing the CEO and/or chairperson.

Influence

Notwithstanding the variation in investor motivations, one empirical question is whether shareholder activism actually improves firm performance, for which an emerging body of evidence is now available. An important qualification is that in many instances, firms targeted for shareholder activism may also have high levels of institutional ownership, and as evidence already exists that these firms also have relatively higher performance, the impact of shareholder activism itself may be confused with an institutional investor effect. Putting this aside, several studies have attempted to find a link between contemporaneous and lagged firm performance (as measured by abnormal returns or the return on equity or assets) and instances of shareholder activism. One possibility is to consider those firms targeted by CalPERS or the CII in their focus lists. Nevertheless, current evidence is ambiguous with no clear indication of an improvement in future firm performance or in the current stock price.

Exactly why performance postshareholder activism does not improve is unclear, but more than one study has suggested that the different measures of firm performance in different studies may account for the wide variation in results. Another complication is that they invariably draw their sample firms from firms targeted through shareholder proposals and other readily visible forms of activism. This ignores the fact that shareholder activism can take subtler, less-public forms like in-person meetings with the CEO and board members. A final difficulty is the wide variation in the characteristics of the activism. For instance, even with shareholder proposals, we could compare and contrast confrontational versus nonconfrontational episodes, shareholder proposals augmented with attention by the media, and proposals by shareholders with the minimum legislated criteria of ownership to more substantial minority shareholders.

However, there is strong evidence that shareholder activism influences the actual behavior of firms with studies finding an increase in assets sales, spin-offs, company restructuring, and employee layoffs. This body of work has also found that successful shareholder proposals aimed at removing takeover defenses are associated with an increase in takeovers. This is consistent with the hypothesis that shareholder activists target firms already considered for takeover and that the episode of activism signals the market that existing shareholders are open to a takeover offer. More recently, hedge funds have been considered, with the finding that hedge fund activists target more profitable and financially healthy firms than other activists (with most prior studies on pension fund activism almost always finding that they are more likely to target poorly performing firms). The results of this body of work suggest that activists employ similar screening mechanisms, but that hedge fund activists target different types of companies.

See Also: Board of Directors; Corporate Governance; Corporate Social Responsibility; Investor Protection.

Bibliography. Anat R. Admati and Paul Pfleiderer, *The "Wall Street Walk" and Shareholder Activism: Exit As a Form of Voice* (Graduate School of Business, Stanford University, 2007); Bernard Black, "Shareholder Activism and Corporate Governance in the United States," in *The New Palgrave Dictionary of Economics and the Law,* vol. 3 (Macmillan, 1998); Alon Brav, Wei Jiang, Frank Partnoy, and Randall Thomas, "Hedge Fund Activism, Corporate Governance, and Firm Performance," *Journal of Finance* (v.63/4, 2008); Thomas Briggs, "Corporate Governance and the New Hedge Fund Activism: An Empirical Analysis," *Journal of Corporation Law* (v.32/4, 2007); Diane Del Guercio and Jennifer Hawkins, "The Motivation and Impact of Pension Fund Activism," *Journal of Financial Economics* (v.52/3, 1999); Fabrizio Ferri and Tatiana Sandino, *The Impact of Shareholder Activism on Financial Reporting and Compensation: The Case of Employee Stock Options Expensing* (Division of Research, Harvard Business School, 2007); Stuart L. Gillan and Laura T. Starks, "Corporate Governance Proposals and Shareholder Activism: The Role of Institutional Investors," *Journal of Financial Economics* (v.57/2, 2000); Harvey J. Goldschmid, *Shareholder Activism: Finding the Balance* (Practising Law Institute, 2007); Michael Smith, "Shareholder Activism by Institutional Investors: Evidence From CalPERS," *Journal of Finance* (v.51/1, 1996); Jean Tirole, *The Theory of Corporate Finance* (Princeton University Press, 2006).

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Siemens

Siemens, a multinational German electrical engineering conglomerate, was founded by the German entrepreneur Werner von Siemens in 1847. The company from the outset demonstrated an orientation toward commercialization of inventions and internationalization of operations. From a traditional power engineering and communications engineering business, Siemens AG extended its portfolio to medical and infrastructure businesses. Siemens, by virtue of its transformation from a small workshop to a global player, has become a prominent representative of the "Made in Germany" brand.

In its more than 160-year history, internationalization has been an essential part of Siemens's corporate business strategy. With a business portfolio encompassing products, systems, and services for the energy, industry, and healthcare sectors, Siemens has positioned itself as a solution provider in more than 190 countries worldwide. The company's inventor and research concentration is evident in the enormous number of ground-breaking inventions, for example, the new technology of telegraph (1846), a gutta-percha press (1847), the discovery of the dynamo-electric principle (1866), the construction of a telegraph line between London and Calcutta (1870), the building of Europe's first underground rail line (1896), and the first metropolitan automatic telephone exchange (1909). By early 2008, Siemens had registered a total of 50,750 patents.

The Rise of a Global Player

Following his invention of a pointer telegraph, Werner von Siemens, together with Johann Georg Halske, formed the Telegraphen-Bauanstalt von Siemens & Halske in 1847. One year later, the newly founded company received a major contract from the Prussian government to build a telegraph line between Berlin and Frankfurt/Main. Despite the success of the early years, the company had a few poor years until new orders from Russia and Britain arrived. In Russia, Siemens & Halske began to install a telegraph network reaching from Finland to the Crimea. In Britain, the company commenced the production and laying of submarine cables. But the overseas activities did not stop here; in the 1860s, Siemens & Halske was contracted to construct a telegraph line between London and Calcutta. The significance of this project lies not only in the prestige of such a large-scale project, but also in the time-space compression of a world that had just begun to globalize. Telegrams between Great Britain and India now took only one hour. In the years that followed, Siemens & Halske opened foreign agencies in all of its focus markets.

World Wars I and II resulted in the expropriation of most of Siemens's foreign subsidiaries and patent rights, the collapse of its markets, and the loss of capital. The postwar years were dominated by the rebuilding of Siemens's manufacturing capabilities and its business abroad. As Siemens acknowledges today, the company's total workforce in late 1944 included approximately 50,000 forced laborers. By the end of the war, four-fifths of the company assets, according to Siemens, had been lost and destroyed.

In 1966 Siemens & Halske AG, Siemens-Schuckertwerke AG, and Siemens-Reiniger-Werke AG merged to form Siemens AG. The new company was divided into six independent operating groups, that is, Components, Data Systems, Power Engineering, Electrical Installations, Medical Engineering, and Telecommunications, plus five central departments. In the early 1990s, further restructuring measures took place. The organization was now split up into 15 smaller operating units. The following years saw expansion into the Asia-Pacific region, acquisitions in Germany and overseas, and on March 12, 2001, the listing of Siemens on the New York Stock Exchange. Further organizational restructuring into six major business groups was undertaken: Automation & Control, Power, Transportation, Medical, Information & Communication, and Lighting.

In more recent years, Siemens has been shaken by corruption scandals resulting in the reorganization of its business into three sectors (energy products, infrastructure, and healthcare) with a total of 15 divisions, business units, and the reduction of the advisory board. The new Siemens chief executive officer, Peter Löscher, the first president in Siemens's history to be appointed from outside the company, committed himself on the occasion of the company's 160th anniversary to the tradition of "the House of Siemens" and to the legacy of Werner von Siemens, which he described as "a tradition of strength."

See Also: Germany; Technology; Transportation.

Bibliography. Thomas H. Davenport and Gilbert Probst, *Knowledge Management Case Book: Siemens Best Practises* (Publicis Corporate, 2002); Wilfried Feldenkirchen, *Werner von Siemens: Inventor and International Entrepreneur* (Ohio State University Press, 1994); Great Britain House of Commons—Committee of Public Accounts, *BBC Outsourcing: The Contract Between the BBC and Siemens Business Service* (The Stationery Office, 2007); Great Britain National Audit Office, *PPP in Practice: National Savings and Investments Deal With Siemens Business Services Four Years On* (The Stationery Office, 2003); Jürgen Kocka, *Unternehmensverwaltung und Angestelltenschaft am Beispiel Siemens, 1847–1914: Zum Verhältnis von Kapitalismus und Bürokratie in der deutschen Industrialisierung* [Organization Management and Employees. A Case Study of Siemens, 1847–1914: About the Relationship of Capitalism and Bureaucracy in the German Industrialization] (Klett-Cotta, 1969); Henry Loewendahl, *Bargaining With Multinationals: The Investment of Siemens and Nissan in North-East England* (Palgrave, 2001); Peter Löscher, "'A Tradition of Strength,' 160 Years of Siemens," *SiemensWorld,* special ed. (2007); Alan MacCormack, *Siemens Sharnet: Building a Knowledge Network* (Harvard Business School Publishing, 2002); B. Van Dorp, *Creating New Wealth at Siemens Information and Communication Solutions: A Graduation Thesis About Intrapreneurship and New Business Development* (Erasmus Universiteit, 2002).

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Silent Language of Hall (Nonverbal Communication)

First published in 1959, *The Silent Language* is a book written by the American anthropologist Edward T. Hall. Drawing on research into variations in communication processes across different cultures, Hall argued that people communicate not only through words, but also through an array of behaviors—or "silent languages"—that are outside the range of most people's conscious awareness. He identified a number of such languages, including the languages of time, space, material goods, friendship, and agreements, and demonstrated how these differed from culture to culture.

Different cultures have different approaches to time. In the United States, for example, time is considered to be linear, sequential, and rational. People in such cultures tend to be very precise about timing: they schedule their day-to-day activities in detail, they attach importance to keeping appointments, they take deadlines seriously, and they are concerned about delays. In other cultures, such as France, people conceive of time in a more fluid and elastic manner. The members of such cultures take a less strict view of time. They attach less precision to scheduling and place less importance on postponement or delay.

Cultures also vary in the way they use space. For example, Hall argued that different cultures have different norms governing social distance, understood as the distance at which people naturally stand from each other. For example, standing at a close distance may seem normal and sociable to the Japanese, but intrusive and uncomfortable to Americans. Cultures also differ in the use of spatial positioning to denote rank or power. In Japan, for example, delegations of managers are commonly arranged with great precision so that their positioning indicates each manager's relevant rank. In delegations of American managers, by contrast, spatial positioning conveys little information about rank. Such spatial arrangements can be frustrating for the Japanese, who are unable to infer rank from physical position.

The importance attached to material goods also differs across cultures. Hall observed that Americans tend to place emphasis on material possessions and the accumulation of goods, using, for example, clothes, automobiles, and houses to ascertain each other's status. In the workplace, American firms commonly denote power and prestige through the use of material possessions: a corner office, a larger desk, a company car, and a salary that is very large compared to other members of the organization. Other cultures attach less importance to material goods. In Japan, for example, senior managers tend to share a large, open-plan office with little distinction in their physical surroundings, and their salaries tend not to vary greatly from those awarded to more junior staff members. In continental European companies, pay scales are more compressed than in the United States, again reflecting a lower importance attached to material goods as an indication of status.

Hall argued that cultures differ in the ways in which their members develop and maintain friendships. In some cultures, friendships are made relatively easily. For example, visitors to the United States commonly state that they make friends quickly and easily, but that their friendships are often transitory and without the depth or endurance of friendships in their home countries. By contrast, cultures that attach little importance to material possessions may be matched by greater emphasis on personal relationships. People are known not by what they own, but rather by their place within a social network of family and friends. As a result of this emphasis on relationships, friendships may take a long time to develop; once developed, however, they tend to be very durable, involving a strong sense of reciprocal obligation.

Hall also observed significant variations in how members of different cultures express agreement and disagreement. In countries such as France, agreements are based on trust and may be consummated with a handshake and only a brief statement. In the United States, by contrast, agreements tend to be explicit and spelled out in writing; this view is captured by the American saying "a verbal contract is not worth the paper it is written on." Likewise, the norms of expressing agreement and disagreement may vary widely during the process of negotiations that lead up to an agreement. The members of some cultures tend to voice their dissent quite readily: American managers, for example, do not hesitate to identify terms that are unacceptable or conditions that must be met for an agreement to be reached. The members of other cultures tend to avoid direct confrontation, and instead use subtle cues to express disagreement. Rather than openly saying that a proposal is unacceptable, a Japanese manager might suggest only that the proposal "may be difficult" or that "it raises some concerns."

As Hall continued his research, he observed common patterns in the ways that people socialized in different cultures using these five different languages: he noted that some people tended to communicate in a relatively explicit fashion, while others communicate effectively with much more implicit information. Drawing on these findings, Hall proposed a distinction between what he called "high context" and "low context" cultures.

See Also: Context; Culture-Specific Values; Monochronic/Polychronic; Space; Status; Time Orientation.

Bibliography. Richard W. Brislin and Eugene S. Kim, "Cultural Diversity in People's Understanding and Uses of Time," *Applied Psychology* (v.52/3, 2003); Edward T. Hall, *The Hidden Dimension* (Doubleday, 1966); Edward T. Hall, *The Silent Language* (Anchor Books, 1990); Edward T. Hall and Mildred R. Hall, *Understanding Cultural Differences* (Intercultural Press, 1990).

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Simulation Modeling

We are all familiar with scale models, which represent the salient features of the scheme being studied. Typical examples would be the day-to-day operations of a financial institution, an office or factory, or the performance of a share portfolio. Of necessity, the model will be a simplification. Typically the model is employed to predict the effect that changing inputs to the system can have on the outputs. While the model should mimic the real system, its complexity should not be a barrier to its interpretation. It is sensible to commence with a very simple basic model and to progressively increase its difficulty. At each stage, the model should be checked for its validity: are the outputs as expected? The simulation approach is adopted in contrast to a formal analytic approach that would give a purely theoretical solution. While the analytic approach may be more reliable and numerically more complex, it does lack flexibility, but with relative ease, additional factors may be "bolted on" to the model to be simulated.

Simulation is also referred to as the Monte Carlo simulation, stressing its obvious links to the gambling casinos in the Monegasque resort, and in particular the roulette wheel, a very accessible (hopefully) random number generator.

At the outset it must be appreciated that this approach has its foundations in probability and statistics. When building a model, you identify the key variables (both input and output) that are central to the problem being studied. Any variable that can be measured and that can take on different values, such as the value of an equity portfolio over a given number of years, is commonly referred to as a random variable. Having built what is essentially a mathematical model, the simulation stage may commence. This should clarify how the variables are interrelated. For example, the expected return on an equity portfolio in 12 months time is clearly not known with certainty, although we will know the historic returns that have been achieved. The simulation may be performed with specialist software or the facilities within popular brands of spreadsheets. Models can be developed for a variety of scenarios. A deterministic model has fixed values as both inputs and outputs (the outcome is predictable given specific initial conditions); while for a stochastic model, at least one of the input or output variables follows a probability distribution. A further level of complexity is introduced by considering the temporal relationship between the variables. Most simulation models encompass the stochastic and time-dependent properties of the system. The probability structure that is normally created is called the distribution function; it shows the frequency with which the random variable actually takes specific values within a certain range. It is this function, via its cumulative equivalent, that lies at the root of the simulation.

The simulation phase is the repeated operation of the constructed model. The model may be rapidly adjusted to address a series of scenarios, which would be prohibitively expensive in terms of time and/or resources in the real system being modeled. The results will indicate how the actual system is likely to perform. While in reality a system cannot be tested to destruction, extreme situations may be investigated via the model. In particular, results representative of long periods of time may be investigated.

In an ideal world, a model is built and simulation employed before commencing a new project or modifying an existing system. If we invest in increased marketing for our product, can we cope with the volume of new clients? Where might the existing systems fail to cope? Simulation is a very good technique when you need to bring together a lot of data and probabilities. Normally, software solutions are used to handle this. Indeed, with both the simulators themselves and computer capacity having grown, it is now possible to undertake very large simulations comparatively easily. However, even in large systems you will normally see that the simulation has converged by the time you have done a few thousand simulations, although more can readily be conducted if required.

See Also: Auditing Standards; Decision Making; Information Systems; Management Research; Management Science.

Bibliography. Stephan L. Campbell, Jean-Philippe Chancelier, and Ramine Nikoukhah, *Modeling and Simulation in Scilab/Scicos* (Springer E-Books, Springer Science + Business Media, Inc., 2006); Joel Hagan and William Slack, *Employing Organizational Modeling and Simulation to Reduce F/A-18E/F F414 Engine Maintenance Time* (Naval Postgraduate School, 2006); James H. Harrington and Kerim Tumay, *Simulation Modeling Methods* (McGraw-

Hill, 2000); Manuel Laguna and Johan Marklund, *Business Process Modeling, Simulation, and Design* (Pearson Prentice Hall, 2005); Averill M. Law and W. David Kelton, *Simulation Modeling and Analysis* (McGraw-Hill, 2006); Johnathan Mun, *Modeling Risk Applying Monte Carlo Simulation, Real Options Analysis, Forecasting, and Optimization Techniques* (Wiley, 2006); Michael J. North and Charles M. Macal, *Managing Business Complexity: Discovering Strategic Solutions With Agent-Based Modeling and Simulation* (Oxford University Press, 2007); Stuart Robinson, *Simulation: The Practice of Model Development and Use* (Wiley, 2004); Asim Abdel Rahman El Sheikh, Abid Al Ajeeli, and Evon M. O. Abu-Taieh, *Simulation and Modeling: Current Technologies and Applications* (IGI Publications, 2008).

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Singapore

The Republic of Singapore was established in 1965, and it is one of the few remaining city-states in the world. After independence, Singapore soon became a highly developed market-based economy. Singapore is the 17th-wealthiest country in the world in terms of gross domestic product (GDP) per capita (US$39,952), and has foreign exchange reserves of US$176 billion (eighth in the world). Singapore is also the world's fourth-largest foreign exchange trading center (after London, New York City, and Tokyo) and is the financial center of southeast Asia. Because of its superior location, historically the economic activities of Singapore revolve entrepot trade. Singapore is one of the busiest ports in the world in terms of tonnage shipped (second after Shanghai). Among all the industrial goods, manufacturing goods are the most important, including biomedical sciences, chemicals, electronics, mechanical engineering, and petroleum refining. In recent years, the government has directed Singapore toward a service economy that emphasizes innovation, entrepreneurship, and cultural business. The transformation is ongoing.

Singapore is an island nation located at the southern part of the Malaysian peninsula, and is 707.1 sq. km. It is separated from Indonesia by the Singapore Strait in the south, and from Malaysia by the Johor Strait in the north. Singapore is in a tropical rainforest climate zone, so there is no clear difference in climate between the seasons. The Singaporean climate is characterized by high temperature, high humidity, and abundant rainfall.

Singapore has a population of 4,588,600, and its population density is 6,489 per sq. km, which is the fourth highest in the world. Today, 78 percent of the Singaporean population are Singaporean residents, which include Singaporean citizens and permanent residents. Among Singaporean residents, the Chinese form 75 percent, Malays form 14 percent, and Indians form 9 percent. At the time Singapore declared its independence, the government chose English as the administrative language in addition to the three official languages: Mandarin (Chinese), Malay, and Tamil. This choice proves helpful in terms of increasing the internationalization of Singapore and smoothing tension between the ethnic groups. Blended with the local dialects, the form of English most spoken by Singaporeans is a localized hybrid form known as Singlish ("Singapore English"). Most of the rest of the population is composed of foreign laborers, who are involved in both high-end and low-end economic activities, thus contributing to Singapore's status as the financial and business center of southeast Asia.

Singapore has long been an important port because it controls the Strait of Malacca, which connects shipping between Asia and Europe. In 1819 Sir Thomas Stamford Raffles landed on the main island and soon realized the military and commercial potential of Singapore. He managed to sign a treaty with Sultan Hussein Shah on behalf of the British East India Company to develop Singapore as a British trading post and settlement, and this entails the island's modern era. Singapore was the most important stronghold of the British Empire in southeast Asia until World War II. From 1942 to 1945, Singapore was occupied by the Japanese. Although it reverted to British rule after the war, the locals began to seek autonomy. After years of struggle, Singapore merged with Malaya, Sabah, and Sarawak to form Malaysia in 1963. Because of ethnic tension, Singapore split from the federation to become an independent republic in 1965 and subsequently joined the United Nations in the same year.

Singapore is a parliamentary democracy. The cabinet, whose head is the prime minister, has the bulk of executive powers. The office of the president of

A street market in Singapore. With its mixed population of Chinese (75 percent), Malays (14 percent), and Indians (9 percent), Singapore's authoritarian government has taken measures to ease ethnic tension.

Singapore has historically been a ceremonial one. Politics in Singapore have been controlled by the People's Action Party (PAP) since self-governance was attained. Singapore is thus criticized as a one-party state, illiberal, or procedural democracy. Nevertheless, the Singaporean government is often praised as the most efficient and incorruptible government in the world.

Lee Kwan Yew, one of the leaders in the pursuit of Singapore's independence, became the first prime minister in 1959. During his term from 1959 to 1990, his administration successfully transformed Singapore from an island with limited natural resources to a highly developed market-based economy, and became one of the Four Asian Tigers, along with Hong Kong, South Korea, and Taiwan. Goh Chok Tong succeeded Lee as prime minister in 1990. His administration tackled the impacts of the 1997 Asian financial crisis, the 2003 severe acute respiratory syndrome (SARS) outbreak, and terrorist threats after the 9/11 attacks. In 2004, Lee Hsien Loong, the eldest son of Lee Kwan Yew, became the third prime minister. His notable decisions are the plan to open casinos to attract more tourists, the plan to cultivate entrepreneurship and innovative industry in Singapore, and the plan to adjust Singapore's competitive position according to the rise of China and India.

See Also: Asia; Asian Tigers; British East India Company; Indonesia; Malaysia.

Bibliography. Henri C. Ghesquière, *Singapore's Success: Engineering Economic Growth* (Thomson, 2007); Tian Wah Goh, *Handbook for Businessmen: Doing Business in Singapore* (Rank Books, 2007); Huo Nig and Heng Chey, "The Making of State: Business Driven Public Spaces in Singapore," *Journal of Asian Architecture and Building Engineering* (v.6/1, 2007); Hitendra Patel and Eduardo Chakarian, *The State of Innovation at Firm Level in Singapore: Findings, Recommendations, and Case Studies* (SNP Reference for Institute of Policy Studies, 2008); George T. L. Shenoy and Wee Ling Loo, *Principles of Singapore Business Law* (Cengage Learning, 2009); Pearlin Siow, *Boss of Me!: The Pocketbook of Big Thinking: 20 Power Secrets to Remember as Shared by Singapore's Movers and Shakers* (Armour, 2008); Kenneth Paul Tan, *Renaissance Singapore? Economy, Culture, and Politics* (National University of Singapore Press, 2007); Yatila A. Wijemanne, *Legal Mechanisms Most Effective in Attracting Foreign Direct Investment by Multinational Enterprises: A Comparative Case Study of Sri Lanka and Singapore* (Stamford Lake, 2007); Belinda Yuen, "Sport and Urban Development in Singapore," *Cities* (v.25/1, 2008).

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Single Market

A single market is a common market between member states where barriers have been removed to enable free movement of goods, services, capital, and labor. These barriers may take various forms including physical borders, product standards, national laws and regulations, fiscal taxes, and foreign discrimination. There are elements of a single market in various custom unions or free trade areas in Asia (Association of Southeast Asian Nations [ASEAN]), South America (Mercosur/Mercosul), and the Caribbean (Caribbean Community and Common Market [CARICOM]). However, the closest example of a single market is the European Union (EU).

The European Single Market

The European single market has its origins in the 1951 Treaty of Paris, which created the European Coal and Steel Community, and the 1957 Treaty of Rome, which abolished all internal barriers to the free movement of goods, services, capital, and labor. In 1958, the European Economic Community was formed with the vision of creating a common market among six member states over a 12-year transition period (Belgium, France, Germany, Italy, Luxembourg, and the Netherlands). The common market required common external tariffs among member states and the elimination of internal tariffs within those member states. In 1968 this objective was achieved. The Treaty of Rome also called for the elimination of nontariff barriers including the harmonization of product standards and indirect taxes, ban of public purchasing discrimination, ban of cartel practices that restricted competition, ban of state aid that created unfair competitive advantages, and regulation of state trading monopolies that discriminated against imports. Finally, the treaty banned discrimination based on nationality, established the Common Agricultural Policy, the Common Transport Policy, and the Common Commercial Policy for trade with nonmember states. Although the original Treaty of Rome did not envisage a monetary union for the common market, in 1972, at a summit meeting in Paris, the Community endorsed the creation of the Economic and Monetary Union to be achieved by 1980.

In the 1970s and 1980s, both trade and nontrade barriers still remained, hindering the progression of the common market. Concerned about Europe's lack of international competitiveness during a period of increasingly globalized markets, the Community viewed further trade integration as the path to future economic prosperity and job creation. These concerns led to the discussion and culmination of the 1985 White Paper on the Single Market Programme (SMP). The SMP focused on completing the single market by removing the remaining physical, technical, and fiscal nontariff barriers by 1992. Also known as the Single European Act of 1986, this program was the most ambitious target the Community ever set for itself and one of its greatest achievements.

The provisions of the Single European Act increased the Community's powers to make laws based on the qualified majority of the Council of Ministers. However, fiscal matters still remained outside the Community's powers. This provided the Community with the power to harmonize national laws, thereby eliminating obstacles to the free movement of goods, services, capital, and labor. Vast legislation programs to expand the single market were adopted in the areas of the environment, research, and social policy. Specifically under the Treaty of Rome's Economic and Social Cohesion, the Community was committed to improving regional disparities. In 1992 the Maastricht Treaty, which officially created the EU, included a provision that member states that fail to comply with the Court of Justice are subject to financial penalties thereby making the EU's laws more binding.

In subsequent years, the EU focused on improving the integration of the single market, and in 2004 it embarked on enlargement. The single market welcomed 10 new member states from eastern Europe with an additional two eastern European states following in 2006, bringing the EU to a total of 27 member states (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom). The accession of these states provided the single market with a larger pool of consumers and a wider range of opportunities leveraging member states' comparative advantages. However, it also brought challenges with increased tensions among member states on migration flows, tax competition, and service markets.

The single market has made significant progress on the free movement of goods, services, capital, and labor since its inception in 1951. Border controls on goods and customs controls on people have been abolished within the EU. Many products benefit from the mutual recognition of national rules, which allows a product legally manufactured in one member state to be marketed in any other member state. Worker mobility has been improved based on mutually recognizing member states' educational diplomas and certain professions. A partial alignment in national value-added tax rates has enabled tax barriers to be reduced and public contracts are open to bidders from any member state.

See Also: Common Market; Customs Union; Economic Integration; European Union; Maastricht Treaty; Markets; Regional Integration; Treaty of Rome; Western Europe.

Bibliography. Iain Begg, "Commentary: The Single Market," *National Institute Economic Review* (April 1998); Commission of the European Communities, *From Single Market to European Union* (Commission of the European Communities, 1992); Commission of the European Communities, *The Single Market and Tomorrow's Europe: A Progress Report From the European Commission* (Office for Official Publications of the European Communities, 1996); Jörg Decressin, Hamid Faruqee, and Wim Fonteyne, *Integrating Europe's Financial Markets* (International Monetary Fund, 2007); European Commission, Directorate-General for Economic and Financial Affairs, *Economic Evaluation of the Internal Market* (European Commission, 1997); European Commission, Directorate-General for Economic and Financial Affairs, *Steps Towards a Deeper Economic Integration: The Internal Market in the 21st Century: A Contribution to the Single Market Review* (European Commission, 2007); Forfás, *Review of the European Single Market* (Forfás, 2008); Georg Menz, *Varieties of Capitalism and Europeanization: National Response Strategies to the Single European Market* (Oxford University Press, 2008); Peter Sutherland, *The EU Single Market Implications for Globalisation* (National Europe Centre Australia, 2003); Zhang Xin-An, Nicholas Grigoriou, and Li Ly, "The Myth of China as a Single Market: The Influence of Personal Value Differences on Buying Decisions," *International Journal of Market Research* (v.50/3, 2008).

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Sinopec

Built upon the former China Petrochemical Company, Sinopec Corporation was founded in 1998. Sinopec Corporation is a publicly listed company in which 68 percent interest is held by Sinopec Group (Sinopec). With its headquarters in Beijing, China, Sinopec is a state-owned enterprise (SOE) of the Chinese government. After two decades' development, Sinopec has become one of the largest petroleum and petrochemical companies in Asia and ranks seventh in the world.

Sinopec is an integrated energy and chemical company with upstream (exploring for crude oil and natural gas), midstream (producing refined oil), and downstream (producing petrochemical products) operations. It comprises more than 80 subsidiaries and branches in six business sectors: oil and gas exploration, refining, chemicals, marketing, research and development (R&D), and foreign trade. The formats of these companies include wholly owned, equity holding, and equity sharing. As the largest Chinese petrochemical company, Sinopec's business assets and operations are mainly located in the east, south, and middle of China, the most well-developed areas and dynamic economic zones in China.

In the fast-developing petroleum market in China, Sinopec has firmly grasped the opportunities and grown rapidly. As the most recognizable brand in the Chinese petrochemical market, Sinopec's competitive advantages are reflected in its brand reputation, leading market position in China, and its emphasis on technological innovation. In addition to Sinopec's internal strengths, operating in the petroleum and petrochemical industry, the highest economic growth area in China, has facilitated Sinopec's development.

As the largest producer and distributor of petrochemical products in China and Asia, Sinopec's record of growth has been strong. In 2006 its output of crude oil of 40.17 million tons and natural gas of 7.27 billion cubic meters made it the second-largest producer of crude oil and natural gas in China. As the key provider of energy in China, Sinopec keeps refineries running at full capacity and guarantees a stable supply for the domestic oil product market. Since its foundation, Sinopec has ensured its leading market position in the Chinese petrochemical market. In 2005 Sinopec ranked first in the top 500 Enterprises of China and 17th in the Fortune Global 500 in 2007, up from its rank of 23rd in 2006.

Listing on the stock exchange markets was a milestone in the history of Sinopec's development. In October 2000 and August 2001, Sinopec Group issued H-shares and A-shares in both overseas and home stock markets in New York, London, Hong Kong, and Shanghai. By 2007 Sinopec had a total of 86.7 billion shares, 75.84 percent of which is held by Sinopec Group, 19.3 percent by foreign investors, and 4.81 percent by domestic investors in China.

In addition to its strong brand and leading market position, Sinopec has successfully promoted technological innovation throughout its business. To maintain its cost leadership market position, Sinopec has been insisting on innovation as one of its core values. Since its foundation, Sinopec has established six research institutions and invested a vast amount of resources to sustain its technological competitive edge. Sinopec's R&D team provides the requisite technology and knowledge and applies them to its production and operations. By the end of 2005, Sinopec held 5,466 valid patents. In 2007 the company applied for 905 domestic patents and 122 foreign patents, of which 677 were granted.

Additionally, China's continuing economic growth and huge domestic demand for oil and petrochemical products puts Sinopec in a more favorable market position than other industries in China. Compared with two decades ago, China's economic growth has witnessed remarkable changes. Consequently, the Chinese petroleum and chemical industry has rapidly developed. In 1993 domestic demand for gasoline, kerosene, and diesel was 7,600 million tons. This figure increased to 1.6 billion in 2007. Experts predict that by 2010, China's domestic demands will increase to 1.89 billion tons. Undoubtedly, the market demands in petroleum and chemical products in China created business opportunities for Sinopec in the past and will bring more opportunities for it in the future.

See Also: China; China National Petroleum; State-Owned Enterprises.

Bibliography. Z. S. Chu, "Marketing Development Is the Natural Choice of the Chinese Petroleum Industry Reform," *Securities News* (June 6, 2008); Wang Jun, "Gasoline Supplier Sinopec," *Beijing Review* (v.51/10, 2008); Sinopec, *Sinopec Annual Report (2007)*, www.english.sinopec.com (cited March 2009); L. M. Wang, "Analysis of the Chinese and Foreign Petroleum Market Trends Under the Pressure of High Oil Price," *International Petroleum Economics* (v.15/12, 2007); L. M. Wang, "The World Energy Outlook 2007," *International Petroleum Economics* (v.15/11, 2007).

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SIOP

The Society for Industrial and Organizational Psychology, Inc. (SIOP), a professional society, is the Division 14 of the American Psychological Association (APA) and an organizational affiliate of the Association for Psychological Science (APS). SIOP's Administrative Office is located in Bowling Green, Ohio, in the United States.

I-O psychology focuses on how people behave in organizations, particularly the workplace. A society of more than 7,300 members internationally and from across the globe with representation from academic, practitioner, and corporate sectors, SIOP's mission is to "enhance human well-being and performance in organizational and work settings by promoting the science, practice, and teaching of industrial-organizational (I-O) psychology." To accomplish this, SIOP supports its members in their efforts to study, apply, and teach I-O psychology; provides forums for I-O psychologists to exchange research, insights, and information; identifies opportunities for expanding and developing the science and practice of I-O psychology; monitors and addresses challenges to the understanding and practice of I-O psychology; promotes the education of current and future I-O psychologists; and promotes public awareness of the field of I-O psychology.

SIOP's roots date back to 1892 with the founding of the American Psychological Association (APA). In 1937 members of several applied groups, including APA's clinical section, formed the American Association of Applied Psychology (AAAP). Section D, Industrial and Business, was one of four sections within AAAP. In 1945 AAAP, APA, and the Society for the Psychological Study of Social Issues merged and reorganized as the APA. AAAP Section D became APA Division 14, Industrial and Business Psychology. In 1962 "Business" was dropped from the name, and in 1973, "Organizational" was added, and Division 14 became the Division of Industrial and Organizational Psychology. To establish some independence from APA, in 1982 Division 14 incorporated as the Society for Industrial and Organizational Psychology, Inc.

Organization and Membership

SIOP operates on a budget of $1.8 million annually. Its organizational structure consists of an executive committee composed of a president, president-elect, past president, five representatives to APA, financial officer/secretary, and eight portfolio positions. SIOP also has several standing committees (Fellowship, Membership, Election, Program, Program-APA, Program-APS, Scientific Affairs, Professional Practice, Education and Training, The Industrial-Organizational Psychologist (TIP), Workshops, Long-Range Planning, State Affairs, Awards, Organizational Frontiers Series, Professional Practice Series, Society Conference, Historian, Ethnic Minority Affairs, Placement and APA/APS Relations). The presidential seat is transferred at SIOP's annual conference. The SIOP Foundation provides financial support for the advancement of I-O psychology.

Membership in SIOP is open to Fellows, Members, and Associates of APA and Fellows and Members of the American Psychological Society, Canadian Psychological Association (CPA), and European Association of Work and Organizational Psychology (EAWOP). SIOP is affiliated with both APS and APA, and its members can join either. SIOP has experienced growth of membership over the years, growing from 5,841 members in May 2001 to more than 7,300 members in January 2009. The two largest sectors for membership employment in 2006 were colleges and universities (39 percent of members) and private sector consulting organizations (22.9 percent). Members with the highest annual income were employed in the pharmaceutical industry.

Publications and Events

SIOP also creates, publishes, and distributes numerous publications to its members and the I-O psychology community. Managed by the SIOP Administrative Office, *The Industrial-Organizational Psychologist* (TIP) is a quarterly publication that provides members news, reports, and noncommercial information related to I-O psychology. *Industrial and Organizational Psychology: Perspectives on Science and Practice* (IOP) is a quarterly journal organized with two focal articles on a specific I-O issue followed by peer-reviewed responses and then replies from the focal article authors. The first issue was distributed in March 2008. Also created in the SIOP Administrative Office, *SIOP Newsbriefs* is e-mailed to members monthly and presents deadlines, activities, and announcements. SIOP also publishes two book series: Organizational Frontiers and the Professional Practice Series.

In addition to its publications, SIOP organizes two large events each year. Since 1985, SIOP has hosted a conference in a different city every spring. The conference, which took on a 3-day format in 2008, includes hundreds of peer-reviewed sessions highlighting I-O psychology research, practice, and theory. In 2008, 4,069 registrants visited the conference from 45 countries. SIOP's Leading Edge Consortium also takes place in a different city every year. The consortium takes an in-depth look at a specific topic that is on the leading edge of I-O psychology. The event averages 200 attendees.

SIOP's Web site, www.siop.org, offers information on all of these publications and events as well as SIOP's online store PubHub, membership directory, media resources, consultant locator services, a job/resume board (JobNet), and other sources of information on I-O psychology.

See Also: Academy of International Business; Employer–Employee Relations; Leadership; Management Science; Multicultural Work Groups and Teams; Work/Personal Life Balance.

Bibliography. Ruth Kanfer, Gilad Chen, and Robert D. Pritchard, *Work Motivation: Past, Present and Future* (Hove: Psychology, 2008).

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SK

SK is a leading family-owned business conglomerate, called a *chaebol*, in South Korea. It was transformed into a holding company system in 2007. Its member companies are involved in many businesses including petroleum, chemicals, and telecommunications; SK Energy and SK Telecom are the two main companies. They have increasingly paid attention to foreign markets and, in particular, SK Energy takes the initiative in securing sources of energy.

SK is the third-largest chaebol and has 64 member companies with assets of 72 trillion Korean won (some US$72 billion) as of April 2008. Originated from a textile company in 1953, SK has since been controlled by the Choi family, and recently governed by Tae-Won Choi, a member of the second generation, who became the owner in 1998 and the group chairman in 2004. The number of member companies has rapidly increased from 16 in 1987 to 32 in 1993 and then to 62 in 2002, standing at 64 in 2008, the second largest among the 30 largest chaebols.

SK adopted a holding company system in 2007. The central company in SK had been SK Corporation, which, founded in 1962, manufactured petroleum and chemical products and also acted as the holding company. This company was divided into SK Holdings and SK Energy in July 2007; the former, the holding company, took over the shareholding function with the life science business, while the latter took over all the other manufacturing businesses. In December 2007 SK Holdings had seven "son" companies, including SK Energy, SK Telecom, SK Networks (trading), and SK E&S (natural gas), which had 16 "grandson" companies. Meanwhile, SK E&S, formerly SK-Enron and a holding company from 2000, itself had 10 son and one grandson companies. In all, 35 of 57 member companies were organized into the holding company system, which is to be developed into a fully fledged one by mid-2009. SK Holdings supervises its subsidiaries and owns the "SK" brand, which replaced "Sunkyoung" in 1998. The company is under full control of Tae-Won Choi: he is a representative board member and the chief executive officer in both SK Holdings and SK Energy, and also the owner of SKC&C, a private company, which is the dominant shareholder in SK Holdings.

As with its predecessor SK Corporation, SK Energy remains a key company in SK. In 2007 it generated sales of some US$27.8 billion, 52 percent of which occurred in overseas markets. Two-thirds (66 percent) of sales was explained by petroleum, such as diesel oil (28 percent), bunker-C oil (12 percent), and gasoline (7 percent), and around a third (27 percent) by chemical products; and 42 percent and 70 percent of respective sales were by export. In the domestic petroleum markets, SK Energy had 32–33 percent shares in 2003–07, competing with GS-Caltex (27–29 percent). The company has recently made great efforts to gain access to sources of energy, and by 2007 secured interests in 27 sources of crude oil and liquefied natural gas (LNG), being involved in exploitation in eight of them; the sources are located in 15 countries including Vietnam, Yemen, Kazakhstan, Egypt, Libya, Côte D'Ivoire, Peru, and Brazil. Also, the company invested in a total of five coalfields in Australia (4) and China (1). For energy development, production, and marketing, SK Energy had founded some 15 subsidiaries in China, Australia, the United States, Brazil, and several other countries by 2007.

SK Telecom, another of SK's main companies, is Korea's top provider of mobile phone and internet service. The company has maintained 50–54 percent market shares since 2002 (51 percent in 2007), surpassing KTF (32 percent) and LG Telecom (18 percent); its sales for 2007 amounted to some US$11.3 billion, most of which was domestic sales. SK Telecom has attempted to achieve a competitive advantage in new technology, spending 2.6–2.9 percent of sales on R&D in 2002–07 (some US$297 million in 2007). In late 2000, the company provided, for the first time in the world, the third-generation mobile phone service, called 3G, which delivered less than 1 million bits per second. In mid-2006, it created 3.5G, the technology between the third and the potential fourth generation, whose capacity of 3 million bits per second enabled e-mail files to be exchanged efficiently. SK Telecom has increasingly served overseas markets and, by 2007, had established some 20 subsidiaries in China, Vietnam, and the United States, among other countries.

See Also: Chaebol; Hyundai Motor; Korea, South; LG; Samsung Electronics.

Bibliography. B. J. Lee, "Phones: Too Much Data?" *Newsweek*, October 18, 2007, www.newsweek.com (cited March 2009); SK, www.sk.com (cited March 2009); SK Energy, SK Holdings, SK Telecom, *The 2007 Annual Report*, dart.fss.or.kr (cited March 2009).

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Slovakia

A landlocked country in central Europe, the Slovak Republic, or Slovakia (population 5,455,407 in 2008, gross domestic product $75 billion in 2007), is a developing country in the last stages of the transition from its communist past to its 21st-century capitalist present. The country was admitted to the European Union in 2004 and intends to adopt the euro as its currency in 2009, and is a member of NATO, the United Nations, and the World Trade Organization.

Settled by Slavic peoples during the second phase of the Migration Period—the 6th century, when Slavic tribes settled throughout central and eastern Europe at a time when Germanic tribes controlled much of western Europe—most of the Slavic states in present-day Slovakia became part of the Kingdom of Hungary by the 11th century, and thus part of the Austro-Hungarian Empire in later centuries. Slovakia seceded from the empire after World War I and formed the state of Czechoslovakia with Bohemia and Moravia. During World War II, Slovakia temporarily seceded from Czechoslovakia in order to acquiesce to Nazi control in exchange for self-governance (rather than being given to Hungary). Postwar Slovakia reintegrated with Czechoslovakia, expelling thousands upon thousands of Hungarians and Germans, some of whom had settled in the area recently and others of whom had lived there for generations. In the early years of the Cold War, Czechoslovakia was increasingly influenced by the Soviet Union, and in 1969 became a Socialist Republic. This lasted 20 years, until the Velvet Revolution ended communism in Czechoslovakia in 1989, and in 1993 Slovakia and the Czech Republic dissolved their union in the Velvet Divorce. They remain close allies.

Now a multiparty parliamentary democratic republic, Slovakia is governed by a president (directly elected for five-year terms) and a prime minister (with whom most executive power rests, appointed by the president and usually the leader of the majority party in parliament). The unicameral parliament, the National Council of the Slovak Republic, consists of 150 delegates elected to four-year terms.

Slovakia has enjoyed high economic growth and fares considerably better than many other postcommunist states. The country is often called the Tatra Tiger, in reference to the rapid growth in the 21st century (and the country's Tatra mountain range), paralleling the nicknames of the Asian Tigers of the 1960s and the various other "tigers" of recent decades. In 2004 and 2005, Slovakia's gross domestic product grew faster than nearly any in the European Union, bested only by some of the recovering Baltic States, and the 12-month growth in the third quarter of 2006 was at least 10 percent.

These economic improvements are largely the work of the right-wing coalition that came to power in 2002, which is criticized by the Slovakian public for the losses associated with these changes: unemployment rose (about 8.4 percent in 2007, but it jumped to nearly 20 percent in the first years of the reforms), government programs have been cut, a flat tax has replaced the progressive income tax, and so on. Currently some market regulations are being considered to deal with the global economic crisis, notably price ceilings on essential goods. In 2008, the government's budget deficit was about 10 percent of the budget. Inflation is about 2.5 percent.

The service sector accounts for more than half of Slovakia's economy, with construction at about 9 percent and agriculture about 6 percent, but industry is at 30 percent and rising. Automobile manufacturing and electrical engineering take the lead in the industrial sector, and Slovakia manufactures more automobiles per capita than any other country, primarily at Volkswagen, Peugeot Citroen, and Kia plants. Sony operates a large factory manufacturing LCD televisions. Metallurgy, chemicals, petroleum refining, construction materials, and nuclear fuel are other subsectors of Slovakian industry. About 40 percent of the country's land is cultivated, and agricultural activity includes the raising of livestock and the growing of wheat, rye, beets, and fruit.

See Also: Company Profiles: Eastern Europe; Czech Republic; Eastern Europe; Transition Economies.

Bibliography. Karen Henderson, *Slovakia* (Routledge, 2002); Ian Jeffries, *Eastern Europe at the Turn of the Twenty-First Century: A Guide to Economies in Transition* (Routledge, 2002); Lawrence Peter King, *The Basic Features of Postcommunist Capitalism in Eastern Europe: Firms in Hungary, the Czech Republic, and Slovakia* (Praeger Publishers, 2000); Stanislav J. Kirschbaum, *A History of Slovakia: The Struggle for Survival* (Palgrave Macmillan, 2005); Adrian Smith, *Reconstructing the Regional Economy: Industrial Transformation and Regional Development in Slovakia* (Edward Elgar, 1998).

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Slovenia

Although one of the youngest nations in the world, Slovenia has quickly established itself as an equal partner and example to other nations. Today, Slovenia is an example of economic success and a guarantee to the stability in a traditionally volatile Balkan region. Several driving factors contributed to Slovenia's economic growth in recent years. First, it has an exceptional infrastructure. Second, it is situated in a strategically important area between western and eastern Europe. Finally, Slovenia is home to a well-educated workforce. These factors allowed Slovenia to be the first 2004 European Union (EU) entrant to adopt the euro as its currency and to be the first transition country to advance from borrower to donor as a World Bank member.

Slovenia (Republika Slovenija) is situated in central Europe. It lies northeast of the Adriatic Sea and shares borders with Croatia to the south, Italy to the west, Austria to the north, and Hungary to the east. The centrally located capital city of Slovenia is Ljubljana. Other major cities are Koper, Kranj, and Maribor.

Slovenia is one of the smallest European countries (20,273 sq. km) with a very diverse landscape. It has a short coastline (46 km) alongside the Adriatic Sea, a mountainous range (Alps) it shares with Italy and Austria, and fertile farmlands in the eastern part of the country. Such diverse landscape is directly related to various climates ranging from Mediterranean on the coast to continental in the eastern and alpine regions of Slovenia.

Approximately 2 million people live in Slovenia and their nationality is predominantly Slovenian (83 percent). Primary minority groups in Slovenia include Serbs, Croats, and Bosnians. Slovenian is the official language; however, a large portion of the population (6 percent) speaks Serbian, Croatian, or Bosnian (formerly Serbo-Croatian). The population in Slovenia is aging with a median age of 41 years and only 13 percent of the population younger than 15. As in the majority of other western European countries, the population growth has been in a slight decline (minus .08 percent).

Until recently, the people of Slovenia have been subjected to the control of foreign powers. Slovenia as we know it today was part of the Austro-Hungarian Empire until the end of World War I. After World War I, Slovenia joined its fellow Slavic states, Serbia and Croatia, in the Kingdom of Serbs, Croats, and Slovenians. In 1929, the Kingdom of Serbs, Croats, and Slovenians changed its name to the Kingdom of Yugoslavia (Yugoslavia = land of south Slavs). After World War II, Slovenia became one of the constitutive republics in the Socialist Federative Republic of Yugoslavia (SFRJ). Such constitutional status allowed

Slovenia to exercise its powers and declare independence from SFRJ on June 25, 1991.

While part of Yugoslavia, Slovenia was its most thriving region. It was the center for research and development and home to many successful firms. Once on its own, Slovenia continued to thrive. It became a member of the EU and the North Atlantic Treaty Organization (NATO) in 2004, and today it has the highest per capita gross domestic product (GDP) in central Europe. A strong economy and a stable democratic political system have assisted in Slovenia's transformation to a modern state. As such, Slovenia is a benchmark for other countries in transition.

While many positive outcomes symbolize Slovenia today, the transition process has not been without obstacles. Although reforms to provide incentives for foreign direct investment (FDI) are taking place, FDI in Slovenia has lagged behind regional averages. At the same time that taxes remain relatively high, the level of state control of the economy is one of the highest in the EU, and the labor market is somewhat inflexible. In addition, established Slovenian industries have been experiencing increased competition from firms originating in other transitional economies. Despite some of these setbacks, Slovenia's potential is great. It is home to a well-educated population, diverse industrial environment (top three Slovenian multinationals in 2007 were Mercator [retail], Gorenje [home appliance manufacturing], and Krka [pharmaceutical manufacturing]), and natural resources that could assure growth in years to come.

See Also: Eastern Europe; European Union; Transition Economies.

Bibliography. CIA, "Slovenia," *World Factbook*, www.cia.gov (cited March 2009); James Gow and Cathie Carmichael, *Slovenia and the Slovenes: A Small State and the New Europe* (C. Hurst, 2008); Anita Tuladhar, Rudolfs Bems, and Jochen R. Andritzky, *Republic of Slovenia: Selected Issues* (International Monetary Fund, 2007); U.S. Department of State, "Background Note: Slovenia," www.state.gov (cited March 2009); Ana Zaljetelj, *ABC of International Business Operations in Slovenia* (Chamber of Commerce and Industry of Slovenia, 2003).

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Smuggling

Smuggling is the importation or exportation of goods in a manner contradicting national or international laws. The last decade has seen a dramatic rise in the incidence of smuggling on a global scale. While illegal goods such as drugs and weapons are most commonly associated with smuggling, the worldwide trade in people, legal drugs, agriculture, and animals comprise a large percentage of the total value of smuggled goods. Typically, smuggled goods are imported or exported in one of two ways: either the entire method of transportation is concealed (for instance, underground tunnels are frequently used to transport munitions into Palestine from neighboring regions) or the illicit goods themselves are disguised to resemble or are hidden in permissible items. Goods have been smuggled in the past inside a variety of items, including luggage, clothing, and false panels in vehicles, and are sometimes ingested by humans or animals for disguised transportation. While the clandestine nature of smuggling makes the scope of its economic value difficult to determine, the approximate annual value of smuggled goods is believed to be in the tens of trillions of dollars.

History

Smuggling has undoubtedly existed since the first tariff, tax, or duty was imposed and has a storied past in all corners of world history. However, the first legislation explicitly addressing smuggling does not appear on record until Britain's 1351 Statute of Treason. This Act of Parliament explicitly forbade the importation of counterfeit money into England and those found guilty could be punished with death. Britain continued to struggle with the smuggling of goods into and out of the Commonwealth for the next several centuries due to high taxes levied on many goods in its expanding empire. To illustrate the magnitude of smuggling in the British Empire, Mathieu Deflem and Kelly Henry-Turner report that smuggling became so rampant during the 18th century that approximately one-third of all tea consumed in Britain was imported illegally. The tension between Britain and its colonies over taxes and smuggling eventually came to a head, resulting in protests such as the Boston Tea Party in 1773 that sparked many independence movements throughout the colonies. Throughout the 19th century, Britain and other nations gradually liberalized their restrictions and taxes on trade goods in a series of adjustments that brought about a decrease in the incidences of smuggling on record. While these growing economies saw the negative effects of smuggling decrease during this period, developing economies continued to struggle with smuggling. Developing countries and ungoverned territories remained greatly affected by smuggling and had little coordinated or enforceable recourse, as many of the economic benefits of their exports were smuggled to avoid exportation taxes.

Smuggling made a notable return to worldwide politics with the passage of various prohibition acts in the early 20th century including in Russia, Iceland, Norway, Finland, the United States, and select Canadian provinces. Smuggling continues to expand into the 21st century, unimpeded by stricter government controls after the September 11, 2001, attack on the United States, as agents opportunistically exploit price disparities and regulatory differences in countries of origin and destination. Presently, the most common goods smuggled worldwide include people (who are both smuggled and trafficked), weapons, illegal drugs, legal drugs, agriculture, and animals.

Human Smuggling

Although closely related, human smuggling should not be confused with human trafficking. Human smuggling is the assisted illegal migration of migrants from one destination to another. The smugglers are most often motivated by profit, and the demand for smuggling services is significant; for example, more than half of the illegal immigrants entering the United States from Mexico receive assistance from paid smugglers. Albeit a dangerous and often deadly expedition, smuggling humans illegally into economically advantageous nations can pay large rewards for both the smugglers and the smuggled. Kahlid Koser followed 50 migrants in their illegal journey from Afghanistan and Pakistan to the United Kingdom and found that in this case the smuggling ultimately benefited the smugglers, the smuggled, their families, and the third-party intermediaries who handled the transactions. While human smuggling is mainly driven by a motive to profit, there have also been numerous historic cases of assisted human smuggling for altruistic reasons. Notable examples include the participants of the Underground Railroad that helped blacks migrate from slave-owning Southern states, those who assisted Jews out of Nazi-occupied Germany, and many other recent cases of refugees being smuggled out of nations in conflicts.

In contrast, human trafficking rarely benefits the smuggled. Human trafficking is the purposeful acquisition of humans through deception, force, or coercion with the aim of exploiting the victim through sex acts and/or labor. The United Nations (UN) has recently devoted many resources to highlighting the gravity of this crisis and in March 2007 launched the UN's Global Initiative to Fight Human Trafficking through a grant made by the United Arab Emirates. This initiative has provided resources to over 110 countries and all levels of stakeholders within to combat the illegal forced trade of primarily women and children for sexual exploitation and forced labor. While the exact number of human trafficking is difficult to determine, the 2008 UN Report on the Overview of Human Trafficking identifies the number of human beings currently indentured against their will at a minimum of 2.5 million people.

Weapon Smuggling

Weapons and their components are another major object of smuggling and are primarily transported into regions undergoing periods of political turmoil. Because of the weakened enforcement mechanisms in these tumultuous regions, the responsibility to prevent smuggling of weapons and ammunition falls primarily to the UN Office and Drugs and Crime. The UN is currently working on two fronts to reduce the amount of gun and ammunition smuggling, estimated to be at least as big worldwide as legal arms sales. First and foremost, they are working to reduce the amount of guns entering conflict zones through increased monitoring and confiscation, and second, they have implemented a weapons destruction program through a partnership with foreign governments, which is designed to limit the amount of unused surplus weaponry that can potentially fall into the possession of smugglers.

Stable nations also struggle with the illegal importation of firearms, as organized networks of smugglers attempt to supersede laws designed to reduce firearm crimes and violence. In addition to deterring the bulk of weapons smuggling in the form of

Smugglers were trying to drop bales of cocaine like these from an airplane into a small boat when they were stopped by a U.S. Coast Guard cutter in 2007. That bust seized 450 of the 9,000 pounds of cocaine under guard at this Jacksonville, Florida, naval station.

small arms, national and international coalitions are actively combating the exchange of many other forms of mechanized weaponry and their components including both traditional and nuclear devices.

Drug Smuggling

Drugs of both the illegal and legal variety remain a lucrative product for smuggling in all parts of the world. Illegal drug smuggling occurs when chemical substances used to alter the body's normal biological functioning are imported into a jurisdiction that explicitly forbids their possession, consumption, and/or sale. Because most countries did not criminally penalize many drugs until the 20th century, illegal drug smuggling has been a relatively recent phenomenon. Smugglers of drugs around the world typically operate under a coalition known as a drug cartel. Cartels, responsible for the majority of drug smuggling worldwide, take various forms, but they all operate with the intent to profit by consolidating a drug supply chain, from growing to production and distribution. The 2008 UN World Drug Report provides a comprehensive evaluation of the world's current drug smuggling situation, with the top four drugs confiscated in 2006 (in unit equivalents) identified as (1) amphetamine-type stimulants (ATS)-related substances, (2) opiates, (3) coca/cocaine products, and (4) cannabis products.

The first of these categories is manufactured and smuggled in both legal (Dexedrine and Ritalin) and illegal forms (methamphetamine and ecstasy). The UN's 2006 report estimates the annual worldwide manufacturing of the drug to be approximately 494 metric tons, with 46 metric tons confiscated the same year. Because of the wide availability of many of the precursor chemicals, many illegal ATS are produced and distributed intraregionally. There is, however, evidence that a large amount of smuggling takes place as European and American demands are met from southeast Asian suppliers. The opium/heroin category, the second UN grouping, has seen a major resurgence in cultivation because of record yields in Afghanistan. In 2007 the worldwide illicit opium production was approximately 8,870 metric tons, with Afghanistan accounting for 92 percent of global production. Because of the regional specificity of growing conditions, the international smuggling market for opiates remains large. Imports to Europe, the Middle East, and Africa are primarily smuggled in from Afghanistan; imports to Asia primarily from Myanmar; and imports to North and South America are primarily smuggled in from Colombia and Mexico.

The third drug category, coca/cocaine products, is produced in the South American countries of Colombia, Peru, and Bolivia and is smuggled primarily into North America, Europe, and west Africa. The global production of cocaine has remained largely stable over the last decade and was estimated to be 994 metric tons in 2007, with Colombia accounting for 55 percent of the total. Cannabis products comprise the last of the UN's major drug categories and dominate all other categories in terms of cultivation volume and use. The UN estimates that 41,400 metric tons of marijuana was produced globally in 2006 with the majority grown in the Americas (55 percent) and Africa (22 percent). The majority of these cannabis products end up being produced and consumed intraregionally with a small percentage smuggled out of the African and Asian countries.

Legal drugs are also commonly smuggled items as price premiums in the destination over the place of origin allow smuggled goods to be sold profitably below local costs. These premiums can arise from tariffs, import quotas, or taxation present in the destination that are absent in the point of origin. Legal drug smuggling occurs both across state and national boundaries. Sari Horwitz recently highlighted the potential profit for the interstate smuggling of cigarettes and noted that a smuggler successful in procuring a truckload of cigarettes in Virginia (a state with low tobacco taxes) and smuggling them into New York (a state with high tobacco taxes) stands to make a potential profit of approximately $2 million. In addition to tobacco products, alcohol and prescription medicine are also commonly smuggled legal drugs.

Agricultural and Animal Smuggling

Agricultural goods and animals are also commonly smuggled at both the intra- and international level. Items are often smuggled for one of two reasons. The first is similar to the aforementioned motivation behind legal drugs: avoiding premiums arising from tariffs, import quotas, or taxation allows the smuggler of illegal agriculture to sell at below-market rates. For example, the U.S. Department of Agriculture's Smuggling Interdiction and Trade Compliance (SITC) Program was enacted after Asian fruit growers in Florida notified the federal authorities that goods illegally imported from Thailand were restricting their ability to profitably compete in eastern markets.

The second reason that agricultural goods and animals are smuggled is to provide exotic or rare materials to private collectors to be used as pets or collectibles. Particularly vulnerable are rare species whose limited availability increases the price premium and the motivation to smuggle, resulting in a reinforcing cycle of illegal smuggling. In addition to the threats posed by smuggling on endangered species, another major concern is the international spread of disease and invasive species. When agriculture and animals are smuggled into new ecosystems that have no natural predators or whose inhabitants have not been exposed to diseases or parasites that the imported animals may bring, disastrous loss of the native agriculture and animals can potentially ensue.

Future of Smuggling

Smuggling is a clandestine act motivated by profit and has taken many forms over its centuries on record. Disguising cargo or avoiding detection at an organized cartel level or by an individual working alone can constitute smuggling. The primary items currently smuggled internationally include both illegal and legal drugs, weapons, humans, agricultural products, and animals. Smuggling is currently combated at both the national level, primarily Customs or Border Patrol divisions, and the international level, through the aforementioned UN divisions and the International Criminal Police Organization (Interpol). Recent increases in trade and disparities in wealth highlighted by globalization have increased both the volume and breadth of international smuggling, resulting in renewed enforcement of antismuggling measures worldwide.

See Also: Black Market; Competition; Cross-Border Migrations; Globalization; Gray Market; Sea Piracy.

Bibliography. Ali Nobil Ahmad, "The Labour Market Consequences of Human Smuggling: 'Illegal' Employment in London's Migrant Economy," *Journal of Ethnic and Migration Studies* (v.34/6, 2008); Helge Berger and Volker Nitsch, *Gotcha! A Profile of Smuggling in International Trade* (Freie Universität, 2008); Tihomir Bezlov, *Transportation, Smuggling and Organized Crime* (Center for the Study of Democracy, 2004); Kahlid Koser, "Why Migrant Smuggling Pays," *International Migration* (v.46/2, 2008); Moises Naim, *Illicit: How Smugglers, Traffickers and Copycats Are Hijacking the Global Economy* (Doubleday, 2005); Kimberly L. Thachuk, *Transnational Threats: Smuggling and Trafficking in Arms, Drugs, and Human Life* (Praeger Security International, 2007); United Nations Global Initiative to Fight Human Trafficking, "Human Trafficking: An Overview," www.ungift.org (cited March 2009); United Nations Office of Drugs and Crime, "2008 World Drug Report," www.unodc.org (cited March 2009); Sheldon Zhang, *Chinese Human Smuggling Organizations: Families, Social Networks, and Cultural Imperatives* (Stanford University Press, 2008); Sheldon Zhang, *Smuggling and Trafficking in Human Beings: All Roads Lead to America* (Praeger Publishers, 2007).

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Social Contract

Social contract describes a broad set of philosophical theories that concern the legitimacy and preservation of extant governing institutions. While applicable to the entirety of the aforementioned theory, four books authored by Jean-Jacques Rousseau and collectively bearing the title of *Social Contract* are most commonly associated with the term. These books concern the balance between individual rights and social order imposed by a legitimate state authority. Rousseau asserts that humans are essentially self-interested and prone to short-term opportunistic behavior, which without limitations hinders the acquisition of stability and higher-order goals. To balance these immediate and long-term goals, Rousseau advocates governance by the "sovereign will" of the populace, with individual citizens free to engage actively in the process or freely emigrate. These views contributed significantly to 18th-century discourse, which typically held governance at two extremes: either the authoritative role of the monarchy or voluntary participation in small social collectives. Rousseau's positions have helped to shape the contracts citizens form with their governments and the contracts they form with businesses or other associations governed by the "partial will" of their select members.

Development

Theories of social contracts and the rights and obligations of a nation's citizens have been a topic of discussion since first appearing in 4th-century-B.C.E. Greek writings. However, the increasing amounts of subjugation by foreign governments during the Renaissance catalyzed modern writings on contract theories. The writings of Thomas Hobbes (*Leviathan,* 1651) were among the first to articulate the need for a governance contract to counter the individualistic and destructive tendencies of humans when residing in a state of nature. Hobbes contended that the populace left to its own devices would remain in a vicious and barbarous state unless people agreed to forfeit rights and liberties in exchange for absolute rule that allows order and social civility. Rousseau differed from Hobbes in a series of discourses written in the 17th century in which he suggested that humans had within them the potential for goodness and thus the "sovereign will" of the populace should dictate governance systems.

The *Social Contract* (1762) is the work of Rousseau most associated with outlining the role of political institutions and the rights of the citizens. As mentioned previously, the crux of his writings builds off Hobbes's earlier works and asserts that people must give up some rights to their government in exchange for social order and security. However, Rousseau's insistence that humans must have their "sovereign will" exercised to legitimate a governing body marked a notable departure from Hobbes's belief in rule by authoritarian monarchy. While differing greatly from Hobbes's position Rousseau stops short of advocating a fully participative democracy. In fact, Rousseau advocates that the will of the populace be carried out by a government ruled by aristocrats because of their advanced education and intelligence and in doing so does actively challenge the appointment of royalty by God to govern. In sum, Rousseau does not advocate any specific system of government, but primarily contributes the suggestion that a legitimate government must express the general will of the people.

Reception and Influence

The publication of the *Social Contract* was fundamental to the paradigm shift away from monarch rule in the 18th century. Its theories influenced social reform in Europe (most notably the French Revolution [1789]), the formation of socialist thought, and the founding of the United States of America. In light of its success, the *Social Contract* has also received much criticism. Many critics argue that the concept of maintaining of government that consistently expresses the general will is only feasible in the abstract. That once one attempts to elucidate the mechanisms and inner workings of such a government, the difficulties overwhelm its practicality. Others point to the lack of true ability for citizens to emigrate and thus decline participation in the social contract as a shortcoming. Mark Hulliung highlights this last critique in his assertion that the Southerners' inability to secede the Union and the resulting United States' Civil War marked a turning point in the influence of social contract on American and Western thought.

Challenges

In the last century, industrialization and the decline of available agrarian subsistence have brought the role of corporations into the social contract debate. As international boundaries and restrictions fall and the power, wealth, and social impact of corporations supersede many governments to which they were once dependent, citizens are now increasingly questioning the role of the "sovereign will" in directing corporate action. The businesses that Rousseau described as small and temporary collectives whose actions were easily directed by the "partial will" of their select and transient membership have been replaced by corporate forces now faced with managing the often-conflicted interests of investors, managers, employees, and direct and indirect stakeholders. The extant challenge for the social contract will be the balance of corporate profits, international competitiveness, and the continued expression of the "general will" in all things.

See Also: Antiglobalization Movement; Corporate Social Responsibility; France; Globalization.

Bibliography. Christopher Bertram, *Routledge Philosophy Guidebook to Rousseau and the Social Contract* (Routledge, 2004); John Douglas, "For-Profit Corporations in a Just Society: A Social Contract Argument Concerning the Rights and Responsibilities of Corporations," *Business Ethics Quarterly* (v.18/2, 2008); Mark Hulliung, *The Social Contract in America: From the Revolution to the Present Age* (University Press of Kansas, 2007); Richard Marens, "Returning to Rawls: Social Contracting, Social Justice, and Transcending the Limitations of Locke," *Journal of Business Ethics* (v.75/1, 2007); Jean-Jacques Rousseau, *The Social Contract, the First and Second Discourses* (Yale University Press, 2002); Jaime Saavedra and Mariano Tommasi, "Informality, the State and the Social Contract in Latin America," *International Labour Review* (v.146/3–4, 2007); Brian Skyrms, *Evolution of the Social Contract* (Cambridge University Press, 1996); Christopher D. Wraight, *Rousseau's The Social Contract: A Reader's Guide* (Continuum, 2008).

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Socialism

Socialism is the idea that humans can live in justice, equality, and freedom in a world in which humanity collectively controls its own fate. Socialists see capitalism as a stage of the development of class society, which contains within it the potential and need to go farther and create a society where human lives are not determined by the whims of the powerful or the economic system. The terms *socialism* and *communism* were at one stage used interchangeably. They still are by some. However, the history of socialism in the broadest sense requires an understanding of the differences as well as the links between them.

The first use of the term *socialism* in English has been traced back to a cooperative magazine in 1827. Many accounts of the history of socialism, however, claim to identify roots that go back to the ancient world. It is true that throughout history men and women have imagined different and better worlds. But these visions (e.g., Plato's *Republic*, Thomas Moore's *Utopia*) were usually backward looking and elitist. Their authors had nothing but contempt for peasants or slaves who raised the flag of rebellion and who asked, in the words attributed to the radical priest John Ball in the English Peasant Revolt of 1381, "When Adam wove and Eve span, who was then the gentleman?"

Origins

Socialism as it is understood today was a product of the economic and political forces created by early capitalist development in Europe. Its political origins derive from the French Revolution. Although this was primarily a conflict for power between privileged groups, it unleashed massive political debate around the ideas of liberty, equality, and fraternity. The crowds of Paris and other towns, the artisans and sansculottes began to make an independent mark. This challenge from below was contained, but its legacy remained. The difficulty was to know how to build on it. Writers and activists like Babeuf, Buonarroti, and Blanqui recognized the suffering of the people, but at this time, could only see the way forward in terms of small groups taking power from society's existing rulers and handing it to the people.

It was the Industrial Revolution that opened up new possibilities. Urbanization and industrialization created a social force—the working class—that early on began to forge its own organizations (from trade unions to political movements like Chartism in England) to demand rights for itself and to challenge the injustices and inequalities that the mass of workers faced.

The great achievement of Karl Marx and Friedrich Engels, from the 1840s, was to see the potential of this new movement. At the level of theory, they took what was a moral critique of capitalism and turned it into a scientific one by trying to unravel the ways in which alienation and exploitation occurred. What compromised capitalism were not the irrationalities of individuals—these were themselves a product of systemic irrationalities. If capitalism was the most dynamic system yet known, it was also driven by a mass of contradictions. Capitalist class rule and organization perpetuated injustice, inequality, and suffering as the price paid by the mass of men and women for the privileges of those who ruled over them.

But a second aspect of their contribution was no less important. This was the argument that the solution to these problems lay in the hands of the mass of workers. Organized as a social force, workers had the power to change the world and they had to find a way to use this. In struggle, ordinary workers could find a common interest, solidarity, and understanding out of which a new society could be built. The emancipation of the working class had, therefore, to be an act of self-emancipation. When Marx and Engels called on workers of the world to unite, this was a call for men and women to take control of their own lives and not wait as a suffering class to be rescued from above or outside by the actions of philanthropists, statesmen, or conspirators.

When these ideas were first put forward, the working class, save in Britain, was still only weakly developed. As the 19th century progressed, industrialization spread and deepened and a working-class movement developed in the advanced countries with three arms. Trade unions were formed to cement the solidarity of workers in their workplaces. Cooperatives developed as an attempt to offer an alternative in distribution (and sometimes production) within capitalism. Political organization led to a proliferation of socialist organizations out of which the great socialist parties began to be formed in the late 19th century. These were then linked internationally with the creation of the Second International in 1889 (the First International of the 1860s, with Marx as its secretary, was a limited organization primarily focused on trade union links).

But as the socialist movement developed, major conflicts emerged, which led to a crisis that affected the meaning of socialism itself. The term came to be so widely appropriated and used and misused that in the late 19th century, a British liberal politician, Sir William Harcourt, could declare that "we are all socialists now." A half-century or more later perhaps, a majority of the world's population were told that they lived in socialist or semisocialist regimes even though none of them had advanced, and many had pushed back, the real cause of human emancipation.

Two related issues are central to an understanding of this. One is statification and nationalization, the other is the difference between socialism from above and socialism from below. For many commentators, capitalism is about the trinity of private property, markets, and profit. But over time, the state has come to play an important role in capitalist societies. If socialism is identified with statification then, with nationalization and control of the commanding heights in an economy, it can be argued that capitalism is giving or has given way to "socialism." The state seemed to many to offer a more rational way of running society. This idea proved especially popular with some intellectuals going back to the French writer Saint Simon and even before. Supporters of this view assumed a world of competing states, but argued that if private property were suppressed within them, then the irrationalities of internal competition could give way to rule by the expert, administration by the competent, and order and efficiency, and so on. This could then be used to rule in favor of the many and improve the general interest.

However, success here required that state power be obtained and used as a lever to uproot private property. "Statt, greif zu!" ("State, take hold of things"), Ferdinand Lasalle, an early German supporter of "state socialism," had argued. Subsequently, reformist socialists developed this idea, but gave it a more democratic tinge by arguing that if workers won the franchise, they could then use it to elect these leaders into power where they could use the state on their behalf. In these terms, although social democratic politicians were sharply separated from more dictatorial currents by their attitude to political democracy, they were much closer to them in their attitude to the state than they liked to imagine.

It needs to be stressed that this reduction of capitalism to a narrowly conceived argument about legal ownership of private property was not part of Marx's original vision. For Marx, property that was not under genuine social control was private property whether it was held by the individual or the state. The state was not an agent of human emancipation but a class institution and an instrument of repression over the many. It was not possible to use it to build a noncapitalist world; rather, it had to be cleared away.

The substitution of state property and planning seemed only to change the form rather than the continent of social relations—to replace a narrow private capitalism with forms of state capitalism. The issue was not whether the state controlled, but who controlled the state and what determined how it operated? The same point was no less forcibly made by Rosa Luxemburg, who argued that if socialism was about state control, then Napoleon and Bismarck should be counted among its pioneers.

Socialism from below looked forward by contrast to a world in which every cook might govern. For this to happen, workers had to take control of society and build democratic structures from the bottom up. This idea was at the heart of Lenin's arguments in his *State and Revolution,* written in the full flush of revolution in Russia in 1917. The existing state seemed to be disintegrating, to be replaced by factory committees, and workers' soviets and new organs of workers' power. It is often forgotten today that many of the democratic freedoms and social gains that are taken for granted were in fact a product of such struggles from below and social and revolutionary crises. Significant reforms have usually had to be battled for over long periods; intellectual argument was rarely enough. They have also had to be defended as the balance of power has changed and pressures have developed to reduce social protection and limit democratic gains.

Counterarguments

The challenge of socialism, especially from below, was often met with repression, but it also produced an intellectual counterattack by those who emphasized the limits to change and claimed that capitalism draws on "natural elements" in human society—a claim that socialists strongly reject. These counterarguments helped to form much of the development of the "classical" foundations of the modern social sciences. For these critics, the failure of socialism was inevitable (although some compromised their own intellectual integrity by the succor that they gave to fascism). Max Weber's arguments about the inevitability and rationality of bureaucracy were in part directed against socialist ideas of rule from below. Robert Michels argued that it was an "iron law" that oligarchies would always rule, basing his claims on his disillusioned analysis of pre-1914 socialist parties. For Vilfredo Pareto, revolution was simply a process by which an old elite was overthrown by a new one. Gaetano Mosca argued that there always had to be a ruling class. These arguments questioned the political impossibility of socialism. In economic terms, Eugen von Böhm-Bawerk argued that Marx's economics were flawed by internal inconsistencies. Ludwig Von Mises went further and argued that any attempt to suppress the price mechanism would produce chaos and irrationality so that socialism was economically impossible, too.

Whether these arguments against socialism are correct continues to be disputed and not least by socialists. But the subsequent development of self-proclaimed socialist states in the 20th century seemed to give credence to hostile arguments. But if in the past century it has always been possible to find someone to defend the indefensible in the name of "socialism," it is important to recognize the intellectual depth of the critique of so-called socialist regimes that developed within the socialist movement.

Socialist States

Following the outbreak of World War I, the socialist movement split into a majority tendency in which the different parties supported their own governments in the conflict and a minority tendency that opposed the war. This split was confirmed by the Russian Revolution. After the war, the former tendency developed into reformist social democracy embodied in the German Social Democratic Party, the French socialists, the British Labour Party, and the Swedish socialists. But in the 1930s, socialism was forced to retreat in the face of fascism, save in Sweden.

After World War II, social democracy made major political advances with social democratic governments often in power, albeit for differing lengths of time in different countries. Social democracy did achieve significant reforms although their critics on the left argued that these were still too few and came at a time when a growing capitalism could afford concessions. For many, the most extensive and to some extent model reforms were, and still are, to be found in a country like Sweden. The aspirations of socialist parties in power, however, soon reduced to that of creating a more humane capitalism, provided that this did not interfere with the essential functioning of the system.

In the last decades of the 20th century, however, the commitment to reform wilted, especially in the face of new economic difficulties. A new accommodation was reached with capitalism by some parties—led perhaps by New Labour in the United Kingdom. Even socialism as a distant goal began to give way to talk of a "third" way between market capitalism and state planning (Russian style), although in reality, it was hard to distinguish what this consisted of as the retreat to promarket position grew more intense, especially in the United Kingdom.

Counterposed to the social democratic tenancy was the communist one. But this was soon marked by events in Russia. This marked not only the history of communism, but also, by association, that of socialism. While most historians accept that the Russian Revolution was a genuine mass revolution, it soon gave rise to a brutal dictatorship under Stalin as the regime tried to "catch up and overtake" the West. Dictatorship also characterized the regimes that followed in its footsteps after 1945.

One question that is the subject of wide debate is whether the revolution or its leadership was flawed from the start or whether a process of degeneration occurred because of contingent factors such as the civil war, hostile pressure, and so forth. Another is whether the resulting regime can legitimately be called socialist or whether its statism reflected the emergence of an extreme form of state capitalism or even some new third form that was neither capitalist nor socialist. The statism of the Soviet Union was in obvious contradiction to many of Marx's and even Lenin's arguments. But it did draw for legitimacy on that strand of socialism that identified change with the abolition of private property as a legal form and rule over the people, albeit in the name of the people. Western opponents of the Soviet Union were happy to take its self-proclaimed socialism at face value and to use it to condemn all forms of socialism. They were no less happy to claim that, as the Soviet Union expanded its influence after 1945, what was at stake was a systematic conflict between two worlds—"socialism" and "capitalism."

The equation "socialism = state = Soviet Union" (or China, Vietnam, Cuba, etc.) also narrowed the theoretical debate over socialism. In economics, for example, the question became not whether a socialist regime could begin to end exploitation and alienation, but whether state planners could emulate the alleged efficiency of market capitalism through either a directed central plan or some form of "socialist market." What became known at the level of theory as "the socialist calculation" debate seemed to be solved at the level of practice when growth rates in the so-called Socialist bloc faltered and many of these regimes disintegrated in 1989–91.

If the regimes that developed in what was once called the "third world" also had little relation to the ideas of socialism as set out by Marx, how then do we explain them? The answer seems to lie in the pattern of unequal development that capitalism creates within and between countries. This unequal structure, one associated with colonial rule, seems to have deeper roots in the global nature of capitalism as a system. Local bourgeoisies often accepted a subordinate role in this global order, compromising with big powers, merging with sections of the traditional local ruling class, becoming in the process an additional corrupt blockage in the way of development. Trotsky argued in the 1920s and 1930s that this created wider conditions for permanent revolution. Workers and peasants could overthrow their local ruling class and join with workers in advantaged countries to create the basis for a genuine global development. But he underestimated the extent to which modernizing elites—intellectuals, teachers, army officers, middle-ranking administrators, driven both by the hope of a different world and the shame of backwardness and frustration at their own marginal position in their own societies, and so forth—might organize to seize power in the name of the people.

Permanent revolution could then be deflected into anticolonial, nationalist development programs. This is what happened in Asia, in places like China and Vietnam and in many parts of Africa and Latin America after the end of World War II. Although these regimes variously described themselves as socialist, they were really nationalist development regimes. Moreover, because they had to rely on local resources for development, they were often forced to impose forms of superexploitation on the peasants and workers in whose name their leaders ruled. Growth did occur, but not to the extent that they hoped and not as often. Lacking democratic constraints, leaderships become more corrupt with coups and countercoups. This "third world developmental socialism" or perhaps better "developmental state capitalism" began to break down in the 1980s when it became obvious that the Soviet model was in difficulties and new spaces appeared to open up for development with the successes of the first Asian Tigers. Even in China, state control gave way to more market principles.

Socialism Today

Why has there not yet been a successful revolution in an advanced country? To explain this, socialists usually offer some combination of three arguments. The first is ideas. Capitalism generates ideas that can prevent workers seeing where their real interests lie. One aspect of this is what Marx called commodity fetishism—the tendency to imagine that it is not people but abstract "natural" forces like "capital," "supply and demand," competition, globalization, and so forth, that rule our lives. Ideologies then developed on this basis, which encourage people to believe that only a privileged elite has the knowledge, virtue, and merit to control capitalism. Workers are encouraged to identify with this class and to divide themselves through racism, sexism, nationalism, and so on.

When radical conflicts do occur, a second issue comes into play—this is the problem of organization and leadership. Organization is necessary to hold people together and allow their energies to be directed, but if political leaders are not prepared to seize opportunities when they arise in a revolutionary situation, then the impetus for change will be lost. To this must be added a third argument. No ruling class voluntarily relinquishes its power and whenever conflicts emerge, ruling classes have shown themselves able and willing to use state power and force to defend their interests.

When the Soviet bloc collapsed, its identification not only with communism but also with socialism seemed to suggest that history as a struggle between great ideological alternatives had ended. Liberal capitalism had triumphed and now had no serious competitors. But opportunistic declarations of the death of socialism seem premature and not least if what had actually collapsed was not socialism in any meaningful sense. Indeed, it could be argued that the destruction of these forms was necessary to allow a return to a more authentic tradition. Certainly, the case for a socialist alternative to capitalism retains an appeal.

Socialists point to the way in which capitalism in the new century remains polarized. The gap between rich and poor has been growing in many parts of the world and rates of social mobility declining. Corporate power remains concentrated and globalization has stretched it in a new direction without bringing an end to war. Worse, the pursuit of private profit seems to be risking environmental and ecological disaster. Equally, socialists would claim that a striving for justice, equality, and popular control continues and the idea of a world in which ordinary people control their own fates remains valid, no matter what critics of socialism and supporters of capitalism might say.

For socialists, the key issue perhaps remains wherever a movement can be organized and sustained to avoid the errors of the past and achieve this. Those who dismiss socialism argue that the answer is no. The failures of the old were inherent to the socialist project itself. Those who support it answer yes. However, we should note that for all the talk of the end of socialism, the paradox of history is that it might be argued that the objective conditions out of which it might be built continue to mature.

It was only in the late 1980s and 1990s that the working class, on a global scale, became the majority class for the first time in history. Hitherto, although the majority in individual countries, workers had been outnumbered on a global scale by other groups and not least peasants. Today, in many parts of the world, earlier struggles are being repeated and trade unions, for example, with over 160 million members worldwide remain the largest voluntary organizations in the world. No less, albeit in a contradictory way, the capacity of the world to eliminate want has increased, just as globalization is helping to integrate the lives and fates of the world populations. The emergence of the antiglobalization and antiwar movement began to breathe a new life into old arguments and challenge the complacency and complicity of the older socialist parties in some of the darker aspects of modern capitalism. Where this will lead remains an open question for the new century.

See Also: Antiglobalization Movement; Capitalism; Communism; Cooperatives; Democratic Globalization; Nationalization.

Bibliography. Geoff Eley, *Forging Democracy: The Left in Europe, 1850–2000* (Oxford University Press, 2002); Melanie Feakins, *Access to Capital for Small and Medium-Sized Enterprises in Poland: Banks, Decision and Economic Development in Post-Socialism,* DPhil. thesis, University of Oxford, 2001; Friedrich A. von Hayek and Bruce Caldwell, *Socialism and War: Essays, Documents, Reviews* (Liberty Fund, 2009); John Higley and György Lengyel, *Elites After State Socialism: Theories and Analysis* (Rowman & Littlefield, 2000); Ken-ichi Imai, *Beyond Market Socialism: Privatization of State-Owned and Collective Enterprises in China* (Institute of Developing Economies, 2003); János Kornai, *From Socialism to Capitalism: Eight Essays* (Central European University Press, 2008); Orlan Lee and Jonty Lim, *Progressive Capitalism or Reactionary Socialism?: Progressive Labour Policy, Ageing Marxism, and Unrepentant Early Capitalism in the Chinese Industrial Revolution* (Hong Kong University of Science & Technology, 2001); Vladimir Il'ich Lenin, *Revolution, Democracy, Socialism* (Pluto, 2008); Vladimir Il'ich Lenin, *The State and Revolution* (Regnery Publishing, 2009); Karl Marx, Friedrich Engels, and David McLellan, *The Communist Manifesto* (Oxford University Press, 2008); Marxist Internet Archive, www.marxists.org (cited March 2009); Paul Mason, *Live Working or Die Fighting: How the Working Class Went Global* (Harvill Secker, 2007); István Mészáros, *The Challenge and Burden of Historical Time: Socialism in the Twenty-First Century* (Monthly Review Press, 2008); Joshua Muravchik, *Heaven on Earth: The Rise and Fall of Socialism* (Encounter Books, 2002); Stephen E. Philion, *Workers' Democracy in China's Transition From State Socialism* (Routledge, 2008); Harry West and Parvathi Raman, *Enduring Socialism: Explorations of Revolution and Transformation, Restoration and Continuation* (Berghahn, 2008).

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Social Pact

A social pact is a form of social protection, whereby governments, worker associations (such as trade unions), and/or management groups engage in policy-making initiatives for the purpose of maintaining appropriate living and working standards. This intersection of industrial relations and social policy has evolved to various levels in a variety of countries. In fact, the establishment of social pacts has been identified as one of the most noted events in western Europe's political economy during the 1980s. This bi- or tripartite relationship also is often referred to as social partnerships in many countries.

The purpose of such agreements is intended to reduce management and market attempts to commoditize labor—creating fair wage and living standard agreements that satisfy all parties. This responsibility is ideally shared among a tripartite: proponents and members of the industrial relations movements, government and government agencies, and the firms that employ such workers. Hence, it is also often associated with the welfare state, which is consistent with the fact that European countries tend to have social pacts, as opposed to the United States or other industrialized economies. These partnerships can generally provide multiple benefits to all parties involved in their development and advocacy. Shared benefits of social pacts include higher rates of employment for workers, the provision of benefits to the unemployed resulting in less likelihood of wages being forced downward, reduced worker-management conflict, and other measures. Social pacts are also seen as more fluid attempts to bridge gaps and address shortcomings of national policies, which are often less responsive in adapting to current economic and social conditions. In some cases, such as in Ireland, Italy, and South Korea, social pacts were initiated in response to an economic or political crisis.

Social pacts have been a prominent feature of industrial relations in Europe, particularly during the 1980s when these partnerships emerged. According to some, there has been considerable push by liberal movements, which have influenced many societies to engage in these partnerships with companies and unions. However, as globalization and technology have affected wages and the distribution of labor, capitalist influences have become more dominant, and firms are less willing to participate in these agreements. It is argued that the social pact at the governmental level may be less relevant because of the changes arising from globalization and technology—whereby workers' interests should be simultaneously represented and defended at the global level (e.g., the International Labour Organization) and at the firm level through corporate policies and procedures. However, trade unions still seek to maintain and strengthen the social pact, particularly in the European Union (EU).

While many social pacts in the EU member states (particularly those evolving in the mid-2000s) were developed at the national level, in some countries such as Austria and the Netherlands, social pacts were developed at the sectoral level (in some cases, these too involved the government as a participant, such as in Denmark). Other non-EU countries that have adopted social pacts include South Korea, Brazil, and Mexico. Overall, these social pacts can be very complex and are often developed with different configurations and levels of governance/participation among the parties involved. They have also been affected by collective bargaining practices. Many social pacts were developed when labor could bargain at a centralized level; now, in some instances, social pacts are used to assist bargaining at more decentralized levels.

One of the major issues that has affected social pacts is the demand for increased flexibility in labor utilization over the past 25 years. In response to the threats and opportunities associated with globalization and technology development, companies have sought a more flexible labor force; this was particularly accelerated during the 1980s. This allocation of work increased corporate reliance on the use of contingent work, part-time work, and other work that more conveniently suited rapid changes of supply and demand for goods and services. These economic shifts also cultivated a demand for wage reductions for workers—social pacts, in fact, typically center around a wage arrangement for workers.

See Also: European Union; Flexibility; Globalization; International Labour Office/International Labour Organization; Labor Standards; Salaries and Wages.

Bibliography. Bernd Brandl and Franz Traxler, "Industrial Relations, Social Pacts and Welfare Expenditures: A Cross-National Comparison," *British Journal of Industrial Relations* (v.43/4, 2005); Lucio Buccaro and Sang-Hoon Lim, "Social Pacts as Coalitions of the Weak and Moderate: Ireland, Italy and South Korea in Comparative Perspective," *European Journal of Industrial Relations* (v.13, 2007); Jimmy Donaghey and Paul Teague, "The Persistence of Social Pacts in Europe," *Industrial Relations Journal* (v.36/6, 2005); Kerstin Hamann and John Kelly, "Party Politics and the Reemergence of Social Pacts in Western Europe," *Comparative Political Studies* (v.40/8, 2007); Bob Hancké and Martin Rhodes, "EMU and Labor Market Institutions in Europe: The Rise and Fall of National Social Pacts," *Work and Occupations* (v.32, 2005); Anke Hassel, "The Politics of Social Pacts," *British Journal of Industrial Relations* (v.41/4, 2003); I. Roxborough, "Inflation and Social Pacts in Brazil and Mexico," *Journal of Latin American Studies* (v.24, 1992); Asbjørn Wahl, "European Labor: The Ideological Legacy of the Social Pact," *Monthly Review* (v.55/8, 2004).

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Socioeconomic Status

Socioeconomic status (SES) is examined both at the internal, family level and as a group and national attribute. At the family level, SES is an indicator of a family's position in a hierarchy that defines societal standing and ultimately determines opportunity and future success of family members. SES considers family income, levels of education, occupational categories, family history or blood (e.g., royalty), gender, perceived intelligence of family members, community standing, and often race and religion. In some countries, the latter categories far outweigh more mutable traits such as income or education. As reflected in the term, both social attributes and economic standing are incorporated into the characterization. Status is sometimes divided into *ascribed* status (inborn, such as gender, intelligence, or royal blood) and *achieved* status (occupation, wealth, or education). Most commonly, SES is associated with wealth or poverty.

Families with higher SES almost always have greater opportunities for the success of their children in education and employment. Higher SES often is reflected in greater resources that are turned into higher-quality child care, greater access to reading materials and exposure to technology, more availability of communications such as cell phones and computers, and generally a better environment for learning. Simply being a part of a higher-level group alters, through regular exposure, vocabulary and language ability, which in turn opens opportunity for access to business, social, and educational groupings.

Likewise, the reciprocal is true. Lower SES is associated with deprivation of opportunity, greater likelihood of exposure to crime and gang violence, and even discouragement from academic success, thus developing a cycle of poverty and limited access to both skills and business capital.

The cyclic nature of SES often results in a rigidity of social stratification. Especially when SES is coincident with visible racial characteristics or religious identification, it can turn into a fractionalization of a society that leads to conflict. Examples include the relationship between whites and blacks in the United States, Malays and Chinese in Malaysia, Shia and Sunni in Iraq, and castes in India, among many.

The nature of government has an impact on SES within societies. In fact, the critical divisions between governments with capitalist and socialist objectives are only superficially about control of the means of production. The differences are as much about the leveling of SES and the government's role in that process. Political leaders from the 18th century forward have often seen their roles as being to lift the lower classes and to promote social mobility. In some cases, this effort is pursued as a moral imperative, while in others it is seen as a means of conflict avoidance and economic progression. Philosophical cleavages of great magnitude related to SES exist based on differences in thinking about human nature, intelligence, ethics and morality, and economic achievement. The gaps between rich and poor, which inevitably parallel SES, are the essence of issues of nationalism, revolution, war, and raw politics in virtually every country in the 21st century, as they have been throughout much of modern history.

Measuring SES remains a matter of debate as it has for the last half century. While simple wealth is often used as an indicator, matters of royalty (bloodlines), biological racial character, IQ, class, and other human characteristics are often entered into the equation and the measures remain imprecise, even though the term is commonplace. More progress has been made when talking about groups, rather than families, and especially about countries.

The International Country Risk Guide (ICRG), which rates Political Risk for 140 countries, classifies them on an equivalent spectrum termed *Socioeconomic Conditions*. These conditions, like status, cover a broad spectrum of factors ranging from country wealth to market conditions to health status. These are encompassed methodologically by breaking the variable down into three subcomponents, each given a weight of four. The Socioeconomic Conditions variable itself is therefore 12 points in ICRG's overall Political Risk rating of 100.

The measures are assessed by country experts, and each is asked to rate their view of the country on a unit scale. The specific measures are as follows:

1. Unemployment (assessed on a 4-point scale, zero being the worst, 4 being the best): While an unemployment level can mean different things to different populations (e.g., 5 percent in Japan versus 5 percent in Argentina), this subvariable tries to weigh the impact of an employment level on the particular society. Thus, while the same percentage might translate as a rating of 3.5 in one country, it might be 2.5 in another.
2. Consumer confidence (4 points): Now commonly measured around the world, this is a rating on the population's feelings about whether they can spend or instead need to set aside resources for an uncertain future.
3. Poverty (4 points): Like with unemployment, an official poverty level can mean different things in different countries, so a rating works better than a percentage. Poverty is the extent to which a section of the population cannot feed or sustain itself.

The poverty measure in particular parallels a critical element of SES. The use of multiple indicators to give a quantitative assessment is an important step. Similar measures need to be undertaken to measure SES for families or groups. However, SES remains a condition that we understand implicitly, but one that we have yet to put into a common cross-national measure.

See Also: Achieved Status/Ascribed Status; Country Screening; Status.

Bibliography. Nancy E. Adler, Michael Marmot, Bruce S. McEwen, and Judith Stewart, eds., *Socioeconomic Status and Health in Industrial Nations: Social, Psychological, and Biological Pathways* (New York Academy of Sciences, 2000); Raymond Aron, Helen Weaver, and Richard Howard, *Main Currents in Sociological Thought II* (Anchor Books, 1970); Llewellyn D. Howell, ed., *The Handbook of Country and Political Risk Analysis* (PRS Group, 2008); B. S. McEwen, *Socioeconomic Status and Health in Industrial Nations: Social, Psychological, and Biological Pathways* (Johns Hopkins University Press, 2000); Carol Propper and John A. Rigg, *Socio-Economic Status and Child Behaviour: Evidence from a Contemporary UK Cohort* (Centre for Analysis of Social Exclusion, 2007); Max Weber, *Basic Concepts in Sociology*, trans. H. P. Secher (Citadel Press, 1962); Max Weber, *Economy and Society*, trans. G. Roth and C. Wittich (Bedminster Press, 1968); Charles V. Willie, *Race, Ethnicity, and Socioeconomic Status: A Theoretical Analysis of Their Interrelationship* (General Hall, 1983).

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Sony

Sony is a world-leading consumer electronics company that is also engaged in a range of industries, from video gaming to motion pictures to financial services. The firm offers a diverse product lineup, such as the Walkman brand of portable audio players, the VAIO brand of personal computers, and the PlayStation brand of video game consoles. Sony is often viewed as Matsushita Electric's rival, although the former is much stronger in entertainment and the latter more so in white goods. In fiscal year 2007, Sony had sales of over $70.3 billion. Based in Tokyo, Japan, Sony has a truly international presence—operating in more than 150 countries and employing more than 163,000 people.

Over the years, Sony has attracted much attention from scholars of business. Widely discussed topics include Sony's battle with Matsushita in the videotape formatting wars in the 1970s; the firm's successes in launching Walkman products; and Sony's recent struggles in developing its entertainment business. Many scholars have also used Sony as a case study by which to examine the management practices between Japanese and Western firms.

Established in 1946 as Tokyo Tsushin Kogyo, Sony was launched as a partnership between Akio Morita and Masaru Ibuka. Amid the chaos after World War II, the firm began its operations from a bombed department store and offered radio repair services and small electric gadgets, including Japan's first tape recorder. In the 1950s Sony began to study the advanced markets of the United States and Europe to learn from and import technologies. The company's turning point came when Sony obtained a license to produce transistors from Bell Laboratories in 1954, and launched a transistor radio in 1955. Sony's successes in these products enabled the firm to list on the Tokyo Stock Exchange in 1958.

In fact, Sony soon became a global company. Following the establishment of Sony Corporation of America in 1960, the company launched branches in Switzerland, Hong Kong, and the United Kingdom. During the 1960s, Sony developed a range of electronics, beginning with the transistor television and transistor videotape.

Sony is widely known for creating its own proprietary standards that are not compatible with rival manufacturers. This was epitomized in the 1970s and 1980s when Sony entered a videotape formatting war with Matsushita. Matsushita was the parent company of JVC, whose VHS format eventually won over Sony's Betamax format. While Sony had been the first to launch the videotape in 1975, it was unable to establish the Betamax format as the industry standard. Compared to its rivals, Sony had been less willing to collaborate with other firms and less responsive to consumers who valued longer running times and portability over technological sophistication.

From the late 1980s, Sony began to diversify out of consumer electronics into a multinational conglomerate. The company's initial steps were in the entertainment industry, first in music and motion pictures and later in video games. Sony launched its music venture through Sony Music Entertainment in 1988, after acquiring the American music company CBS Records. It expanded into the film business through Sony Pictures Entertainment in 1991, after acquiring the American motion picture company Columbia Pictures. Sony's initial foray into the video game business with Nintendo stumbled as the partnership faltered. However, the company continued to develop this business through its subsidiary Sony Computer Entertainment, and introduced its first PlayStation console in 1994.

Sony continued to diversify in the new millennium, most notably through a joint venture with the Swedish telecommunications firm Ericsson to develop a mobile phone business. The company also began to offer financial services, which included banking services through Sony Bank and life insurance services through Sony Life Insurance.

Sony faces several challenges amid the rising tide of globalization and increasing competition. One is a threat from foreign rivals such as Philips and Samsung, who also have large global market share, advanced research and development (R&D) facilities, and expansive distribution networks. In addition, the firm faces competition from companies in developing countries that can offer low-priced alternatives. Sony also faces increasing cost pressures from rising raw material prices. The company's future lies in its ability to capitalize on its brand image and diversified product range, form strategic alliances to pursue collaborative R&D, and invest in growing markets such as semiconductors.

See Also: Hitachi; Japan; Matsushita Electric Industrial; Samsung Electronics.

Bibliography. Se-jin Chang, *Sony vs. Samsung: The Inside Story of the Electronics Giants' Battle for Global Supremacy* (Wiley, 2008); Peter J. Coughlan, *Competitive Dynamics in Home Video Games: The Sony Playstation* (Harvard Business School, 2001); Aaron Frisch, *The Story of Sony* (Smart Apple Media, 2004); Shu Shin Luh, *Business the Sony Way: Secrets of the World's Most Innovative Electronics Giant* (Capstone, 2003); Atsushi Osanai, *Dilemma Between New and Existing Technologies: Separation and Coexistence of Old and New Technologies in the Television Development Division of Sony Corporation* (Kobe University, 2007).

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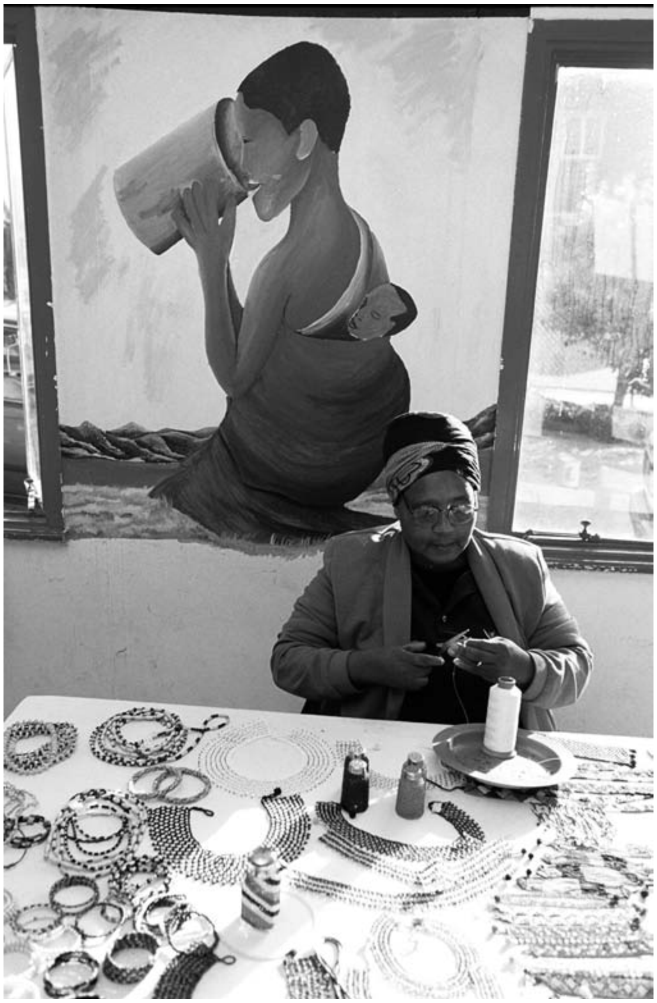
South Africa

South Africa has the largest economy in Africa and the 20th largest in the world. The nation of 43 million people of diverse origins, cultures, languages, and religions has a history of bitter racial strife, which has significantly hurt economic growth. Black Africans are the largest racial group (79.5 percent), from diverse ethnicities including the Zulu, Xhosa, and Basotho. Whites (9.2 percent) descend from many ethnic groups, including Dutch, Portuguese, German, French, and English. Mixed-race "Coloreds," and Indians/Asians comprise 8.9 percent and 2.5 percent of the population, respectively. While 11 official languages exist in South Africa, the three most



A woman sells handmade jewelry at a market in South Africa, where income inequality is worsening despite economic growth.

spoken first-home languages are Zulu (23.8 percent), Xhosa (17.6 percent), and Afrikaans (13.3 percent). Although English is the language of commerce, it is spoken by only 8.2 percent of South Africans at home. Christians dominate the religious, accounting for 79.7 percent of the population, while 15.1 percent have no religious affiliation.

The Dutch began European colonization by settling the Cape of Good Hope in the 17th century. Competition between Africans and Europeans for land through the 19th century was intensified by the discovery of diamonds and gold, further deepening native subjugation. Years of clashes between the descendants of the Dutch settlers, Afrikaners (Boers), and the British culminated in the South African (Boer) War of 1899–1902. The British won, but the two groups together drafted a constitution in 1908–09, and the British Parliament's 1910 South Africa Act gave the country its independence.

In 1948 the election victory of the right-wing National Party established the full legal system of apartheid, or "separateness," which cemented white minority rule. Blacks were forced into townships and the major black opposition movement, the African National Congress (ANC), was outlawed. By the 1980s, domestic and international repercussions of apartheid had crippled the economy. In 1990, National Party president F. W. de Klerk released Nelson Mandela, who, after 27 years in jail, became the head of the now-legal ANC and first president under fully democratic elections in 1994. Mandela then created a Truth and Reconciliation Commission to uncover apartheid crimes and unify the nation.

South Africa is a middle-income, emerging market of abundant natural resources; well-developed financial and legal sectors, including the world's 17th-largest stock exchange; and a modern infrastructure. South Africa's 2006 gross domestic product (GDP) growth of 5 percent was lower than that of Africa as a whole (5.5 percent), although fiscally conservative policies resulted in a favorable 2006 inflation rate of 4.6 percent. The major exports are corn, diamonds, fruits, gold, metals and minerals, sugar, and wool, primarily to other African countries, Germany, Japan, Switzerland, the United Kingdom, and the United States. Machinery and transportation equipment make up more than one-third of imports, followed by chemicals, manufactured goods, and petroleum.

Despite a decade of economic growth and a per capita income of about $12,000 (fourth highest in Africa), unemployment remains high at 26 percent partly because of the apartheid legacy of skill mismatch and inequalities. Development is significant around the four urban areas of Cape Town, Port Elizabeth, Durban, and Pretoria/Johannesburg, although elsewhere it is marginal, resulting in a poverty rate of approximately 50 percent. South Africa has one of the highest rates of income inequality in the world, which has been worsening over the last five years. A bright spot is the emergence of a growing black middle class, currently 10 percent of the adult black population, which has been aided by affirmative action, particularly in the public sector.

The agricultural industry accounts for 2.6 percent of GDP, and contributes around 10 percent of formal employment. Although commercial farming is relatively well developed, people in some rural areas still survive on subsistence agriculture. The largest locally produced crop is maize, with 9 million tons produced annually, while livestock farmers produce 85 percent of all meat consumed. Deregulation of the market, land reform (only 4 percent of the land is owned by the black population, far below a 2015 goal of 30 percent), foreign competition, farm attacks, and diminution of surface waters from climate change are current challenges for the sector.

Macroeconomic stability means South Africa can now focus on structural obstacles to growth and equity by strengthening trade, reducing crime, and engaging in an industrial policy that emphasizes business services and tourism while diversifying away from minerals and mineral processing. Combating the worsening human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) epidemic remains the chief challenge. The adult prevalence rate is 16.2 percent, while life expectancy has fallen from 57 years in 2000 to 45 in 2006.

For the future, the government is aiming to increase public investment to prepare for the 2010 FIFA World Cup, improve public service delivery, generate employment, promote sustainable development in response to global warming, and reduce income disparities. Priority sectors are public works, housing, water, education, and health services. The state electricity supplier, Eskom, will supplement government efforts with investment spending designed to prevent the rolling blackouts that plagued the country in 2007. Significant spending by Transnet is also planned to improve the quality and efficiency of the country's rail network, major ports, and harbors.

See Also: Africa; Company Profiles: Africa; Corporate Social Responsibility; Emerging Markets.

Bibliography. Saskia DeKlerk and Jaipe Kroon, "Networking in South African Businesses," *Management Decision* (v.45/1, 2007); Jeffrey Frankel, Ben Smit, and Federico Sturzenegger, "Fiscal and Monetary Policy in a Commodity-Based Economy," *Economics of Transition* (v.16/4, 2008); Neuma Grobbelaar and Hany Besada, *Unlocking Africa's Potential: The Role of Corporate South Africa in Strengthening Africa's Private Sector* (South African Institute of International Affairs, 2008); Sandra James, Christine Oddy, and Monica Scott, *Major Companies of Africa, South of the Sahara 2008* (Graham & Whiteside, 2008); K. I. Mitchell and L. D. Mitchell, *Graded Questions on Income Tax in South Africa, 2008* (Butterworth, 2008); Simon Roberts, *Industrial Development and Competitiveness in South Africa: International Production, Multinationals and the Role of Government* (Elgar, 2008); Imraan Valodia, *The Informal Economy in South Africa: Issues, Debates and Policies: Reflections After an Exposure Dialogue Programme With Informal Workers in Durban, South Africa, March 2007* (University of KwaZulu-Natal, 2008); Don-Terry Veal and Keenan Grenell, *Entrepreneurship in South Africa and the United States: Comparative Studies* (Edwin Mellen Press, 2008); Cherryl Walker, *Landmarked: Land Claims and Land Restitution in South Africa* (Jacana Media, 2008); Quentin Wray and Lynette Dicey, *Best Employers South Africa 2008/09* (CRF, 2008); Charles Amo Yartey, *The Determinants of Stock Market Development in Emerging Economies: Is South Africa Different?* (International Monetary Fund, African Department, 2008).

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Sovereign Borrowing

Sovereign borrowing is the process whereby a government raises debt finance, either on the capital markets or through borrowing from commercial banks. In general, the basic principles of borrowing are applied, but the specifics of the situation are given by the fact that the borrower is the government and/or a public entity that is considered to be owned or close to the government. The very traditional model would state that the borrower in the case of sovereign borrowing must be the government (the "state" in continental European parlance), and it cannot be derived for any other public entity, regardless of the fact that the (central) government would implicitly or explicitly guarantee for the entity. However, more recent internationally promoted documents widen the concept of "sovereign" (see, for instance, the text of the Basel II Agreement, where for bank risk purposes, the sovereign has been fairly widely defined). Here, we will primarily endorse the classical interpretation of sovereign borrowing, where only the central government may be regarded as (real) sovereign, while others may have derived sovereign status, primarily for risk management and risk assessment purposes.

Modern governments generally run deficits. In and before the 19th century, a good minister of finance was one who could provide a surplus in the government coffers; the beginning of the 20th century brought the fashion of a balanced budget; and finally, after World War II, and especially since the 1960s, deficits in public finances have become chronic, and the situation is unlikely to change anytime soon. At present, the U.S. federal government is the largest sovereign borrower, running its public debt to the amount of $9.5 trillion in early 2008. In fact, all major Organisation for Economic Co-operation and Development (OECD) countries are running public debts, which represent a significant part of gross domestic product (GDP). Sovereign borrowing (public borrowing) is not only the consequence of increased (or ever increasing) public spending per se, but also (as theory states) contributes to smoothing national consumption, or to undertaking projects that could not have been financed without externally raised finance.

Repayment

Sovereign borrowing raises the question of whether the holder of power is capable of servicing the debt or, in the case of being unable to serve it due to liquidity problems, is ready to address the problems and is willing to adhere to the internationally set arbitration committees. The issue of willingness to pay has attracted the attention of scholars. In a more traditional legal sense, the sovereign power may do whatever it pleases on territory that is under its control. However, from the very early 20th century, the absoluteness of the rights has been challenged, although more in private than in public law. Today, there are even legal theories that call for the support of more inherent rights and the intervention of sovereign powers (foreign governments) and international organizations, if the sovereign power in the case infringes the principles of international law (and/or principles of "natural law").

Economists are generally more prone to assume that even a government can be declared bankrupt, but usually they avoid considering the problem of enforcement. Creditors usually cannot seize the assets of the debtors, at least not on the territories where the debtor is a sovereign power. Assets may be seized if on the territories of other countries, but even then, enforcement costs may be higher than expected. Often, the local courts may refuse to look into the case, or the political factor may be as strong as the country where the claim is made and would not like to see the relationship with the debtor deteriorated. In practice, it may be only the U.S. courts that would consider the claim for repayment, if one is to base the judgment on the practice of "attracted jurisdiction" that the U.S. courts have exercised in the last decade or so.

Economic theory has offered two explanations as to why sovereign debtors (i.e., governments) repay their debt. One explanation revolves around the reputation theory, that is, that the government pays when the obligation is due to preserve a good reputation, and have the access to credit in the future. In other words, keeping a good credit rating is a crucial motivational factor, as it should provide easier access to finance internationally. The other explanation focuses more on possible sanctions. Although the sanction may not be a result of domestic court proceedings, the threat of sanctions, primarily by other governments, may serve as a motivational factor. Sanctions, usually trade related, can motivate, especially small open market economies. Most likely, the combination of both influences sovereign borrowers to follow the letter of contract and repay the debt. Even in cases where governments announced a moratorium on servicing foreign debt, they reversed their decisions fairly quickly, but not before there was damage to their reputation and credit rating internationally.

The theory of sovereign borrowing states that open economies, with significant inflows of foreign direct investments (FDIs), should have better access to international financial markets. However, more recent research has shown that, surprisingly, this may not be the case. It seems that reputation factors are the most important when granting funds to a particular sovereign borrower. The most important factors, not surprisingly, are those related to long-term stability, both economic and political, and prospects of the sovereign borrower. Often, international capital (debt) markets are very good at assessing the trends in economic performance of a particular country, and the loss of confidence in the borrower's abilities to meet the claims is an important signaling device in lending modeling.

The importance of sovereign borrowing is expected to increase, as public sector deficits are growing and need to be served in a way that will not destabilize national economies (i.e., through the monetization of the public deficit).

See Also: Credit Ratings; Debt; Development Assistance; Government Bonds; Regional Development Banks.

Bibliography. Eduardo Borensztein et al., *Sovereign Debt Structure for Crisis Prevention* (International Monetary Fund, 2005); Inter-American Development Bank, *Living with Debt: How to Limit the Risks of Sovereign Finance* (Harvard University Press, 2006); Chris Jochnick and Fraser A. Preston, *Sovereign Debt at the Crossroads: Challenges and Proposals for Resolving the Third World Debt Crisis* (Oxford University Press, 2006); Lex Rieffel, *Restructuring Sovereign Debt: The Case for Ad Hoc Machinery* (Brookings Institution Press, 2003).

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Space

According to the American anthropologist Edward T. Hall, people communicate not only through words but also through the ways in which they use and organize space. Since space speaks as loudly as words, a culture's underlying assumptions can be identified by examining how its members acquire, use, and protect space. Hall first articulated his thoughts on a possible relationship between culture and space in *The Silent Language*. Specifically, he developed the idea of *territoriality*, a term used to describe how animals take possession of, use, and defend the territories that they inhabit. Hall applied this concept to human beings and observed that how people lay claim to and defend their personal space varies across cultures.

Some cultures, he argued, are more territorial than others. The members of such cultures attach considerable importance to ownership: they mark out the areas that they inhabit, and may enter into boundary conflicts with their neighbors. Other cultures, he contended, are less territorial. In these cultures, boundaries and the ownership of space are less important: members are more open to sharing their living space, are less concerned about material ownership, and have a less-developed sense of "stealing" compared to members of cultures classified as highly territorial.

Hall developed further his concept of space in *The Hidden Dimension*. Here, he proposed the theory of proxemics, the study of how humans use space within the context of culture. According to Hall's theory, people are surrounded by so-called *proxemic zones*, a term used by Hall to describe invisible "bubbles" whose boundaries mark out personal space and zones of threat. Hall identified four zones that surround a person. Intimate space relates to the closest bubble of space surrounding a person. Entry into this space is restricted to only the closest of friends. Personal space defines the distance at which interactions among good friends are conducted. Social and consultative space is the space in which people feel comfortable conducting routine interactions with both acquaintances and strangers. Public space refers to the space beyond where people will perceive interactions as impersonal and relatively anonymous.

Hall argued that, of the four zones he identified, the area of personal space has the potential to differ the most significantly from culture to culture. To this end, he differentiated between what he referred to as noncontact cultures and contact cultures. He considered the United States and northern European countries to be noncontact cultures. The members of such cultures feel an aversion to casual touch and resent spatial intrusion. By contrast, Hall considered Arabic, Latin American, and southern European countries to be contact cultures. In these cultures, people tend to be more comfortable when interacting in close proximity to each other.

According to Hall, these different, culturally-grounded perceptions of space have the potential to generate misunderstandings in cross-cultural business encounters. Imagine, for example, that an American businesswoman and a potential Spanish customer are talking with each other at a trade fair. Given the preference of noncontact cultures for large personal space, the American may consider her Spanish interlocutor to be too intrusive: from the American's perspective, the Spanish customer may be standing too close, his voice may be too loud, the smell of his breath too disconcerting, and the feel of his hand on her arm too uncomfortable. Since contact cultures prefer close body space, the Spanish customer may find his American colleague aloof or stand-offish. He may feel that, despite his overtures of friendship, the American is coldly backing away and holding him at arm's length.

The value of Hall's theory of proxemics, argue its supporters, lies in the attention that it devotes to previously ignored channels of communication. In the absence of theories of nonverbal communication, they claim that his ideas have captured the imagination of a large number of academics who continue to use proxemics as the basis for their research. The anthropology of space, for example, has become an established area of research pursued by anthropologists interested in how architecture (understood as buildings, furniture, and design) expresses culturally-grounded ideas and sustains power relations between people.

However, Hall's theory of proxemics is not without its detractors. Although they accept the impact of his theory, critics argue, for example, that it is based on sweeping generalizations, not least since it divides the world into ideal types of contact and noncontact cultures. They have also criticized Hall for making bold assertions without providing concrete evidence to back them up. Hall's use of cultural and biological terminology, moreover, has been criticized for leading to conceptual confusion.

See Also: Context; Culture-Specific Values; Monochronic/Polychronic; Silent Language of Hall (Nonverbal Communication); Time Orientation.

Bibliography. Lily A. Arasaratnam and Marya L. Doerfel, "Intercultural Communication Competence: Identifying Key Components From Multicultural Perspectives," *International Journal of Intercultural Relations* (v.29/2, 2005); Molefi Asante, Yoshitaka Miike, and Jing Yin, *Global Intercultural Communication Reader* (Taylor & Francis Routledge, 2008); Joan G. DeJaeghere, "An Introduction to Intercultural Communication: Identities in a Global Community," *International Journal of Intercultural Relations* (v.31/5, 2007); Carol Zinne Dolphin, "Beyond Hall: Variables in the Use of Personal Space in Intercultural Transactions," *Howard Journal of Communications* (v.1/1, 1988); Edward T. Hall, *The Hidden Dimension* (Doubleday, 1966); Edward T. Hall, *The Silent Language* (Anchor Books, 1990); Edward. T. Hall and Mildred R. Hall, *Understanding Cultural Differences* (Intercultural Press, 1990).

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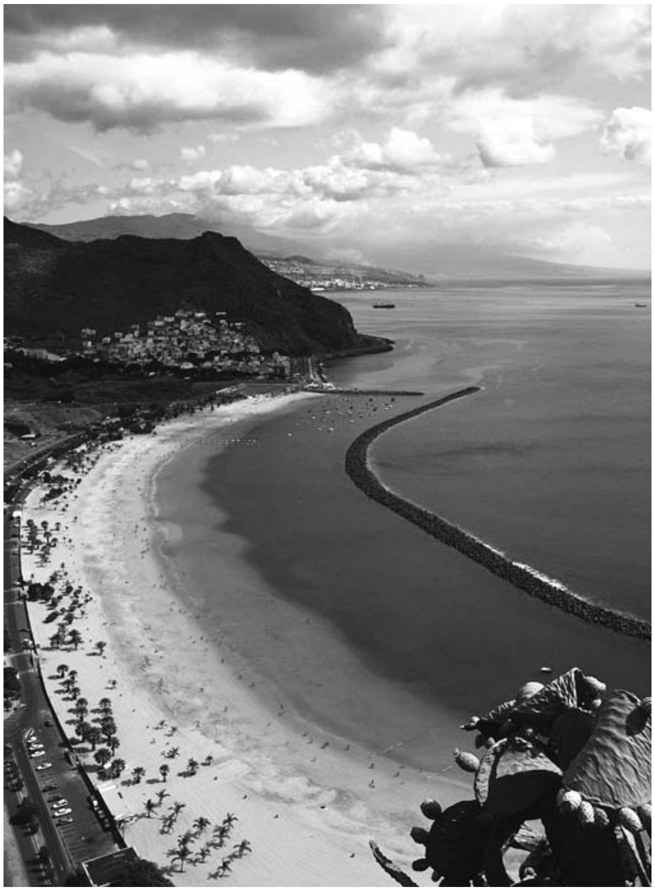
Spain

There was a time when geography teachers in northern Europe would often use an examination question that read: "Europe ends at the Pyrenees. Discuss." Travelers who visited Spain before the advent of mass tourism in the 1960s retain impressions of what appeared to be essentially a Third World country, not quite Africa, but certainly qualitatively different to anything else to be experienced in western Europe at that time. The so-called express trains took over 14 hours to run from Madrid to Barcelona, Spain's two most important cities, although, as the crow flies, the distance is only 300 miles. Today, modern electric trains run from Seville to Madrid, on to Barcelona, then through France to Paris. They are so fast and comfortable that Spanish airlines have reduced and cancelled many flight routes. In the 21st century, a British train operator chose the Spanish word *Adelante* to be the brand name of its new breed of fast diesel trains, which speaks volumes about changes in both Spain's external image and its real economy.

From 1939 until the death of the dictator General Francisco Franco in 1975, the economic environment of business in Spain tended toward isolationism and protectionism. Large government-backed monopolies dominated key industrial sectors. In Spanish discourse, the years 1975–86 are known as the "transition." In English-speaking circles, this word tends to be associated with the end of communism in Russia and the eastern bloc, and it could be argued that in many ways, Spain was the first European country to peacefully evolve from a near-totalitarian, planned economy to a pluralist, market-based democracy.

After Franco's death, instead of the chaos that many feared, there developed a carefully crafted and intelligently manipulated transition from autarky toward a modern pluralist society. This phenomenon, together with the collapse of communism in eastern Europe



A beach in Spain's Canary Islands. A tourism-related building boom brought 30 percent of all immigrants to the EU to Spain.

and Russia between 1989 and 1991, made Spain the target for many commentators, journalists, and academics interested in the possibility of a "role model" that offered lessons in peaceful change in the post–Cold War world. It can be argued that Spain's success contrasts with the dismal experience of, say, the Soviet Union, which, unlike Spain, lacked the institutions that were capable of adapting to a new democratic and market-orientated order.

Today, Spain is one of the most regionalized countries of the European Union (EU), with democratically structured autonomous communities such as Catalonia, Galicia, and Andalucia taking full responsibility for a wide range of government functions including education and economic development. Spain's postdictatorship embracing of regional autonomy without the dreadful balkanization experienced by Yugoslavia provides another contrast with the communist transition.

In common with the leaders of those members of the eastern bloc (Poland and Slovenia, for example) whose transitions are widely regarded as having been more successful, most Spanish modernizers (the *aperturistas*) realized from an early stage that close contact with and eventual membership in the EU's institutions would underpin and protect their new democracy and help foster economic development.

It can also be argued that well before the transition, Spain was (unlike the communist world) already participating in Western consumerism and popular culture, even if much of it was filtered through channels from Argentina, Mexico, or other of the more industrialized countries of Latin America. Unlike eastern Europeans under communism, Spaniards under Francoism wishing to emigrate found that there was no legal impediment to the mobility of labor, and on their return to Spain, the fortunate ones with money to invest could lock into a strong entrepreneurial culture that was already well established in the home country, together with a business environment which, although bureaucratic and sclerotic, was generally well regulated and, apart from some often-spectacular aberrations, part of a law-abiding civic culture, mostly free of corruption.

During the transition itself, Spanish policy makers were also far more circumspect than their eastern bloc counterparts in accepting the need for a headlong rush into wholesale privatization. It could also be argued that during the 1960s and 1970s, either by accident or by design, the Spanish educational system helped to better prepare the way for Spanish participation in the global economy by replacing French with English as the foreign language of first choice in the school curriculum. Last but not least, although to a large extent isolated from the European defense mainstream, Spain's strategic geographical position at the edge of the North Atlantic ensured that throughout the Cold War it was de facto part of the Western alliance's defense network through its acceptance of American military bases paid for, of course, in very useful U.S. dollars.

EU Membership

For Spain, the importance of EU membership was primarily political and psychological, providing Spain's post-Francoist governments additional leverage to push through far-reaching measures of political and economic liberalization that brought Spain into line with the business environments of northwestern Europe. EU membership was also hugely popular among Spanish voters, and has enjoyed more or less all-party support. Spanish business interests were also enthusiastic.

Since 1986, when it joined the EU, Spain has experienced an unprecedented period of economic growth, and although economic expansion has been patchy and unemployment has been stubbornly high, at times growth rates have been among the highest in the EU. The movement toward the single market during 1992 was viewed by most Spaniards as the start of real integration into the European business and political culture, but also as an opportunity to promote Spain on the world stage. During 1992, Madrid was chosen as the cultural capital of Europe, Expo ’92 took place in Seville, and Barcelona hosted the Olympic Games.

Western Europe has always been the most important market for Spanish exports and a major supplier of the Spanish economy. This pattern has been reinforced by EU membership. The concentration of Spanish trade in the EU is such that the largest four economies (France, Germany, Italy, and the United Kingdom) account for just over half of Spanish exports and supply just under half of imports. Spain participates fully in the Single European Currency, and has been a member of the euro since its launch in January 1999.

Despite all this, the Spanish economy can still be viewed as one of the least “open” in Europe, and its share of foreign investment is still not very high in comparison with some other countries, while Spanish investment abroad is small in relation to total output. On the other hand, the Spanish market is the fifth largest in Europe, with a population close to 40 million and a relatively high level of purchasing power.

One reason why the Spanish experience is important is that it provides an empirical counterargument to the “dependency” and “core periphery” theoreticians who predicted that free market forms of European integration would result in Europe’s already prosperous areas flourishing at the expense of the impoverished areas. Along with Ireland and (to a lesser extent) Portugal, Spain provides some practical evidence that cohesion can coexist and develop alongside supranational integration. Spain also provides encouragement to those who believe that political strength at the subnational level fosters economic strength. In spite of Spain’s labor market problems, it is not difficult to come across instances of articles in the international press of the “economic miracle” variety.

Industry

Spanish industry has traditionally been dominated by medium-sized firms, many of them family-run concerns that have been careful not to grow so big that there is a danger of the family losing overall control. From a globalist perspective, the lack of massive multinational firms could be seen as a handicap on Spain. However, in recent years, Spanish banks have been busy taking over other European banks; a Spanish company has become the owner of the three main London airports; and a Spanish toll-road company has won the contract to operate the Pennsylvania Turnpike in the United States.

From the late 1990s and into the 21st century, the building industry in Spain was a major motor of economic development in Spain, fueled by a buoyant housing market. Many of the houses being built were holiday and second-home apartments for buyers from other European countries such as Germany and the United Kingdom. Ironically, houses were being built in Spain at four times the rate in the United Kingdom, at a time when some British commentators were arguing that a shortage of housing supply in the United Kingdom was causing house price inflation. Many of the workforce in the Spanish building industry were immigrants and, generally, immigration into Spain was accounting for some 30 percent of all immigration into the EU. Much of the housing being built in Spain was purchased not for personal use, but by individuals and corporations for speculative purposes, with the intention of renting out.

The property market in Spain was already showing signs of slowdown when the U.S. subprime crisis of 2008 and the associated global credit crunch began to take effect. The Spanish building industry then became a major contributor to a problem of rising unemployment in Spain. The fact that many of the new unemployed were immigrants, a substantial proportion being illegal immigrants, and therefore not entitled to the safety net of the welfare state, added to social tensions in the outer suburbs of the large cities, and these tensions figured largely in the Spanish General Election of 2008, when the socialist prime minister José Luis Rodriguez Zapatero was grudgingly reelected, having had to defend immigration as being something vital to the economy, recruiting workers into the types of jobs that Spaniards either could not or did not wish to do. At the same time, he had to defend his record as a strict enforcer of measures against illegal immigration.

Modern Spaniards have living standards and expectations that occupy a different universe to those of their grandparents, and even their parents. However, in many ways, the growing middle class shares the worries, uncertainties, and insecurities of their counterparts in any other modern European country. Today, there is no doubt that Europe extends well beyond the Pyrenees, but there is much doubt about the type of economy and society that the Spaniards and their fellow Europeans wish to build.

See Also: Banco Bilbao Vizcaya Argentaria; Banco Santander Central Hispano Group; Euro; European Union; Repsol YPF; Telefónica.

Bibliography. Mercedes Cabrera and Fernando del Rey Reguillo, *The Power of Entrepreneurs: Politics and Economy in Contemporary Spain* (Berghahn Books, 2007); Pablo N. Costada, *Spain: Economic, Political, and Social Issues* (Nova Science, 2008); Espicom Business Intelligence, *Emerging Generic Markets in Western Europe: France, Italy, Portugal, Spain* (Espicom, 2007); Joseph Harrison and David Corkill, *Spain: A Modern European Economy* (Ashgate, 2004); John Howell, *Starting a Business in Spain* (Cadogan, 2005); International Business Publications, *Spain: Starting Business (Incorporating) in Spain Guide* (International Business Publications USA, 2008); Hakime Isik, *Cross Cultural Guide: How to Do Business in China, Russia, Spain and Colombia* (VDM Verlag, 2007); Carmen Camarero Izquierdo, Carlos Hernandez Carrion, and Sonia San Martin Gutierrez, "Developing Relationships Within the Framework of Local Economic Development in Spain," *Entrepreneurship and Regional Development* (v.20/1, 2008); Mario Izquierdo, Juan Jimeno, and Juan A. Rojas, *On the Aggregate Effects of Immigration in Spain* (Banco de España, 2007); Brigid Laffan, *The European Union and Its Member States* (Palgrave Macmillan, 2009); Felix Lopez and Natalia Martin, "Antecedents of Corporate Spin-Offs in Spain: A Resource-Based Approach," *Research Policy* (v.37/6–7, 2008); Vicente Roca-Puig, Inmaculada Beltran-Martin, Juan C. Bou-Llusar, and Ana B. Escrig-Tena, "External and Internal Labour Flexibility in Spain: A Substitute or Complementary Effect on Firm Performance?" *International Journal of Human Resource Management* (v.19/6, 2008); Sebastián Royo, *Varieties of Capitalism in Spain: Remaking the Spanish Economy for the New Century* (Palgrave Macmillan, 2008).

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Special Drawing Rights

The special drawing right (SDR) was created by the International Monetary Fund (IMF) in 1969 as an artificial international reserve asset. The SDR was created as a unit of account involving transactions of the IMF. At the time it was created, its gold value was the same as that of the U.S. dollar. SDR was introduced to compete with the U.S. dollar as an internationally accepted store of wealth. Its value is based on a simplified basket of several major currencies. However, since the introduction of the euro, the basket of currencies used to value SDRs consists of only the U.S. dollar, euro, Japanese yen, and British pound.

Under the Bretton Woods system of fixed exchange rates, a country with a deficit balance of payments account would settle its accounts by giving up assets or claims to foreign assets. This is referred to as an official reserve transaction. Such a transaction would lead to a transfer of ownership of gold and convertible foreign currencies like the U.S. dollar. The Bretton Woods system also allowed countries to utilize their official reserves to purchase their domestic currencies when such currencies depreciate in the foreign exchange market. The two key reserve assets at the time were gold and the U.S. dollar. The mechanism for boosting reserves depended on the United States' running a balance of payments deficit. By around 1969, the supply of gold and U.S. dollars was inadequate relative to the volume of international trade and commerce. This shortage of reserve assets was the motivation for the creation of the SDR.

When the Bretton Woods system collapsed, the SDR became a unit of account in transactions involving the IMF. Moreover, several international and regional institutions use the SDR as a unit of account. The SDR is not a currency in the true sense of the word because it is not a liability of the IMF that issues it. Many countries around the world peg their currencies to the SDR. There is a movement within the international private/commercial sector to issue SDR-denominated deposits in commercial banks. The focus on SDR is based on the fact that its value is not as volatile as that of many international vehicle currencies.

The Articles of Agreement of the IMF define the allocation of SDRs based on the quota of each member country with the IMF. The "net cumulative allocation" is the cumulative total holdings of SDRs allocated to a country. A country is expected to draw down its allocation of SDRs when it faces a balance of payments difficulty. SDRs can also be utilized to supplement the reserve holdings of a country. If a country draws upon its allocation of SDRs, it can exchange the SDR with foreign governments for their currencies to boost its reserves. Each member of the IMF is obligated to accept SDRs in exchange for its currency up to three times its net cumulative allocation. Sometimes the IMF can identify member countries with strong external positions to purchase SDRs from weak members in an attempt to help the latter.

The allocation of the SDR given to each member country translates to an acquisition of a costless asset because interest is neither paid nor earned. However, if a member holds SDR above its allocation, interest is earned on the excess. On the other hand, if a member holds SDR below its allocation, interest is paid on the shortfall.

When the SDR was introduced in 1969, its value was set equal to US$1 or 0.888671 grams of fine gold. In July 1976, its value was calculated based on a weighted basket of 16 currencies. In January 1981, the value of the SDR was redefined as a weighted average of five currencies. With the introduction of the euro in 2001, the value of the SDR was redefined again as a weighted average of four currencies. The criteria for selecting the currencies in the basket include the usability of currencies in accordance with Article XXX (f) of the IMF, and are also those issued by the member countries or unions whose exports of goods and services during a five-year period are adjudged to have the largest value. The weight assigned to each currency in the basket depends on the value of exports of goods and services and the amount of reserves denominated in the currency. The currency basket is reviewed every five years. The method used by the IMF to determine the weekly SDR interest rate is also based on a weighted average.

See Also: Exchange Rate; Exchange Rate Volatility; International Monetary Fund; International Monetary System; Reserve Currency.

Bibliography. Geert Bekaert and Robert J. Hodrick, *International Financial Management* (Pearson Prentice Hall, 2009); International Monetary Fund, "Review of the Method of Valuation of the SDR," www.imf.org (cited March 2009); International Monetary Fund, "Special Drawing Rights: A Factsheet," www.imf.org (cited March 2009); Dhara M. Khambata, *The Practice of Multinational Banking* (Quorum, 1996); Michael Melvin, *International Money & Finance* (Pearson Addison-Wesley, 2004); Michael H. Moffett, Arthur I. Stonehill, and David K. Eiteman, *Fundamentals of Multinational Finance* (Pearson Addison-Wesley, 2008); Thomas J. O'Brien, *International Financial Economics* (Oxford University Press, 2006); Kenneth Pilbeam, *International Finance* (Palgrave Macmillan, 2006).

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Specific/Diffuse

Specific and diffuse are concepts from the work of Dutch author Fons Trompenaars and British writer Charles Hampden-Turner, as explored in their management philosophy best sellers *Riding the Waves of Culture: Understanding Diversity in Global Business* (1997) and *Managing People Across Cultures* (2004). Trompenaars is a specialist in the field of cross-cultural communication, an interdisciplinary field that studies the communication differences among—and between—different cultures. Though incorporating academic disciplines, the field originated in international business, when corporate representatives abroad found that knowing the language was not enough to communicate effectively, and that the things at the heart of the cultural differences they

The difference between specific cultures, which put sharp dividing lines between work and personal life, and diffuse cultures, which do not, means that Americans doing business abroad need to be aware of the import of preliminary social activities.

encountered were more significant than simply chopsticks-versus-cutlery etiquette.

Trompenaars and Hampden-Turner developed a model of culture with seven dimensions; every culture can be described according to its position in those seven dimensions: universalism vs. particularism; individualism vs. collectivism; neutral vs. emotional; specific vs. diffuse; achievement vs. ascription; sequential vs. synchronic; and internal vs. external control. The first five govern the ways people interact with each other, the sixth governs time orientation, the last reflects the attitude toward the environment and general surroundings.

The differences described by these dimensions are often so deep that it can take a visitor a long time to even recognize that they are present; they may realize that something is off about their interaction in the foreign culture, but ascribe it to a language barrier, a lack of local intimate social group, or some other cause, because the expectations inculcated by these dimensions are so fundamental that it often does not consciously occur to us that they even are expectations. To expect someone to knock on a door before entering means being aware that knocking is a choice, that it is possible not to knock; that is merely etiquette, and deviation is empirical, concrete, easy to notice and articulate. What Trompenaars and Hampden-Turner attempt with their model is to articulate much of that which has remained unsaid about variations among and amid cultures.

The specific/diffuse dimension describes the extent to which people get involved with each others' lives—that is, the extent to which their life transpires in intersecting or nonintersecting layers or spheres. Trompenaars and Hampden-Turner provide the example of two bosses. One, when employees run into him at random in the mall or some other nonwork situation, may be greeted informally, spoken to informally, given less personal space. The other, when encountered in a nonwork situation, is still deferred to—is accorded some degree of respect in matters that have nothing to do with his job, treated as if his opinion has more weight, and this may even be true of people who don't work for him. Though the United

States is considered a culture of the former type—the specific type—there are nevertheless plenty of Americans who find themselves in the position of the latter, such as certain celebrities. Ian Fleming's James Bond novels, for instance, became American best sellers when Jack Kennedy revealed an affection for them, and Ronald Reagan's inclusion of Jelly Belly jelly beans in his inauguration celebration helped to propel that brand to national success.

When we describe the difference in terms of respect, it starts to sound like a class system, which is misleading. What is going on is whether one's reputation is specific (confined to context) or diffuse (permeating the rest of the areas of one's life). This affects, for instance, how much you expect to know about the personal lives of your coworkers, and how likely you are to interact with them socially outside work. Specific cultures put sharp dividing lines between work and personal life. Diffuse cultures do not. In Germany, for instance, the wife of a doctor will be called Frau Doktor just as he is called Herr Doktor—the title permeates just as the husband's surname does, and for the same reason: it is that much a part of him, as is she.

There is an online example of the difference between specific and diffuse approaches in the social networking sites Facebook and Myspace. Myspace groups all friends together without differentiation, except the ability to add "top friends," and some limited content filtering. It is essentially diffuse. Facebook, on the other hand, categorizes friends as workmates, roommates, significant others, schoolmates, family, and so on, and actively encourages the use of this differentiation, while optional applications allow for the mapping of acquaintanceship to show that Bob married Carol who went to school with Ted who lives with Alice who works with Bob.

Specific cultures are likely to keep business and personal life separate, while workmates and business acquaintances in diffuse cultures will want to know each other in nonbusiness contexts and consider that necessary in order to have a grasp of each other's character. This is one of the communications barriers overseas workers can run into; keeping to oneself or avoiding answering questions that seem intrusive in a diffuse culture can make one seem standoffish, cold, or awkward, regardless of personal charisma or social skills. Americans doing business with visiting foreigners often find that business negotiations only really begin once "the ice has been broken" somehow, which may take days of wining and dining, taking in a baseball game, and visiting nightlife hotspots.

On the other hand, while one's character permeates deeper in a diffuse culture, Trompenaars and Hampden-Turner describe the boundary of private space as being more severe. The French favor high windows and high fences, making a stronger boundary marker of private space. Trompenaars describes his own discomfort with an American friend helping himself to a beer in the refrigerator after it is offered; even though Trompenaars (from a diffuse Dutch culture) had invited him to have the beer, it was a breach of his expectations for an acquaintance to open the refrigerator instead of waiting to be served. In certain diffuse cultures, it may be strictly inappropriate to ask certain questions—such as about religious or political beliefs—of anyone who is not an intimate. Non-Americans often comment on the confessional nature of American culture, in which a virtual stranger may reveal sexual details, sometimes for no apparent reason except to make small talk—while those same Americans might be just as put off by moving to a culture where coworkers live in the same apartment building, and have fewer barriers between personal and work life.

See Also: Achieved Status/Ascribed Status; Individualism/Collectivism; Internal/External; Neutral/Affective; Time Orientation; Universalism/Particularism.

Bibliography. Fons Trompenaars and Charles Hampden-Turner, *Managing People Across Cultures* (Capstone, 2004); Fons Trompenaars and Charles Hampden-Turner, *Riding the Waves of Culture: Understanding Diversity in Global Business* (McGraw-Hill, 1998).

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Spot Market

A spot market is a real-time market for the trade of commodities or securities, where the transactions are conducted instantly, in contrast with the futures exchange or the forward market, where a price is agreed upon for a transaction that will occur at a specified point in the future. The spot market, then, is the one that operates most like ordinary retail markets, with cash exchanged for goods "on the spot." The spot price is the price for which something sells on the spot market, and is relevant in futures/forward trades as well as other considerations.

The internet and other technological advances have increased the importance of the spot market in commodities. Assets can be bought and sold repeatedly throughout the day, because of the lack of a need to take the time to physically transfer them back and forth. Even so, a delay is sometimes built into the way the market works: the spot market is especially huge in the foreign exchange market that has become the subject of such intense speculation in the last few decades, but on that market there is a two-day delivery date, a length of time originally chosen because of the time it took to physically deliver currency from one bank to another. Spot transactions are the second-most common on the global foreign exchange market, after swaps. Foreign exchange transactions are conducted with currency pairs: the transaction currency (the currency the buyer is paying in) and the counter currency (the currency that is being purchased), though this is somewhat a matter of perspective, since each party is both a buyer and seller.

The spot market has also become important to the energy market. Suppliers with surplus energy or natural gas can use the internet to instantly locate prospective buyers, negotiating prices—often almost instantaneously thanks to the algorithms in automated auction-style bidding systems (buyers can dictate ahead of time that they are willing to pay up to a certain amount for a certain quantity, without needing to be there to monitor the market, just as systems like eBay will increase the user's bid as necessary up to a specified maximum bid). The energy can then be transferred to the customer within minutes of the surplus being identified, an extraordinary acceleration compared to the pace at which transactions transpired when trading floors were the only venue for spot markets. Some energy markets mandate spot price pools, which are independent exchanges that pool the bids and prices of various buyers and sellers in order to set fair values, with the goal of "clearing the market," making transactions rapid and facilitating quick exchanges.

There is no single spot market for most commodities, and markets are less interlinked than stock exchanges. They can be privately operated, organized by industry agencies, or government operated, and may be available to the public, authorized brokers, or specific members, depending on the nature of the exchange and the commodity. Spot prices are generally publicly available, and affect other markets and exchanges by acting as a barometer by which the value of a thing can be estimated.

Though ownership transacts instantly, delivery and payment may be delayed some, depending on the market. As stated, foreign exchange has a two-day delivery; crude oil can have a delivery of up to a month; while energy delivers within an hour. In all cases, the spot price paid is the price set at the time of the transaction, regardless of whether anything impacts the value during that brief period before delivery.

See Also: Arbitrage; Foreign Exchange Market; Forward Market; Futures Markets; Swap.

Bibliography. James L. Bickford, *Forex Wave Theory: A Technical Analysis for Spot and Futures Currency Trade* (McGraw-Hill, 2007); Rob Booker, *Adventures of a Currency Trader: A Fable About Trading, Courage, and Doing the Right Thing* (Wiley, 2007); Paul J. Devereux and Robert A. Hart, "The Spot Market Matters: Evidence on Implicit Contracts From Britain," *Scottish Journal of Political Economy* (v.54/5, 2007); Kathy Lien, *Day Trading the Currency Market: Technical and Fundamental Strategies to Profit From Market Swings* (Wiley, 2005); Wayne McDonell, *The FX Bootcamp Guide to Strategic and Tactical Forex Trading* (Wiley, 2008); Anne Neumann and Boriss Siliverstovs, "Convergence of European Spot Market Prices for Natural Gas?: A Real Time Analysis of Market Integration Using the Kalman Filter," *Journal of Applied Economics* (v.13/11, 2006); David M. Newbery, "Competition, Contracts and Entry in the Electricity Spot Market," *Rand Journal of Economics* (v.29/4, 1998); Ed Ponsi, *Forex Patterns and Probabilities: Trading Strategies for Trending and Range-Bound Markets* (Wiley, 2007); Dominick Salvatore, *International Economics* (Wiley, 2007); Frank Sensfuss, Mario Ragwitz, and Massimo Genoese, *The Merit Order Effect: A Detailed Analysis of the Price Effect of Renewable Electricity Generation on Spot Market Prices in Germany* (ISI, 2007); M. J.

Stevenson, *Filtering and Forecasting Spot Electricity Prices in the Increasingly Deregulated Australian Electricity Market* (University of Technology, Sydney, 2001).

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Spread

Spread denotes the ability of an investor to trade in the market by being able to request to sell or buy financial assets/commodities at ask or bid prices, respectively. The difference between ask and bid prices is called spread and reflects liquidity available in the market. The larger the spread, the less willingness there is to trade in the respective asset. An alternative definition of the spread is related to the strategy that involves the simultaneous use of two or more options of the same type. These option positions are taken to profit from short-term movements. However, profits can be made even if the stock price does not diverge from a specific exercise price.

Market makers are in charge of supporting liquidity in the market. As a reward, they can purchase assets at the bid price and sell them at the offer prices. Before the reduction of the tick size, that is, the minimal price increase, from one-sixteenth of a dollar to one cent in 2001 at the New York Stock Exchange (NYSE), this strategy could have provided the market maker with significant profits. Specialists at NYSE also post bid and ask depth, which is determined by the volume of securities offered and requested at various ask and bid prices. The lower the difference between prices and the larger the volumes offered at each price, the greater the depth. The existence of the bid and ask price does not indicate that transactions are exclusively executed at these prices. Bid price is requested by the potential buyer, while the initial offer of the seller is summarized in the offer/ask price. The executed price may be bid, ask, or any other value within a spread. The swings from bid to ask prices and vice versa can lead to noticeable market movements, which was explained as part of a so-called January effect. Selling at a bid price in a seller-initiated trade in December will depress prices compared to an enthusiastic purchase spree at the ask price initiated by a buyer in January.

Albeit rather simple to define, the spread in itself has a challenging structure. Apart from the coverage of the already explained order processing cost for market makers, the spread contains the adverse selection component that reflects the attitude of an uninformed investor faced with informed counterparts. The spread will increase in the state of increased information asymmetry and vice versa. Finally, the third component is determined by the market maker's decision to change quotes in an attempt to hedge inventories as a response to the behavior of other market participants. To evaluate these elements, it is necessary to introduce the notion of a trade spread in which all trades higher than the spread midpoint are buyer initiated and all prices below the spread midpoint are seller initiated.

There are at least four spread trading strategies in the derivatives markets: bull, bear, butterfly, and calendar. In the bull spread, an investor intends to profit from an increase in the price of an underlying asset. The call option with the lower exercise price is purchased, while the second call option with a higher exercise price is sold. The initial loss due to the higher premium paid than received can be reversed if the price of the underlying asset reaches the higher exercise price.

In the bear spread, an investor expects a price decline and the call option with the higher exercise price is bought, while the one with the lower exercise price is sold. The positive difference between premiums is the major income source in this case. The same strategies can be achieved with put options. In butterfly spreads, the highest profit is realized if the stock price is close to the midway exercise price. Two call options with the highest and lowest exercise prices, respectively, are bought, while two call options are sold at the price that is close to the current market price and midway between the previous two exercise prices.

As in the previous two cases, put options can be used with identical purchase/sale steps involved. Unlike in bull, bear, and butterfly strategies, in the calendar spread there is no assumption about the use of options with identical expiration dates. The sale of a call option and the purchase of a longer-maturity call option with the same strike price lead to profits if the stock price is close to the exercise price when the short-term call option matures.

See Also: Bid/Ask Spread; Liquidity (or Market Liquidity); Market Maker; Option.

Bibliography. Hee-Joon Ahn, *The Components of the Bid-Ask Spread in a Limit-Order Market: Evidence From the Tokyo Stock Exchange* (Columbia Business School, 2003); John Y. Campbell, Andrew W. Lo, and Archie Craig MacKinlay, *Econometrics of Financial Markets* (Princeton University Press, 1997); Bart Frijns, Aaron Gilbert, and Alireza Tourani-Rad, *Insider Trading, Regulation and the Components of the Bid-Ask Spread* (Auckland University of Technology, 2005); Roger D. Huang and Hans R. Stoll, "The Components of the Bid-Ask Spread: A General Approach," *Review of Financial Studies* (v.10, 1997); John C. Hull, *Options, Futures and Other Derivatives* (Prentice Hall, 2000); Kenneth A. Kavajecz, "A Specialist's Quoted Depth and the Limit Order Book," *Journal of Finance* (v.54/2, 1999); Donald B. Keim, "Trading Patterns, Bid-Ask Spreads, and Estimated Security Returns: The Case of Common Stocks at Calendar Turning Points," *Journal of Financial Economics* (v.25/1, 1989); Naiping Liu and Lu Zhang, "Is the Value Spread a Useful Predictor of Returns?" *Journal of Financial Markets* (v.11/3, 2008); Richard Roll, "A Simple Implicit Measure of the Effective Bid-Ask Spread in an Efficient Market," *Journal of Finance* (v.39/4, 1984); Nuttawat Visaltanachoti, Hang Luo, and Jian Tang, *Trade Scheduling and Bid-Ask Spread Forecasting: Evidence From the Shenzhen Stock Exchange* (Massey University, 2005).

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Sprint Nextel

Sprint Nextel, headquartered in Reston, Virginia, is the holding company of a telecommunications corporation that provides wireless and wireline communications services to consumers, businesses, and governments. Sprint Nextel's operational headquarters is located in Overland Park, Kansas. Sprint Nextel was formed through a merger of Sprint and Nextel announced in December 2004 and approved by regulators on August 3, 2005. Sprint Nextel employs approximately 60,000 people worldwide serving 54 million subscribers. Net operating revenues for fiscal year 2007 were approximately $40,146 million.

The logo from the merger of Sprint and Nextel, which was approved by regulators on August 3, 2005.

The Sprint Corporation was founded as the Brown Telephone Company by Cleyson Leroy Brown in Abilene, Kansas, in 1899. After emerging from bankruptcy in 1938, the company name was changed to United Utilities. The company grew throughout the midwestern and southern United States and changed its name in 1972, to become United Telecommunications.

In 1984 United Telecommunications announced its landline network would be converted to a 100-percent digital fiber optic network and would offer extraordinary clarity. By 1986, the long distance division, Sprint, was the first coast-to-coast fiber optic network. Sprint promoted its sound quality through a well-known series of "pin drop" advertisements and commercials. In 1992 United Telecommunications changed its name to Sprint Corporation. Also in 1992, Sprint became the first carrier to offer commercial internet access.

In 1987 entrepreneur Morgan O'Brien founded a company named Fleet Net. The company established itself as a nationwide provider of wireless communications, and by 1993 had changed its name to Nextel. Nextel subsequently merged with Dial Call and OneComm, and acquired all of Motorola's specialized mobile radio (SMR) licenses for the United States. With the infusion of a billion-dollar investment by wireless pioneer Craig McCaw, the company created the Nextel phone that used Motorola's iDEN technology, providing enhanced digital cellular, two-way radio, and text/numeric paging in one phone. The iDEN service was introduced as the

Nextel National Network in January 1997. By 2000 Nextel Worldwide offered all-digital wireless coverage in the United States and 70 other countries. In 2002 Nextel became the first carrier to offer live streaming video services.

Sprint Nextel uses a number of network technologies to provide its products and services. Sprint Nextel's networks include its nationwide Sprint personal communications service (PCS) network; its code division multiple access (CDMA) national Nextel network; its integrated digital enhanced network (iDEN); its fourth-generation mobility network using worldwide interoperability for microwave access (WiMAX) IEE standard 802.16e-1005; and its global internet network, a Tier 1 internet protocol (IP) backbone.

The Sprint PCS network has a voice calling area that covers more than 295 million people in the United States, Puerto Rico, the U.S. Virgin Islands, and Guam. The CDMA global system for mobile communications (GSM) provides international roaming for customers in over 160 countries worldwide. Sprint's mobile broadband network, evolution-data optimized (EV-DO), connects to more than 224 million people in 13,000 cities and more than 1,100 airports in the United States (its overlapping and faster EV-DO Rev A network provides services to over 212 million people in over 10,700 communities). Sprint Nextel's National Nextel Network is an all-digital wireless network in the United States that reaches 264 million people in 297 markets.

Sprint Nextel is regulated at the national level by the Federal Communications Commission (FCC) and in certain states by public utilities commissions. The FCC oversees the licensing, acquisition, construction, operation, and sale of wireless spectrum and operations. The FCC licenses Sprint Nextel for its 1.9 gigahertz (GHz) CDMA network, its 800 and 900 megahertz (MHz) iDEN network, its 2.1 and 2.5 GHz broadband radio services (BRS), as well as other licenses currently not utilized by its networks.

Sprint Nextel offers an array of technological advances to its customers in the rapidly changing telecommunications markets through its use of strategic alliances recognizing its own strength of expertise as being in wireless and wireline networks. Sprint Nextel partners with the following companies for various projects:

- Alcatel Lucent to provide mobile broadband services
- Cisco Systems to provide managed network telephony and security as well as third-generation wireless and wireline voice, video, and data integration
- Hewlett-Packard to develop embedded mobile technology solutions
- IBM to provide software assets and business process knowledge to its mobility framework
- Microsoft to provide business applications and network security
- Nortel to leverage telephony network management services
- Northrop Grumman to provide secure networks for the needs of local governments, state governments, and the federal government

As of December 31, 2007, Sprint Nextel had consolidated assets of approximately $64.1 billion and shareholder equity of $21.3 million. As of February 2008, Sprint Nextel had about 53,000 Series 1 common stock record holders and 11 Series 2 common stock record holders.

See Also: AT&T; Motorola; Verizon Communications.

Bibliography. Oliver Boyd-Barret, "Cyberspace, Globalization, and Empire," *Global Media and Communication* (v.2/1, 2006); Peter Curwen, "Anatomy of a Merger: Sprint Nextel," *Info* (v.9/4, 2007); Paul Kirby, "FCC Order Would Give Sprint Nextel Until 2010 to Vacate 800 MHz Channels," *Telecommunications Reports* (v.74/20, 2008); Craig Kuhl, "WiMax: Coming to a Tower Near You?" *Communications Technology* (v.25/11, 2008); DongBack Seo, C. Ranganathan, and Yair Babad, "Two-Level Model of Customer Retention in the US Mobile Telecommunications Service Market," *Telecommunications Policy* (v.32/3–4, 2008); Sprint, www.sprint.com (cited March 2009); Steven J. Vaughan-Nichols, "Mobile WiMax: The Next Wireless Battleground?" *Computer* (v.41/6, 2008); Joanie Wexler, "The Wireless Data Roaming Quagmire," *Business Communications Review* (v.37/6, 2008); Maury Wright, "WiMax Gains in Mobil-Broadband Game, but 4G Lurks," *EDN* (v.52/7, 2007).

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Sri Lanka

Sri Lanka was known as Ceylon until 1972. The modern name, Sri Lanka, is a reference to the Indian epic *Ramayana*, in which the island is named Lanka. The "Sri" prefix is a common term of respect in south Asia. Sri Lanka lies at the crossroads of the Indian Ocean and its early history consists of repeated migrations of peoples from the Indian mainland. Throughout some of India's history, kingdoms in south India were powerful enough to control parts of Sri Lanka. In 1505 a Portuguese fleet landed on Sri Lanka and controlled most of the island in just over 100 years. Portuguese control was replaced by the Dutch and later the British. From 1796 until 1948, Ceylon remained part of the British Empire. Ceylon achieved its independence from the British Empire on February 4 without the violence that had been prominent in India. However, tensions between the Sinhalese and the Tamil populations would increase and eventually lead to civil war between them.

Sri Lanka lies off the southern tip of India and is separated from the mainland by the Palk Strait. It is separated by only 35 km (22 mi.) from India. Sri Lanka is 65,610 sq. km (25,332 sq. mi.) or approximately half the size of New York State or slightly larger than West Virginia. Sri Lanka has a population of about 22 million, but since the 1980s, several hundred thousand Tamils have fled to Western countries. There are eight provinces that Sri Lanka is divided into: Central, North Central, North Eastern, North Western, Sabaragamuwa, Southern, Uva, and Western. In 2006 the Supreme Court ruled void a presidential directive merging the North and Eastern provinces. The merger is seen by some as a prerequisite to settling the conflict between the Tamils and the Sinhalese and a parliamentary decision on the issue is pending.

A new constitution for the Democratic Socialist Republic of Sri Lanka was promulgated on September 7, 1978. The executive president is directly elected for a seven-year term renewable once. The Parliament consists of one chamber, composed of 225 members who will next have elections by 2010. The prime minister and other ministers, who must be members of Parliament, are appointed by the president. Sri Lanka's legal system is highly complex because it is a mix of English common law, Roman-Dutch, Kandyan, and Jaffna Tamil law. As such, it has not accepted compulsory International Court of Justice (ICJ) jurisdiction. Judges for both the Supreme Court and the Court of Appeals are appointed by the president.

Sri Lanka is a member of the United Nations (UN), World Trade Organization (WTO), the Commonwealth, the International Organization for Migration, the Asian Development Bank, the Colombo Plan, and South Asian Association for Regional Cooperation (SAARC). Its defense consists of an army, navy, and air force. Twenty years of civil war have severely affected the socioeconomic status of Sri Lanka's peoples. Interregional commerce has been disrupted, poverty has increased, infrastructure has been damaged, and public finances have been weakened as a result of the continued conflict. However, a peace process was initiated in 2002 and since then, the government has embarked on reforms in order to rekindle the economy. Some of those reforms include privatization, amendment of bank laws, restructuring of financial markets, flotation of the exchange rate, and the introduction of a value-added tax system. Furthermore, in 2003, the international community promised aid worth $4.5 billion, which was to be disbursed from then until 2007 as long as the peace process continued. In 2006 fighting intensified and the government took control of the Eastern Province area in 2007. In January 2008, the government officially withdrew from the cease-fire and now actively engages the Tamils in the northern portion of the island.

Expanded port facilities are planned in Colombo, Sri Lanka, to take better advantage of the island's strategic trading location.

On December 26, 2004, a tsunami hit Sri Lanka and, along with a significant loss of human capital (31,000 lives), caused an estimated $1.5 billion in damages. Sri Lanka's gross domestic product (GDP) per capita is $4,100 (2007 estimate). Agriculture makes up 16.3 percent, industry 27 percent, and services 56.6 percent of its GDP, respectively (2007 estimates). The United States is its largest export partner, followed by the United Kingdom and India, followed by China. The ruling Sri Lanka Freedom Party is trying to reduce poverty by steering investment to disadvantaged areas, promoting agriculture, developing small and medium enterprises, and expanding the already enormous civil service. Currently, the government has halted privatizations. Around 800,000 Sri Lankans work abroad, most of whom are in the Middle East (90 percent). These expatriates send home more than $1 billion a year in remittances. The continued persistence of the Tamil Tigers of the north and east for an independent sovereignty continues to hinder the optimal progress of the economy. The major religion is Buddhism, with almost 70 percent of the population subscribing to it, followed by Islam.

See Also: Bangladesh; Company Profiles: South Asia; India.

Bibliography. M. M. M. Aheeyar, *Impact of Micro-Finance on Micro-Enterprises: A Comparative Analysis of Samurdhi and SEEDS Micro-Entrepreneurs in Sri Lanka* (Hector Kobbekaduwa Agrarian Research and Training Institute, 2007); CIA, "Sri Lanka," *World Factbook*, www.cia.gov (cited March 2009); Nombulelo Duma, *Sri Lanka's Sources of Growth* (International Monetary Fund, Asia and Pacific Department, 2007); *The Europa World Year Book 2006, Volume II, International Organizations Countries: Kazakhstan-Zimbabwe* (Routledge, 2006); Mario Gomez, *A New Constitutional Framework for Sri Lanka: Proposals From Business and Civil Society* (Berghof Foundation for Conflict Studies, Sri Lanka Office, 2007); International Business Publications, *Sri Lanka: Starting Business (Incorporating) in Sri Lanka Guide* (International Business Publications USA, 2008); Barry Turner, ed., *The Statesman's Yearbook 2008* (Palgrave Macmillan, 2008); S. S. Upadhyay, *India & Sri Lanka: Economic and Political Relations* (ABD Publishers, 2007); Nireka Weeratunge, *Enhancing the Enterprise Culture of Sri Lanka: Results of the ILO Enter-Growth Project's Cultural Assessment in Four Districts* (International Labour Organization, 2007); Hema Wijewardena, Anura DeZoysa, Tilak Fonseka, and Basil Perra, "The Impact of Planning and Control Sophistication on Performance of Small and Medium-Sized Enterprises: Evidence From Sri Lanka," *Journal of Small Business Management* (v.42/2, 2004).

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Staffing Levels

There are different levels of international employees around the world. An expatriate is an employee who is sent by a company in one country to manage the same company's operations in another country. There are three types of expatriates: parent country nationals (PCNs), host country nationals (HCNs), and third country nationals (TCNs).

PCNs are employees who are born and live in the parent country. These employees tend to be responsible for starting up operations at locations in another country. A hiring manager is responsible for staffing the operations with employees who can adapt to the new environment and be self-motivated. Some of the desired characteristics of a candidate include work experience with other cultures, knowledge of multiple foreign languages, and extensive travel overseas. However, some multinationals are concerned about hiring too many PCNs, given the additional expenses that are incurred by the company. For example, the multinational corporation (MNC) will have to consider costs such as relocation expenses, cultural training, housing assistance, taxation allowances, incentives and rewards, and family issues. HCNs are employees who were born and raised in the host country. MNCs have found that hiring managers from the host country is an opportunity to build good public relations with the citizens of that country. This approach shows an economic commitment on the part of the MNC by providing local citizens with the opportunity to gain employment and fueling the local economy. Another incentive is that hiring an HCN is not as costly as hiring a PCN. TCNs are employees who were not born or raised in either the host or parent country but work in the host country. These candidates tend to be pursued when there are jobs that require a certain level of expertise and skills to perform certain jobs.

Different countries will utilize different combinations of these employees to staff their international operations. Four of the major approaches include the following:

1. Ethnocentric staffing approach: The staffing plan is dictated by the MNC's values, attitudes, practices, and priorities. The corporate office is responsible for establishing human resource policies and practices as well as selecting candidates who will be equipped to provide leadership to the subsidiaries in other countries.
2. Polycentric staffing approach: Although the corporate office may make all of the hiring decisions, there is consideration for the needs of the local subsidiaries. In addition, the policies and practices are developed at the local level to meet the needs of the local citizens filling the jobs. Although the locals are selected for managerial positions, it is rare for these individuals to be promoted to the corporate office. These employees tend to be promoted to positions at the local level only.
3. Regiocentric staffing approach: Human resource policies and practices are dictated by the needs of the region. The approach utilized is similar to what occurs in the polycentric staffing approach. However, there is a broader territory—it is regional versus local. Therefore, there are opportunities to hire and promote workers to regional levels.
4. Geocentric or global staffing approach: The multinational's focus is to look at the "big picture" and develop a plan that provides optimal utilization of all resources, not just human resources. Local and regional concerns are not given priority; rather, they are given equal weight as some other factors in the decision-making process. Staffing practices are developed at the corporate level and the selection process is based on a global pool without regard to a person's country of origin or cultural background.

When considering these approaches, the organization must consider issues such as the following:

- National concerns: MNCs are expected to work within the legal parameters of the host country. Therefore, it is essential to be aware of the local employment law policies and practices.
- Economic concerns: The MNC has to consider cost of living expenses (i.e., housing, food, incentives, and rewards).
- Technological concerns: Given the increased use of technology in business operations, MNCs will need to determine if the host country's workforce has a skilled pool of potential candidates.
- Organizational concerns: The MNC's level of internationalization as well as the product life cycle are two important factors evaluated when determining staffing needs.
- Cultural concerns: It is imperative that the corporate office considers the differences between the corporate and subsidiary cultures when making staffing decisions and policies.

Organizations will have to decide if it is best to establish the international business function internally or externally. It is important for organizations to assess their current workforce to determine if they will need to rely on expatriates to establish a presence in the host company or whether it is more feasible to hire employees from the host country to minimize cultural and language barriers.

If the organization elects to start internally, it may assign a team to set the budget, ship products, and develop the international marketing plan. However, this can become expensive, so the organization may evaluate two other options. One option is to hire employees from the host countries. Many organizations elect this option to minimize cultural and language barriers and secure labor that is cheaper than its current workforce. If the organization elects to hire employees from the host country, it is important that it assimilates these new hires into its corporate cultural so that they will have an understanding of what the organization values and how it operates.

See Also: Education Allowance; Ethnocentric Human Resource Policy; Expatriate; Geocentric Human Resource Policy; Housing Allowance; International Training; Regiocentric Human Resource Policy.

Bibliography. Thomas P. Bechet, *Strategic Staffing: A Comprehensive System for Effective Workforce Planning* (AMACOM, 2008); Donald L. Caruth, Gail D. Caruth, and Stephanie S. Pane, *Staffing the Contemporary Organization: A Guide to Planning, Recruiting, and Selecting for Human Resource Professionals* (Praeger Paperback, 2008); D. Collings et al., "Composing the Top Management Team in the International Subsidiary: Qualitative Evidence on International Staffing in U.S. MNCs in the Republic of Ireland," *Journal of World Business* (v.43/2, 2008); Herbert Heneman III and Timothy Judge, *Staffing Organizations* (McGraw-Hill Irwin, 2008); M. Morrison, "International Recruiting a Helpful Staffing Tool," *Hotel & Motel Management* (v.223/4, 2008); J. Bonache Pérez and J. Pla-Barber, "When Are International Managers a Cost Effective Solution? The Rationale of Transaction Cost Economics Applied to Staffing Decisions in MNCs," *Journal of Business Research* (v.58/10, 2005); B. Reiche, "The Effect of International Staffing Practices on Subsidiary Staff Retention in Multinational Corporations," *International Journal of Human Resource Management* (v.18/4, 2007); J. Shen, "Factors Affecting International Staffing in Chinese Multinationals (MNEs)," *International Journal of Human Resource Management* (v.17/2, 2006); Peggy Tallier, *Nurse Staffing Ratios and Patient Outcomes: A Critical Look at Nurse Staffing Ratios and the Impact on Patient Outcomes* (VDM Verlag, 2008).

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Standard International Trade Classification

The Standard International Trade Classification is a classification system maintained by the United Nations Statistics Division. The system is used to provide a standardized classification of imported and exported goods, in order to make it feasible to compare sets of import/export data regardless of country, and to have accurate data about international trade. Although Revision 4 of the classification was written in 2006, Revision 3 remains the standard in international usage. Both versions follow the same essential hierarchy, with each digit adding further detail: the first digit indicates the Section; the second, the Division; the third, the Group; the fourth, the Subgroup; and the fifth, the Item. Zero and two Roman numerals are used in order to create 12 sections with single digits.

The first two levels of the hierarchy begin with the following items:

- 0: Food and live animals
  - 00: Live animals other than animals of division 03
  - 01: Meat and meat preparations
  - 02: Dairy products and birds' eggs
  - 03: Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations thereof
  - 04: Cereals and cereal preparations
  - 05: Vegetables and fruit
  - 06: Sugars, sugar preparations and honey
  - 07: Coffee, tea, cocoa, spices, and manufactures thereof
  - 08: Feeding stuff for animals (not including unmilled cereals)
  - 09: Miscellaneous edible products and preparations
- 1: Beverages and tobacco
  - 11: Beverages
  - 12: Tobacco and tobacco manufactures
- 2: Crude materials, inedible, except fuels
  - 21: Hides, skins and furskins, raw
  - 22: Oil-seeds and oleaginous fruits
  - 23: Crude rubber (including synthetic and reclaimed)
  - 24: Cork and wood
  - 25: Pulp and waste paper
  - 26: Textile fibres (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)
  - 27: Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)
  - 28: Metalliferous ores and metal scrap
  - 29: Crude animal and vegetable materials, n.e.s.
- 3: Mineral fuels, lubricants and related materials
  - 32: Coal, coke and briquettes
  - 33: Petroleum, petroleum products and related materials
  - 34: Gas, natural and manufactured
  - 35: Electric current
- 4: Animal and vegetable oils, fats and waxes
  - 41: Animal oils and fats

42: Fixed vegetable fats and oils, crude, refined or fractionated
43: Animal or vegetable fats and oils, processed; waxes of animal or vegetable origin; inedible mixtures or preparations of animal or vegetable fats or oils, n.e.s.

5: Chemicals and related products, n.e.s.
51: Organic chemicals
52: Inorganic chemicals
53: Dyeing, tanning and coloring materials
54: Medicinal and pharmaceutical products
55: Essential oils and resinoids and perfume materials; toilet, polishing and cleansing preparations
56: Fertilizers (other than those of group 272)
57: Plastics in primary forms
58: Plastics in non-primary forms
59: Chemical materials and products, n.e.s.

The first two levels continue with the categories of (6) Manufactured goods classified chiefly by material, (7) Machinery and transport equipment, (8) Miscellaneous manufactured articles, (9) Commodities and transactions not classified elsewhere in the SITC, and the categories for gold, which are (I) Gold, monetary, and (II) Gold coin and current coin.

See Also: Export; Harmonized System; Import.

Bibliography. United Nations Statistics Division, *Standard International Trade Classification Revision 3* (United Nations, 2006).

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Standardization

Standardization refers to the efforts of companies to offer a common product, to use a common marketing approach, and to make their business activities the same or uniform throughout a particular market such as a country, a region such as Europe or western Europe, or the whole world. Companies pursuing the standardization approach tend to adopt the same or very similar strategies and marketing programs to offer similar goods and services in different markets throughout the world. The global marketing strategy refers to a plan that guides companies in how to position themselves and their products in international markets, what customers to serve, and the degree to which company activities should be standardized or adapted. Therefore, standardization is an element of the global marketing strategy. The importance of standardization for global business comes from the fact that standardization is one major strategy or approach used by companies in their international business operations; the others are adaptation and a mixture of standardization and adaptation. The term *standardization* is sometimes used to refer to global or global integration approach as well.

Strategies

When it comes to developing strategies streamlined for global markets, companies have three major strategy options. The first and perhaps the simplest one is standardization that comes from the geocentric view of the world that assumes that there are more similarities than differences across the markets throughout the world. Therefore, the global strategy, which is based on standardization, is the appropriate strategy to operate in international markets. Its argument is that markets throughout the world have become homogenized and thus companies can offer their goods and services through a high degree of standardization and a low degree of adaptation to meet some local market needs. The standardization approach may be appropriate for products having a high level of competitive advantage in terms of functionality and/or low price.

The second option is adaptation, which states that cultural differences exist among countries; therefore, companies should modify their strategies and offerings according to the local market's conditions and consumer preferences. Thus, multidomestic strategy, which is based on adapting different strategies for each country or region, is the appropriate strategy when operating in international markets. The last option is to use a strategy that is a mixture of standardization and adaptation to get benefits from both markets and products that require standardization and adaptation at the same time to a certain extent.

Which approach is better and used by companies? When we analyze the practices of companies with respect to whether they utilize the standardization or adaptation approach, we cannot determine precisely which one is mostly preferred because companies differ in their choices of the standardization and adaptation approaches.

A chronological analysis shows that during the 1950s, the adaptation approach was preferred because companies were not familiar with international markets and consumers. Lack of information as to the purchase behavior of consumers in different markets may have discouraged companies from adopting standardization because companies may have thought that consumers were not the same; therefore, companies preferred the adaptation approach. Companies got more and more knowledge about international markets and consumers as time went by and therefore they were able to see similarities among consumer preferences across markets throughout the world. This led to the replacement of the adaptation approach with the standardization approach during the 1960s. However, the adaptation approach became popular again during the 1970s because of increasing nationalistic tendencies.

Recent Developments

The 1980s were the years in which the world witnessed the birth and growth of many multinationals that favored standardization; multinationals tried to implement similar product strategies across countries. Because the international competition was not intensive at that time and many countries began to abandon their protective and closed trade regimes and adopt liberal capitalistic ones, many multinationals were able to operate in such countries where competition did not really exist and they enjoyed this smooth competition through their standardized products in these markets at that time. However, because global competition is very intense nowadays, many products are available in many markets, and there have been changes in consumer tastes and preferences, so the standardization strategy alone does not always result in the expected performance. Therefore, we see companies currently using a mixture of these two strategies in their international business activities.

One key feature of the global marketing strategy is the extent to which marketing programs are standardized or modified (adapted). Some key elements subjected to standardization and adaptation decisions in international markets are branding, product development, pricing, marketing communications, and distribution. When a company does not yet have international operations, it has its domestic marketing strategy, which refers to various marketing programs of the company in its domestic (own) market. However, as the company acquires more and more international operations in different international markets, the domestic marketing strategy becomes the international or global marketing strategy and such a strategy becomes very complicated because the company now needs to consider local and international rivals, cross-cultural differences in culture, language, religion, living standards, economic and politic conditions, regulations, laws, business practices, and economic and business infrastructure in many foreign markets. The challenge for the company is to determine the activities to be standardized across countries and the ones to be adapted for specific markets.

Standardization, whether full or partial, is a natural process to a certain extent because companies will try to get benefit from their proprietary processes (ownership and production expertise) and scale economies (more production and less unit cost) when it introduces a product to a new market. Therefore, the choice of standardization is inherent to a certain extent in new markets. Moreover, as some markets become similar as a result of globalization and as global competition intensifies, the standardization approach may be preferable. However, in addition to these factors, many other factors affect the standardization choice: Companies need to analyze the nature of products, their own capabilities, the extent to which adaptation is required because of the differences among markets, the structures of foreign markets, the rivals, and the regulations in foreign markets in which companies consider investing. It is normal that markets differ; therefore, some kind of adaptation may complement the standardization approach to get as much benefit as possible from international business operations. For example, the core technology of the product may be standardized while the size, shape, color, additional benefits, price, distribution, and sales terms may be adapted to the foreign market's needs. Computer chips, automotive electronics, color film, pharmaceuticals, chemicals, telecommunications, network equipment, steel, and petrochemicals are some examples of products to which the standardization approach is applicable. However, consumer electronics, automobiles, trucks, watches, toothpaste, shampoo, industrial machinery, toilets, chocolate bars, beverages, and clothing products are some examples of products to which the standardization approach is not much applicable, although exceptions are always possible, especially for prestigious products and brands.

Advantages and Disadvantages

There are many benefits of using the standardization approach. Other things being equal, companies generally prefer to utilize the standardization approach because it is appropriate in getting consistency in customer relationship and design; many companies operate in many countries throughout the world and when companies use the same product features, design, brand name, and packaging across markets, this can help create a universal representation of the products and the consistency among the offerings of the company. Such a consistency also helps create and sustain brand image, which refers to the perception of a company and its products by consumers. As such a perception affects buying behavior, a good and positive perception created through consistency is priceless.

Another benefit of the standardization approach is that when a product is successful in a market, when consumer preferences across markets converge, and when other markets have similar competitive conditions, then the standardization approach in new markets is expected to be successful and cost effective by capitalizing on similarities. The standardization approach is also beneficial in coordinating and controlling various company activities. As companies become international or global, it is hard to coordinate and control many and different company activities throughout the world. If company activities are standardized, then it becomes easier to coordinate and control these various and widespread activities.

However, when companies choose the standardization approach for one reason or another, they may miss some market opportunities. Although some markets are similar, a firm attachment to the standardization approach may not be effective as many markets are fragmented, and adaptation, albeit small, may be necessary to meet the expectations of local consumers. Therefore, it would be wise for companies to assess the advantages and disadvantages of standardization carefully and then determine what to standardize.

Standardization is not a good strategy when companies are required to adapt their offerings according to differences across markets. Culture, industry, legal environment, marketing infrastructure (distribution channels, quality and quantity of retailers, advertising agencies, and media), competition, consumer tastes and preferences, standards, and regulations as to product features may all differ. Such differences thus render the standardization approach not appropriate. In addition, the existence of "not invented here syndrome" in international companies makes the standardization approach not a good option. This syndrome refers to some internal resistance by subsidiaries and affiliates of international companies against the ideas, programs, and plans developed at the headquarters or somewhere else. Therefore, standardized plans and programs may not always be welcomed by subsidiaries and affiliates if such a syndrome exists and the managers of these affiliates are accustomed to autonomy in their decision making.

If full standardization is not viable all the time, then an appropriate question would be "what to standardize?" Strategic decisions that are related to the whole company are generally more standardized. Daily or tactical decisions may not be standardized and thus local managers can be flexible in their decisions. Marketing activities are generally less standardized than other business functions and within marketing activities, some marketing activities such as product design may be more appropriate for standardization than sales promotion. Standardizing corporate image, branding, and product positioning is beneficial as this can provide consistency and unification in company offerings across different markets. When deciding on what to standardize, managers need to consider the basis for customer purchasing behavior, the marketing's role within the company strategy, and the viability of mass customization. If purchasing behavior shows similarities among consumers across different markets, then companies can capitalize on these similarities through standardization.

In conclusion, the standardization approach corresponds to the efforts of companies toward global integration and is generally suitable in such global industries as commodities, industrial equipment, and high technology products. Aircraft manufacturing, pharmaceuticals, credit cards, and chemicals are some examples of such industries in which consumers across markets or segments do not differ much in their preferences. Therefore, companies can adopt the standardization approach by offering identical products and implementing similar programs across different markets. Three major benefits of pursuing the standardization approach are reduction in costs, enhancement in company image, and improvement in planning and control. However, companies generally do not implement standardization alone. Instead, they also use adaptation at varying levels because it is not always viable to pursue one product–one world strategy because of differences in consumer preferences, legal requirements, and competitive conditions.

See Also: Customization; Global Brand Strategy; Globalization; Localization.

Bibliography. S. T. Cavusgil et al., *International Business, Strategy, Management, and the New Realities* (Prentice Hall, 2008); H. J. Cheon et al., "A Meta-Analysis of Studies on the Determinants of Standardization and Localization of International Marketing and Advertising Strategies," *Journal of International Consumer Marketing* (v.19/4, 2007); Christian Homburg, Sabine Kuester, and Harley Krohmer, *Marketing Management: A Contemporary Perspective* (McGraw-Hill Higher Education, 2009); Kai Jakobs, *Standardization Research in Information Technology: New Perspectives* (Information Science Reference, 2008); Philip Kotler, Kevin Lane Keller, and Taihong Lu, *Marketing Management in China* (Pearson Prentice Hall, 2009); Jeffrey J. Loyka, "A Model of Factors That Influence Global Product Standardization," *Journal of Leadership & Organizational Studies* (v.10/2, 2003); *Marketing Management* (Juta Academic, 2009); *Marketing Management: A Strategic Decision-Making Approach* (McGraw-Hill College, 2009); Kurt Pedersen, *Standardization in an International Perspective* (Aarhus School of Business, 2002); Kondrad Vakfi, *Standardization, Quality Control and Quality Assurance Systems for SMEs* (Konrad Adenauer Vakfı, 2001).

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State Farm Insurance Cos.

The State Farm Group, headquartered in Bloomington, Illinois, is an insurance and financial services company serving the United States and parts of Canada (Alberta, New Brunswick, and Ontario). State Farm's mission is "to help people manage the risks of everyday life, recover from the unexpected, and realize their dreams." The company has a strong reputation based on its values: quality service, quality relationships, mutual trust, integrity, and financial strength. As of 2007, State Farm had more than 17,000 agents, 68,000 employees, and 75 million policies in the United States and Canada. State Farm serves its customers through 13 regional zones. State Farm opened its first Canadian office in Toronto in 1938. For 2007, the combined net worth of the State Farm group of companies was estimated to be $63.7 billion.

State Farm was founded by a retired farmer, George Jacob Mecherle, on June 7, 1922, as the State Farm Mutual Automobile Insurance Company. It initially concentrated on providing automobile insurance for Illinois farmers. Mecherle thought that farmers drove less and had fewer accidents than city dwellers, and thus should pay less for automobile insurance. His founding philosophy for State Farm was based on insurance coverage at a fair price coupled with fair claim settlement. By 1942, State Farm was the largest automobile insurer in the United States and has retained its largest ranking every year since. In 2008 State Farm created its Code of Conduct reaffirming Mecherle's philosophy with its current chairman's statement, "At State Farm, not only do we do what is legal, but we also do what is right." State Farm's well-known theme song "Like a Good Neighbor" was written by composer and entertainer Barry Manilow and debuted in 1971.

State Farm Mutual Automobile Insurance Company is the parent company of a number of wholly owned subsidiaries that provide health insurance, property insurance, life insurance, banking products, and mutual funds. Its automobile business is underwritten by its State Farm Mutual, State Farm Indemnity, State Farm Guaranty, and State Farm Texas County Mutual units. State Farm Indemnity and State Farm Guaranty serve the unique automobile insurance needs in New Jersey, and State Farm Texas County Mutual serves motorists in Texas. Its fire insurance business is underwritten by its State Farm Fire and Casualty, State Farm Lloyds, State Farm General, and State Farm Florida units. These subsidiaries offer homeowners, business insurance, and other lines. Homeowners insurance was first offered by the company in 1955, and by 1966, State Farm was the largest writer of homeowners insurance in the United States. State Farm General provides homeowners and property liability insurance in the state of California, and State Farm Florida provides homeowners and property liability insurance in the state of Florida.

State Farm classifies its health insurance business into five categories: Medicare supplement, disability income, long-term care, hospital surgical, and hospital income. Its insurance and annuity business is underwritten by its State Farm Life insurance Company and State Farm Life and Accident Assurance Company. In 2007, the affiliate units held 7.7 million policies in force valued at $685 million. As of 2007, the combined net worth of the life affiliates was valued at $5.7 billion. State Farm Life and Accident Assurance Company operates to the special requirements for life insurance in New York, Connecticut, and Wisconsin. Its property/casualty reinsurance business is underwritten by its State Farm Mutual unit.

State Farm Bank and Mutual Funds

Chartered in 1998 and launched in 2000, the State Farm Bank offers lending in four areas: vehicles, home equity, mortgages, and credit cards. On the deposits side, State Farm Bank offers savings and checking accounts, certificates of deposit and money market accounts, individual retirement accounts, and health savings accounts. The State Farm Bank is a member of the Federal Deposit Insurance Corporation (FDIC) and is an Equal Housing Lender. As of 2007, State Farm Bank had 1.9 million accounts and assets of $15.9 billion. As a virtual organization, its services are available only through agents, online, by phone, and through the mail.

Its mutual fund business is composed of two entities: State Farm VP Management Corporation and State Farm Investment Management Corporation. These units have approximately $4.6 billion under management, representing over 406,000 accounts. State Farm offers a number of actively managed fund portfolios under the LifePath Funds brand managed by Barclays Global Fund Advisors. These funds offer a time-horizon-based mix of investments in domestic stocks, international stocks, domestic bonds, and money market funds with holdings in 10 asset classes. State Farm also offers a variety of individual stock and bond funds as well as money market funds.

See Also: Assicurazioni Generali; Citigroup; Legal & General Group; MetLife; Nippon Life Insurance.

Bibliography. Jeremy A. Ball, "Flood Damaged and Salvaged Automobiles Threaten Consumer Woes: Hurricane Katrina and Rita & the $40 Million State Farm Insurance Settlement," *Army Lawyer* (v.390, 2005); "Diversity and Inclusion: An Interview with Vincent J. Trosino. Sr., President of State Farm Insurance," *Black Collegian* (v.34/2, 2004); John Gibeaut, "Harvesting Bad Faith: Court to Re-examine Punitive Damages in State Farm Insurance Case," *ABA Journal* (v.88, 2002); Daniel Hays, "State Farm to Repay Florida Homeowners," *National Underwriter/Property & Casualty Risk & Benefits Management* (v.112/34, 2008); Ryan Melcher, "State Farm Insurance Company: The Unitary Thrift Holding Company Model for Integrated Financial Services," *North Carolina Banking Institute* (v.7, 2003); Roger Parloff, "The Siege of State Farm," *Fortune* (v.157/9, 2008); Lewis Pryor, "Using a Blog to Communicate During Hurricane Katrina at State Farm," *Business Communicator* (v.6/8, 2006); State Farm, www.statefarm.com (cited March 2009).

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State Grid

With headquarters in Beijing, the State Grid Corporation of China (SGCC) is the provider of electric power throughout China, reaching 88 percent of the country's area. It operates both the electric grid in the country as well as all power plants. In existence since 2002, it is a state-owned enterprise and has 49 subsidiaries as well as the responsibility for managing and operating the Tibet Electrical Power Company. Its 1.5 million employees serve a customer base of 128 million people. Its stated income for 2005 equaled $105.5 billion with profits equal to $21.7 billion. In the same year, it ranked 40th in the Fortune Global 500; the following year it ranked 32nd.

Among the responsibilities of SGCC has been that of bringing electricity for the first time to remote areas of China, a project analogous to that of the New Deal's Tennessee Valley electrification of the 1930s in the United States, only on a much larger scale. In 2006 SGCC brought free electricity to over 545,000 households. In addition to the newly created demand for consumer goods this electrification created, public works such as electrified irrigation pumps were now possible. SGCC has stated its intention to continue this effort to other areas of the country. SGCC has also been involved in international projects. In 2007, it was a partner with the Calaca High Power Corporation in a team that won a 25-year contract to run the Philippines power grid.

Challenges

An important part of SGCC's mission has been to ensure that China's industrial growth, which requires enormous amounts of power, can continue. SGCC's task has not been easy for a number of reasons. Shortages of fuel, inadequacies of infrastructure, and increased demand have combined to create an array of problems that must be solved.

In recent years, China has seen coal shortages that have affected the ability of the coal-fired plants that supply over 80 percent of China's power. Coal supplies (one-third of which came from illegal mines shut down by the government) fell seriously short in 2008. The result was some rationing of power. In addition, the inability of certain companies to produce up to capacity affected the nation's gross domestic product (GDP) as well as causing certain stock prices to fall. The coal-fired power plants connected to the nation's grid are supposed to maintain a 15-day supply of coal. In reality, 541 of these had less than a 12-day supply, while others had a seven-day supply, and others enough coal for only two or three days. The coal shortage combined with increasing demand and infrastructure problems prevent areas with a surplus from transmitting their electricity to areas that need it.

Solving the problem of transporting electricity from remote regions, and some of these have a great deal of available coal or are located where hydroelectric dams have been built, has been an important project for SGCC. In 2007 it proposed constructing and using an ultravoltage power grid that would make the transfer of energy possible from remote regions. The technology to enable these massive transfers exists (having been developed by the Soviet Union years before). It would completely bypass smaller grids between the interior and the coast, where the power is needed. In 2008 SGCC stated that it had awarded a $70 million contract for power equipment that would allow the construction of such a line to run from northeast China to urban areas. The line, which will run in parallel with already-existing lines, will allow the massive transfer of electricity. When completed and online in December 2009, the project will have cost $400 million.

Whatever specific course SGCC pursues, it must further develop and improve its existing infrastructure. The International Energy Agency has stated that China, probably through SGCC, must spend more than $1.5 trillion between 2008 and 2030 to ensure that its electric infrastructure can support growth. The demand for power is so great and will increase so dramatically that even a massive project such as the Three Gorges Dam, which will sell electric power to SGCC, will not be able to supply as high a percentage of the national requirement as had originally been planned.

In addition to developing new ways to increase power supplies domestically, SGCC has brokered agreements with other countries to supply power to China. In 2008 it was announced that SGCC would sign an agreement with Russia's Far East Power Grid to supply 10 million kilowatts to northeastern China. Three years earlier, another similar agreement had been signed with a Russian power grid to supply electricity. A 2008 agreement with Mongolia will result in that nation supplying 12 million kilowatts to northern China. Another agreement has been signed to bring electricity from Kazakhstan to China.

See Also: China; China National Petroleum; Company Profiles: East Asia; Russia; Sinopec.

Bibliography. Douglas F. Barnes, ed., *The Challenge of Rural Electrification: Strategies for Developing Countries* (Resources for the Future: Energy Sector Management Assistance Program, 2007); State Grid of China, www.sgcc.com.cn (cited March 2009); Yi-Chong Xu, *Electricity Reform in China, India and Russia: The World Bank Template and the Politics of Power* (Edward Elgar, 2004).

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State-Owned Enterprises

A state-owned enterprise (SOE) is a business owned or controlled by a national government. SOEs are a common instrument of government economic policy in both developed and developing countries, although concerns about their costs and performance relative to private firms have led to a worldwide privatization trend since the 1980s. Typically, SOEs have been prominent in transportation, communication, and energy production and distribution, and common in capital-intensive industries including mining and the manufacturing of chemicals, metals, machinery, and transportation equipment. In some countries, SOEs are also found in virtually any other sector of the economy, including banking and finance, trade, consumer industries, construction, and agriculture.

As stated above, an SOE is a business owned or controlled by a national government. SOEs differ from private firms in a variety of ways. They tend to have a variety of objectives, sometimes of a conflicting or contradictory nature. Making a profit is usually one stated objective, but may or may not be the primary one. SOEs are supposed to offer social returns, meaning special benefits to the state's population, and be held accountable by the public through its elected or self-proclaimed representatives. At the same time, SOEs are generally expected to be financially viable and produce goods or services at prices related to their costs, and are thus different from ordinary government services and administration. Their business-like nature also differentiates them from state-owned producers in purely communist regimes without a legitimate private sector.

State ownership of an SOE may be complete or partial, and a company may be considered an SOE even when the government does not own a majority share of the company, as long as the state's minority position is enough to make political intervention possible. From a legal point of view, an SOE may be classified as a government agency subject to general public law, a public corporation (a separate legal entity subject to special statute), a state company subject to private law, or a listed firm with shares owned fully or in part by the government. The three latter organizational forms imply an increasing degree of autonomy from political and bureaucratic interference, but in practice autonomy also tends to depend on a variety of other factors, and especially on the company's financial status.

Historical Origins

The history of government-owned business operations goes back to antiquity, but SOEs as we know them today became widespread between the 1930s and the 1960s. Before that time, SOEs could be found in sectors with natural monopolies, meaning unlimited economies of scale (utilities, infrastructure), or in areas of strategic importance (heavy industry, weapons). With the collapse of international capitalism in the 1930s, however, state ownership and management of enterprises became increasingly popular as a political response to economic challenges. SOEs could eventually be found operating in a wide variety of economic activities, often because decision makers believed that state ownership would lead to more efficient and fair use of resources.

In industrialized countries, SOEs were seen as a solution to market failure and a way to promote long-term growth while limiting vulnerability to short-term business cycles. They were also intended as instruments of social engineering, with the hope of redistributing wealth and power, making business democratically accountable, securing employment, and improving industrial relations. In some cases, the creation of SOEs through nationalization also served to rescue mature industries, thus forestalling social unrest.

In the developing countries that became independent in the decolonization wave of the post–World War II era, SOEs were meant to serve several additional purposes. In general, SOEs were seen as instruments of nation building that were to promote economic growth, industrialization, national pride, and the exclusion of exploitative foreign interests. In many cases, SOEs were meant to engage in "state entrepreneurship" where a culture of private enterprise was missing. Nationalization could also represent a kind of "resource nationalism," with the nationalization of foreign oil operations as one prominent example.

By the 1970s, many had begun to question the performance of SOEs relative to private firms. SOEs incurred heavy losses and burdened states that increasingly found themselves in fiscal difficulties following the oil crisis and the stagnation of the world economy. In response, governments across the globe took steps to reform or privatize large numbers of SOEs. In the

1980s, the United Kingdom and western Europe were early leaders in this process, later followed by Latin America and Asia. In the 1990s, former communist countries in central and eastern Europe became transitional economies intent on privatizing state holdings. By the turn of the millennium, thousands of small, medium, and large SOEs had been sold in part or in full to dispersed private citizens, financial institutions, or multinational corporations. Nevertheless, vast numbers of SOEs remain, and their significance continues to be considerable. This is especially true for the least-developed countries, despite consistent efforts by the World Bank and others to impose privatization programs as part of broader strategies of structural adjustment.

Pros and Cons of SOEs

A variety of arguments have been put forward in defense of SOEs. Many politicians and scholars have held that the ability to introduce other objectives than merely the maximization of profits is an important justification for state ownership. SOEs may be required to provide certain goods and services to all citizens without regard to place of residence or wealth, and to provide continued employment in struggling industries. They may be used to encourage the development of impoverished regions and to resist the influence of capitalist elites and foreign multinationals. SOEs allow government to influence the economy through directing credit and investment, financing efforts in new industries, and encouraging or substituting for private capital accumulation. They may to some extent facilitate macroeconomic planning and enable the government to use SOE investment as an anticyclical measure. SOEs may also be important to foster social cohesion and enhance political legitimacy, especially in developing countries where the state is weak and unstable. In these various ways, SOEs are believed to promote social justice, economic growth, and national integration.

In recent years, arguments illuminating the downsides of SOEs have attracted more attention. Many economists describe SOEs as inefficient and unproductive by design. They believe that some of the market failures SOEs are intended to correct can be solved more efficiently through contracting out or government regulation of private firms. At the same time, they suggest that "government failure" is far more pervasive and harmful than market failure. SOEs are frequently subject to politicization, corruption, and rent-seeking behavior, and the assumption of a benevolent government allowing SOEs to operate at "arm's length" is rarely justified. Critics insist that SOE managers lack incentives to innovate and cut costs, while the multiplicity of objectives causes accountability and responsiveness to be less than optimal. These problems are accentuated by the fact that many SOEs are monopolies, meaning that efficiency is difficult to measure. In general, SOEs are difficult to monitor, and few sanctions are available even when performance is obviously suboptimal—continued losses do not result in bankruptcy, and even nonperforming SOEs continue to have access to credit through state-owned banks or government guarantees. This "soft budget constraint" is often seen as the most important factor explaining the inferior financial performance of SOEs.

The notion that SOEs are suitable instruments of distribution and social justice has also been countered by some critics. If SOEs are inefficient and contribute to long-term distortions in the allocation of labor and capital, they will impede economic growth, crowd out private alternatives, and in practice require large subsidies from taxpayers and consumers to SOE managers and workers. Thus, they also contribute to government deficits and inflation while artificially raising SOE wages. Such high wages may create economic dualities in developing countries, where poverty is most prevalent outside the modern sector. In this view, the distributional effects of SOEs may be primarily to reward special constituencies and (in low-income countries) to create a small "state bourgeoisie."

It is, of course, very difficult to determine how successful SOEs have been throughout history. The many different goals and purposes of these organizations make it inherently difficult to judge their performance or even decide how it should be judged. However, this has not discouraged observers from trying to assess SOEs from a variety of perspectives. The building consensus, based on hundreds of empirical studies, suggests that SOEs often have done poorly in terms of productivity and financial results, and that they have drained state budgets and national credit markets, with deleterious consequences for private businesses and the citizenry at large. Mainstream economists in particular tend to employ highly negative characterizations of SOEs, and politicians, too, seem to have reached a point of disillusionment. The next section provides a brief overview of the development paths of SOEs in some key countries to highlight the diversity of experiences with SOE as an instrument of economic policy.

SOE Trajectories

Western Europe has been remarkable both for its faith in SOEs in the 1930s to 1970s and for the high volume of privatization after 1980. Italy was an early leader in nationalization, prompted by the crisis of the 1930s to set up the massive, state-owned holding company IRI. Originally a temporary fix to rescue the banking system, IRI eventually became a permanent feature of Italy's political economy. The holding company branched out into a variety of manufacturing sectors and served as a major instrument for industrial development in Italy after World War II. IRI at the height of its powers owned hundreds of companies, with the total number of employees in IRI holdings surpassing 500,000. As late as the 1980s, fixed investment in IRI companies exceeded the fixed investment in all private industry in Italy. IRI subsidiaries were involved in shipbuilding, steel, engineering, biomedical industry, biotechnology, aerospace, food processing, cement, telecom, the operation of toll roads, shipping, banking, and financial services. In 1953, IRI was joined by ENI, a holding company in the oil and gas sector, and in 1964 by EFIM, a third holding company with interests in the production of trains, helicopters, aluminum, and glass. Many of the subsidiaries of IRI and other holding groups were in fact competitive and productive firms, but over time it proved difficult to achieve financial self-reliance. By the early 1980s, the Italian government was transferring amounts equivalent to billions of dollars a year to the holding groups. The steel subholding Finsider struggled even after cutting the workforce by 50,000, and the government had to write off almost $800 million of automaker Alfa-Romeo's debt. In the end, a program of privatization was implemented in the 1990s.

In the United Kingdom, the main drive toward SOE took place immediately after World War II, but it lasted in some respects until the election of Conservative prime minister Margaret Thatcher in 1979. Between 1946 and 1977, Labour governments pushed to nationalize coal mining, railroads, airlines, utilities, iron and steel manufacturing, and the building of automobiles, ships, and airplanes. The 1940s introduction of SOEs in coal, rail, and energy alone affected 2 million British workers. Unlike in Italy, however, government involvement in most manufacturing sectors and in banking remained limited. The relative productivity of British SOEs has been the subject of some debate, but the financial record was poor. In the 1980s, the Thatcher government spearheaded the worldwide drive toward privatization. The goals of the privatization program were to raise revenue, promote efficiency and competition, reduce government control of the economy, and develop the capital market by encouraging widespread ownership of stocks. This program was in general successful and popular, and offered evidence that the privatization process itself encouraged a positive change in organizational focus. By the time Labour returned to power in 1997, SOEs had ceased to be a factor in the British economy.

In France, some SOEs had been established in the 1930s, and more widespread nationalization followed World War II. Wartime collaboration with the German occupying forces and strong faith in collective solutions justified the takeover of airlines, large banks and insurance companies, the entire energy sector, as well as 20 percent of the manufacturing sector. A new wave followed in the early 1980s, following which SOEs existed in most sectors of the economy. As in other European countries, SOEs in banking, telecom, energy, and heavy industry were especially important, but the most impressive feature of state ownership was its near-ubiquity. The 1981–82 nationalization drive took 53 percent of corporate capital in France out of private hands. However, the election of a center-right government in 1986 led to an almost equally sudden reprivatization, with the sale of 22 major companies. At this point, key SOEs such as Renault, Air France, Credit Group Lyonnais, and the steel industry were experiencing severe problems and imposing great burdens on government budgets. By the late 1990s, even the Socialists had lost some of their faith in SOEs, and Prime Minister Lionel Jospin oversaw the privatization of France Télécom.

Since World War II, SOEs have played a comparatively modest role in the three remaining giants of industrial capitalism, that is, the United States, Germany, and Japan. In the liberal market economy of the

United States, many of the tasks performed by SOEs elsewhere have been handled by regulatory regimes or public enterprises at a subnational (state or municipal) level. In the Federal Republic of Germany, state ownership and interference was to a considerable extent discredited by the Nazi regime. The public offerings of Volkswagen and VEBA in the 1960s were early predecessors to the much later drift toward privatization in other Western countries.

Asia

Japan, too, avoided extensive nationalization following World War II, despite a generally statist orientation. SOEs were largely limited to the so-called system of three public corporations and five governmental departments. This did, however, include important activities in transportation (railroads, aviation) and communication (telephone and telegraph systems), as well as monopolies in tobacco and alcohol. These SOEs tended to be overstaffed, yet they were notorious for providing poor customer service. A public commission established in 1981 suggested major reforms of Japanese SOE, and partial privatization began in the mid-1980s. The $40.6 billion third tranche offering of Nippon Telegraph & Telephone (NTT) in 1987 was the largest single security offering to date, and the partially privatized NTT rapidly emerged as the world's second largest listed telecom company. Both NTT and the Japanese railroad system, unbundled into seven distinct corporations, showed improvements and used their newfound freedom to diversify into related business areas. NTT alone set up 85 new business entities in its two first years. However, the sell-off of NTT, the Japanese railroads, and other SOEs proceeded quite slowly, primarily because the stagnation of the Japanese economy had reduced the absorptive capacity of the stock market.

Elsewhere in Asia, many of the countries that became independent in the 1940s and 1950s had "legacy" SOEs that had been established by colonial powers. South Korea and Taiwan, for example, had SOEs in transportation, communication, energy, and other sectors created as colonial enterprises by the Japanese. However, these countries soon added to their existing holdings by creating new SOEs. In South Korea, there was an emphasis on heavy and chemical industry, which were seen as strategically important sectors where risk and capital needs were too great for private investors. The Taiwanese government offered strong support for SOEs in oil, electricity, and steel in order to support export industries with raw materials and intermediate goods. In both countries, SOEs were used to encourage rapid, state-directed industrialization.

Although South Korea and Taiwan achieved phenomenal growth, many other Asian countries relied heavily on SOEs with much less success. In South Asia, SOEs mushroomed after independence, with state ownership common across virtually every sector of the economy in India and Pakistan. Indian SOEs were dominated by noneconomic objectives, often devoid of cost control, and in many cases so vast as to create significant diseconomies of scale. SOE performance was consequently very weak. Considering that in the 1980s, 22 of India's 25 largest firms were SOEs, the negative effect on growth and development was substantial. Reform and privatization began in the 1990s. In Bangladesh, SOE sales began earlier, but as privatized firms continued to rely on the extremely lax banking practices of state banks, performance failed to improve. In fact, rent seekers were able to buy up SOEs with government money without any real commitment to pay debts or even taxes.

In Indonesia, state control of natural resources and strategic industries is required by the constitution. The oil revenue windfall in the 1970s turned many Indonesian SOEs into industrial giants, as oil revenues were deposited in state banks closely connected with state-owned industries. By the 1980s, Indonesia had more than 200 SOEs in sectors as diverse as banking, insurance, manufacturing, mining, agriculture, utilities, transportation, and trade, with a majority being monopolies. Since privatization of SOEs runs counter to Indonesian core values and national identity, a more modest approach of granting increased autonomy and exposing SOEs to competition has been the preferred and relatively successful approach of reformers since the mid-1980s. By contrast, the government of Malaysia has pursued a more aggressive privatization policy to divest itself of many of the more than 1,000 SOEs accumulated between 1957 and 1985. In Malaysia, the development of public enterprises has been linked with promoting the status of the Malay population (in the face of economic dominance by ethnic Chinese) since the 1969 race riots. Consequently, the privatization program also included strict restrictions on foreign and non-Malay ownership.

Since 1978, China has been through a process of liberalization leading from a system without private enterprise to a "socialist market economy." A process of separating governing and business, offering greater autonomy and more incentives to SOEs and their managers, began in the 1980s. However, the positive effects of these changes proved to be temporary. In 1992, SOE losses and subsidies ate up 62 percent of state revenues. A new policy of partial privatization was developed, leading to insider buyouts of many small SOEs and public listing of larger firms. In 2001, public offerings of major oil companies, banks, and telecoms ensued, and since 2005 the Chinese government has been determined to further decrease the state's holdings in large firms. However, the government still retains a controlling share in most companies listed on the stock exchanges, either directly or through state investment organizations known as "Legal Persons." Outsiders, therefore, continue to question the independence, transparency, and quality of corporate governance in leading Chinese companies.

Latin America and Africa

In Latin America, the development of SOEs has been based on an "organic-statist" approach to political economy, emphasizing moral obligations and economic interdependence within the political framework of "presidential patrimonialism." In Brazil, SOEs have been important in heavy industry, transportation, and utilities, and in such a large country, the economies of scale inherent in capital-intensive industries have allowed a modicum of success and many consistently profitable SOEs. However, the promotion of costly, import-substituting SOEs in Latin America in the 1970s also contributed to the grave debt crisis of the 1980s. Right-wing regimes in Chile and Argentina were pioneers of privatization already in the 1970s, and other Latin American countries have followed in their footsteps in the decades since (partly due to intense World Bank and International Monetary Fund [IMF] pressure). In many cases, these transactions took the form of debt-for-equity swaps, because SOEs carried most of the external debt. The immediate social cost of privatization (and liquidations) was often high, as in Mexico, where 400,000 SOE jobs were lost between 1983 and 1993. Latin America has arguably experienced the most radical privatization process of any market-economy region over the last 25 years. Mainstream economists tend to think of this process as successful and necessary, but the consequences of privatization have proved extremely unpopular in many Latin American countries.

African governments embraced SOE as a political and economic tool when independence came in the 1950s and 1960s. However, their poor performance and the accumulation of deficits and debts, combined with external pressure, resulted in 43 African countries having divestiture programs by 1992. Yet privatization in Africa is difficult because of a lack of capital markets, persistent economic troubles, and weak institutional frameworks. In Nigeria, the government embarked on a privatization program in the late 1980s, with the ambition of relieving the fiscal burden and encouraging private initiative in hydrocarbons, paper and pulp, sugar, and so forth. However, the sales have raised little revenue, and private entrepreneurship still leaves much to be desired. In general, SOEs remain pivotal and the private sector weak in most African countries.

Privatization: Progress and Pitfalls

Between the early 1980s and the early 21st century, governments around the world earned more than $1 trillion from the sales of SOE shares and assets. The global SOE share in GDP consequently dropped by an estimated one-half. In many cases, these sales were opportunistic, designed primarily to raise revenue or gather political support. In the worst cases, they were flagrant examples of corruption, allowing well-connected individuals access to significant assets at nominal costs. Outside pressure and a "bandwagon" effect also affected privatization programs. However, in most cases, privatization followed from an increasing concern with the performance of SOEs and a drastic devaluation of their merits since the mid-20th century. Governments found that the benefits of SOEs did not justify the costs.

Most scholars who study privatization agree that privatization "works," in other words, it tends to improve efficiency, productivity, and returns. The best results have been achieved when privatization has been combined with other reforms, such as deregulation and increased competition. In some cases, privatization without other reforms and appropriate institutional safeguards may have disastrous consequences, especially in developing countries where the operating conditions for private enterprise can be dismal. Privatization can also lead to unemployment, poverty, social problems, and political protest. Hence, it is reasonable to expect that SOEs will continue to play an important role in many countries for years to come.

See Also: Communism; Nationalization; Privatization.

Bibliography. Alberto Cavaliere and Simona Scabrosetti, "Privatization and Efficiency: From Principals and Agents to Political Economy," *Journal of Economic Surveys* (v.22/4, 2008); Reuel J. Khoza and Mohamed Adam, *The Power of Governance: Enhancing the Performance of State-Owned Enterprises* (Palgrave Macmillan, 2007); W. Megginson, *The Financial Economics of Privatization* (Oxford University Press, 2005); Organisation for Economic Co-operation and Development (OECD), *Privatising State-Owned Enterprises* (OECD, 2003); P. A. Toninelli, ed., *The Rise and Fall of State-Owned Enterprise in the Western World* (Cambridge University Press, 2000); Maria Vagliasindi, *Governance Arrangements for State Owned Enterprises* (World Bank, 2008); Qian Wang, T. J. Wong, and Lijun Xia, "State Ownership, the Institutional Environment, and Auditor Choice: Evidence from China," *Journal of Accounting and Economics* (v.46/1, 2008); World Bank, *Bureaucrats in Business* (Oxford University Press, 1995); Yong Zhang, *Large Chinese State-Owned Enterprises: Corporatization and Strategic Development* (Palgrave Macmillan, 2008).

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Statoil

The former Norwegian petroleum company, Den Norske Stats Oljeselskap AS, was founded on July 14, 1972, and operated as a private limited company wholly owned by the government of Norway after a unanimous act of parliament passed by the Norwegian Stortinget. It came about after the discovery of large deposits of offshore oil and the Norwegian government was keen to take part in exploitation of oil on its continental shelf. Its initial managing director was Arve Johnsen.

The theory of oilfields in the North Sea led to problems about how these might be exploited, but these were largely academic until December 1969 when Phillips Petroleum, an American independent company, was able to map out the Ekofisk field in the Norwegian sector of the North Sea. Phillips negotiated a flat 10 percent royalty fee from the government, plus taxes. Initially, the Norwegian government was not sure how to exploit this, but it founded Den Norske Stats Oljeselskap AS—known as Statoil—to do this, using the expertise of other oil companies that would be hired on a contractual basis. This kept the control—and also the profits—with the Norwegian government, a move that became more important with the discovery of other oilfields such as the Statfjord one, which was then estimated to have 2 billion barrels, soon after the mapping of the Ekofisk oilfield.

The other economic imperative driving the decisions by the Norwegian government was that the oilmen should be Norwegian. To proceed, they moved far slower than their British counterparts who sought to exploit their oilfields in the North Sea as quickly as they could. The British were keen for the oil to save them from having to import increasingly costly oil—the price having quadrupled—and were in a precarious financial position. The Norwegians, by contrast, with a much smaller population, recognized that they would become self-sufficient in oil by 1975. They were helped by the fact that, at that time, 55 percent of all power in the country came from hydroelectricity. Initially, most of the oilmen operating in Norway were foreign, but the Norwegian government introduced a program of systematic training, and by 1974, four out of five of the oilmen working in Norway or in Norwegian waters were Norwegian.

In August 1975, to ensure greater Norwegian control over the oil, the Norwegian government took over Norsk Braendesloje, a subsidiary of British Petroleum (BP) that was 50 percent owned by BP. This was then handed to Statoil to improve its control of the sector. Thus, by late 1975, Statoil controlled 75 percent of production from Ekofisk, and to help with the exploitation of Statfjord, became equal partners with Mobil. Statoil was also invested with control of 37 blocks of seabed on Norway's continental shelf, each of which covered some 200 sq. mi. However, the strategic plan for the Norwegians was for Statoil to exploit an oilfield on its own. This became closer to reality when the Norwegian government, in October 1980, announced that an oilfield west of Bergen, with about 1 billion barrels of oil, was to be exploited by Statoil, which would have an 85 percent stake, Norsk Hydro a 9 percent stake, and Saga Petroleum a 6 percent stake.

There was further success for Statoil which, on July 15, 1981, reported that it had found large deposits of natural gas southwest of Stavanger, and that they hoped to start production there in 1986. In January 1988, Arve Johnsen stepped down as managing director, a post he had held for 15 years. He had been forced to resign two months after six government-appointed board members had also resigned after there had been massive cost overruns on the expansion of the Mongstad refinery. Indeed, in 1987 the company recorded a loss of $300 million, as against a profit in the previous year of $180 million. This led to the appointment of private sector economist Harald Norvik, who had headed the Astrup-Hoeyer construction company. Norvik introduced cost-cutting moves including reducing jobs as crude oil prices fell.

By 2004 the production of oil in Norway had leveled off at 3 million barrels a day, and fell progressively since then as no new oilfields were found. By this time much of the production by Statoil was concentrated near Stavanger. The problems that Statoil has faced with new exploration plans is that oil is believed to be at places such as the Lofoten Islands, off the northern part of Norway, in the Arctic Circle, close to the spawning ground of cod and where there are large seabird colonies.

There was also controversy for Statoil, which was seeking to expand operations in Iran, and some executives were involved in allegations of bribery, which saw a number of senior Statoil employees including the chief executive resign in September 2003. By this time, the Norwegian government no longer controlled Statoil. It had been privatized in 2001, and listed on the Oslo Stock Exchange and the New York Stock Exchange. In December 2006, plans were revealed by which Statoil was going to merge with the Norwegian conglomerate Norsk Hydro, and it did to form StatoilHydro on October 1, 2007, the world's largest offshore oil and gas company. Exports of petroleum and gas remain the most significant exports from Norway, the wealth having transformed the country markedly in the last 30 years.

See Also: BP; ExxonMobil; Norway; OSE All Share Index (Oslo).

Bibliography. Mark Arnold-Forster, "Norway's Oil: A Treasure Deeply Buried," *New York Times* (September 22, 1974); Jad Mouawad, "Oil Explorers Searching Ever More Remote Areas," *New York Times* (September 9, 2004); "Norway to Begin Soviet Oil Talks," *New York Times* (September 5, 1974); Leonard B. Tennyson, "For Norway, Oil Means Slow Wealth," *New York Times* (September 14, 1975).

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Status

Status refers to a person's position within a social structure. Status typically involves a ranking (on the basis of relative power and prestige) and is determined by either ascribed or achievement-oriented factors. Ascribed status is automatically transmitted to a person—usually at birth (e.g., gender, ethnicity, and family heritage). Achieved status is attained as a result of individual abilities and performance (e.g., level of education, income, and type of occupation). The dominant form of status—thus how status is determined—differs from country to country and can have important strategic implications for marketers.

When ascribed status is the primary determinant of social standing, individuals can do very little to enhance their status. In countries where achieved status is dominant, individuals have at least the opportunity to improve their relative social standing. Attempts to improve status in achievement-oriented societies include engagement in conspicuous consumption—the acquisition and, most importantly, public consumption/display of products that are defined by members of society as symbolizing "the good life."

When searching for opportunities in the global marketplace, marketers often view achievement-oriented societies where conspicuous consumption transpires as prime markets for their products (which are essentially used as props to enhance status). Marketers can take advantage of the desire to enhance status via conspicuous consumption in a variety of ways. For example, products are sometimes advertised on the basis of providing the benefit of status enhancement by suggesting that public usage of the product serves as a means of communication—that one "can afford the fine things in life" or "has good taste." Marketers can also facilitate status enhancement via conspicuous consumption by pricing products high and distributing products in exclusive fashion (e.g., in upscale retail stores). Attempts at status enhancement via conspicuous consumption have changed in recent years due to the globalization of the economy.

Conspicuous Consumption and Status

Over 100 years ago, Thorstein Veblen coined the term *conspicuous consumption* to describe the highly visible, lavish, often wasteful consumption activities of newly rich elites in the United States—a nation where achievement-oriented factors weigh heavily in social status determination. The primary purpose of this behavior, practiced by members of what Veblen called "the leisure class," was to enhance social status and prestige. While this type of consumption activity was not confined to the United States and had existed for centuries, Veblen's conceptualization formally documented the realization that consumption was engaged in not only to meet one's basic needs. Consumption had become a means of identity creation.

Veblen's notion of conspicuous consumption remains viable today. This is particularly true in affluent nations where achievement-oriented factors are the primary determinants of social standing, and materialism and individualism are strongly held cultural values (e.g., the United States). In nations such as these, people often define who and what they—and others—are by what they possess and publicly consume. Products infused with symbolic meaning by members of society serve as vehicles for communication to others. Proper product use and display can signal wealth, power, and taste to others, thus improving one's social standing/status.

Although Veblen's original conceptualization of conspicuous consumption remains relevant today, refinement is called for due to changes in consumer behavior resulting from the recent and ongoing incorporation of nations—and their peoples—into the global economic system. Exemplary is the case of how conspicuous consumption has recently come to be increasingly used to enhance status in India.

Conspicuous Consumption and Status in Present-Day India

Traditionally, India is a nation characterized by the Gandhian philosophy of simple living and the socialist ideology of community/collectivistic living and self-reliance. India is also historically characterized as a nation where ascribed factors have dominated social status determination (e.g., via the caste system). As a result, consuming in conspicuous fashion has not been traditionally viewed as an appropriate—if even possible—means of enhancing status in India.

This began to change in the 1970s with the growth of a more individualistic middle class. The partial liberalization of the Indian economy in the 1980s and, most notably, more extensive liberalization via integration in the global economic system in the 1990s has paved the way for pursuit of a global culture characterized first and foremost by the ideals of Western consumerism—and for status enhancement via increasingly high levels of conspicuous consumption. This recent shift away from austerity—and from ascribed dominance of status determination—has been fueled by the glorification of consumption as a means of defining oneself in Indian media and cinema.

It is important to note, in closing, that seeking status enhancement through conspicuous consumption in present-day India differs somewhat from Veblen's original vision. It is not, for example, only very wealthy social elite—Veblen's "leisure class"—who signal status in this way. In India today, conspicuous consumption is used as a means of enhancing status by a fast-growing middle class (composed largely of knowledge workers and entrepreneurs).

In addition, status enhancement through conspicuous consumption in India does not involve only the public consumption of very expensive goods. Instead, social standing is often enhanced more subtly through consumption of less expensive products that symbolize "good taste" and "cultural refinement." These nonelite consumers do seek status through public consumption, but their status is based not so much on the display of extraordinary wealth as it is on the creation of exclusivity on the basis of intellectual and cultural distance from others. Marketers looking to take advantage of the escalating desires—and abilities—of consumers in India (and other transitional countries) to enhance status via conspicuous consumption are well advised to take factors such as these into account when formulating and implementing strategy.

See Also: Achieved Status/Ascribed Status; Buying Motives/Behavior; Consumer Behavior; Consumption; Socioeconomic Status.

Bibliography. John Beck, *Meritocracy, Citizenship and Education: New Labour's Legacy* (Continuum, 2008); Reinhard Bendix and Seymour Martin Lipset, *Class, Status, and Power; Social Stratification in Comparative Perspective* (Free Press, 1966); Himadri Chaudhuri and Sitanath Majumdar, "Of Diamonds and Desires: Understanding Conspicuous Consumption From a Contemporary Marketing Perspective," *Academy of Marketing Science Review* (v.11, 2006); Alain De Botton, *Status Anxiety* (Pantheon Books, 2004); James Leigh and Terrance Gabel, "Symbolic Interactionism: Its Effects on Consumer Behavior and Implications for Marketing Strategy," *Journal of Consumer Marketing* (v.9/winter, 1992); Roger Mason, *The Economics of Conspicuous Consumption: Theory and Thought Since 1700* (Edward Elgar, 1998); Vance Packard, *The Status Seekers: An Exploration of Class Behavior in America and the Hidden Barriers That Affect You, Your Community, Your Future* (McKay Co., 1959); Joel Marc Podolny, *Status Signals: A Sociological Study of Market Competition* (Princeton University Press, 2008); Thorstein Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* (Macmillan, 1899).

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Stereotyping

Stereotyping is the act of representing a group of people based on the assumption that they share certain attributes. The description, a stereotype, is typically an oversimplified, standardized conception or image due to the lack of direct knowledge and experiences those doing the stereotyping have of members of the other group. Stereotypes can be positive or negative and are often based on incomplete or false generalizations to describe individuals and the group to which they are assigned according to characteristics such as age, race, nationality, ethnicity, and religion. As a consequence of stereotyping, an individual is understood only in terms of the group to which they are perceived to belong.

Originally, the word *stereotype* is believed to have been used in the printing trade, similar to the word *cliché*, to refer to the duplicate impression of an original typographical element. In modern English, the noun *stereotype* first appeared in 1850 as meaning "image perpetuated without change." In his book *The Public Opinion*, published in 1922, American journalist Walter Lippmann described a stereotype in this way and cautioned that such partial images were an inadequate way of representing the world. Stereotypes continue in public and private life where those stereotyping have limited experience with individuals that they perceive to belong to a certain group. In particular, stereotypes are perpetuated in the media due to the frame of reference of writers, directors, reporters, producers, and editors. Similarly, stereotyping occurs in international business where individuals lack prior interaction with foreign business partners and may project their assumptions about the gender, nationality, or profession to which they categorize them. In this context, stereotypes are usually culturally embedded and may be difficult to change. For example, Americans may be stereotyped as unintelligent, self-important, obese, and loud by Europeans. In America, a typical stereotype of English people is as stiff, upper-class, prim, and having bad teeth.

In psychology, the causes of stereotyping have been explained as a type of ingroup-outgroup behavior whereby individuals favor those they identify as like themselves and magnify differences among those they perceive as different. On the other hand, sociologists emphasize the interrelationships between different groups and the relative standing of groups in a social structure. These two perspectives can be applied to understand stereotyping as a mechanism to explain, justify, and exaggerate differences between groups, related to the status or position of a group. The stereotype content of groups with fewer social and economic advantages will contain elements that assist to explain disparities, such as lower employment rates. For example, members of disadvantaged groups might be described negatively and undeservedly as unintelligent or unmotivated as a way of justifying the differences.

The role and content stereotyping in international business management and marketing has attracted much attention. Whereas stereotypes in their broadest sense represent individuals' cognitive associations and expectations about groups in society, national or country stereotypes describe qualities or associations that are perceived to be closely linked to a nation's population. Studies have demonstrated that national stereotypes can bias the perceptions of management, employees, and customers in decision making. Further, the popular view in international business literature warns managers of a tendency to reinterpret incoming information to make it more consistent with national stereotypes. This may result in negative consequences, such as the disregard for or discounting of ideas and input from managers from countries that have negative stereotypes.

National stereotypes have been demonstrated to affect decision making in a range of business situations. In the context of consumer decision making, research in international marketing into the effects of a product's country of origin on consumer evaluations has found that cognitive, affective, and normative factors of national stereotypes play an influential role, as well as political, economic, technological factors of country stereotypes. Examples of well-known product-country stereotypes include consumers' preference for French champagne, Italian fashion, German automobiles, and Belgian chocolate. Similarly, industrial buyers have been shown to categorize suppliers into two groups—those from technologically advanced nations, and those from less technologically advanced nations. Similarly, research in international management has shown that individuals have a tendency to evaluate colleagues in teams from the most advanced and economically strong countries more favorably. There is also evidence that suggests that managers stereotype their colleagues by country. For example, European managers hold stereotypes of each other. In particular, one study demonstrated that British managers were perceived by German managers to be more accepting and German managers perceived by British managers to be hardworking. Furthermore, it has been shown that stereotypes influence managers' assessments of their willingness to conduct business with others, that is, their eagerness to establish business relationships with outgroup members before direct contact occurs.

Stereotyping also influences investor, tourist, and migrant decision making since national images are influential in evaluations of a country as a potential location for foreign investment, as a tourist destination, or a place to live, work, and play. Consequently, nations must play an active role in positioning and differentiating their identity in the competitive global marketplace as these images can have considerable consequences for their products, services, industries, and residents.

See Also: Consumer Behavior; Country of Origin; Decision Making; Diversity; Facilities Location Decision; Multicultural Work Groups and Teams; Women in Business.

Bibliography. N. Adler, *International Dimensions of Organizational Behavior* (PWS-Kent, 1991); G. V. Bodenhausen, "Stereotype Biases in Social Decision Making and Memory: Testing Process Models of Stereotype Use," *Journal of Personality and Social Psychology* (v.55/5, 1988); C. L. Cooper and B. D. Kircaldy, "Executive Stereotyping Between Cultures: The British vs. German Manager," *Journal of Managerial Psychology* (v.10, 1995); General Motors Corporation, *Women "Take Care," Men "Take Charge": Stereotyping of U.S. Business Leaders Exposed* (Catalyst, 2006); Elizabeth L. Haines and John T. Jost, *Placating the Powerless: Effects of Legitimate and Illegitimate Explanation on Affect, Memory and Stereotyping* (Stanford University, 2000); J. Hilton and W. von Hippel, "Stereotypes," *Annual Review of Psychology* (v.47, 1996); D. J. Schneider, *The Psychology of Stereotyping* (Guilford Press, 2003); H. Tajfel, *Human Groups and Social Categories: Studies in Social Psychology* (Cambridge University Press, 1991); N. Zaidman, "Stereotypes of International Managers Contact and Impact on Business Interactions," *Group and Organization Management* (v.25/1, 2000).

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Stock Exchanges

A stock exchange (sometimes called a securities exchange or, especially in Europe, a bourse) is both a physical facility and an organization or company that facilitates the trade of stock shares and other securities. Because so much trading is conducted outside the physical facility—electronically or through brokers—

there are fewer regional stock exchanges than there once were; more than half of the stock exchanges in the United States closed or merged with others during the 20th century, as the business of exchange reduced the need for a separate stock exchange in Arizona, Buffalo, Louisville, and so forth. Although the terms are sometimes conflated in casual speech, the *stock market* and the *stock exchange* are not synonymous; the *market* consists of all the trade conducted on all the exchanges, or all the exchanges of a large region. The American stock market, for instance, includes all the trading done at the various stock exchanges in the country, as well as over-the-counter trades.

Role in the Economy

Stock exchanges began as mutual societies owned and run jointly by the brokerages who participated in them, like a mall owned by its stores. The Dutch East India Company led the way in selling stock in its company, doing so for the first time in 1602 on the Amsterdam Stock Exchange. The London Stock Exchange opened in 1688, and more European and American exchanges followed. The first American exchange was the Philadelphia Stock Exchange, in 1790 (it was bought by NASDAQ in 2007); the New York Stock Exchange opened in 1817, succeeding a 1792 trading agreement (the buttonwood agreement, named for the tree under which it was signed) between two dozen New York brokers.

At the end of the 20th century, some stock exchanges began demutualizing—going public, turning the mutual society into a corporation. NASDAQ and the NYSE have both gone public in the 21st century, and as a result of the NYSE's merger with Euronext, the first "global exchange" is a publicly traded corporation. Between this shift in exchange ownership, the development of electronic trading and algorithmic trading discussed below, and the failure of investment banks in the wake of the 2007–08 financial crisis, the 21st century is seeing the shape of Wall Street, the stock market, and the world's stock exchanges transform more radically than they have done since the aftermath of the Great Depression.

The fundamental role of the stock exchange has been in the service of business—raising capital by selling shares to the public, enabling mergers and acquisitions to facilitate growth—but the nature of investment has taken on a life of its own. Investing in the partial business ownership represented by stock shares long ago ceased to be principally the activity of professionals. Stock ownership is a common part of many Americans' investment portfolios as they plan for retirement or midlife expenses like college tuition, and casual investing has become quite popular—especially with the advent of e-trading and online access to brokers and stock tips—among Americans of all walks of life.

The market itself is widely used as an indicator of economic health, putting the exchanges under scrutiny whenever major events occur; the market is watched for rises and falls after elections or announcements of key appointments, after policy changes, and so forth, presumably reflecting investor confidence in response to the events of the world and their perceived consequences.

World Stock Exchanges

The 20 largest exchanges in the world (roughly in order, though jostling may occur) are as follows:

- NYSE Euronext, formed in 2007 by a merger between the New York Stock Exchange and the European multinational exchange Euronext. The new company also operates the American Stock Exchange (acquired in 2008) and NYSE Arca (formerly the Pacific Exchange, and still located in San Francisco).
- The Tokyo Stock Exchange, which has lately been developing joint products with the London Stock Exchange (LSE), one of which will be a Tokyo market based on the LSE's less-regulated Alternative Investment Market.
- BM&F Bovespa, formed in 2008 by the merger of the Brazilian Mercantile and Futures Exchange with the São Paulo Stock Exchange. Though slower to adopt electronic systems than many North American exchanges, Bovespa adopted them more decisively: open outcry is long abandoned, and the exchange uses electronic trading exclusively.
- NASDAQ, the National Association of Securities Dealers Automated Quotations, an American exchange and the world's first electronic stock exchange.
- The London Stock Exchange, the center of "the City" that is the United Kingdom's equivalent of

Wall Street. After NASDAQ failed in an attempt to acquire the LSE, it sold most of its shares—28 percent of the company—to the Borse Dubai in the United Arab Emirates.

- The Hong Kong Stock Exchange, the largest exchange in China.
- The Shanghai Stock Exchange, the largest exchange in mainland China.
- The Toronto Stock Exchange, the largest Canadian exchange, with the most oil and mining stocks in the world. The TSX is Canada's only exchange for preferred stock; common stock is handled by the Canadian Venture Exchange, and derivatives by the Montreal Exchange.
- The Frankfurt Stock Exchange, owned and operated by the Deutsche Borse, which attempted to negotiate a merger with Euronext before the NYSE beat its offer.
- The Madrid Stock Exchange, Spain's largest exchange.
- The Bombay Stock Exchange, the largest exchange in south Asia, listing more companies than any other exchange in the world.
- The National Stock Exchange of India, one of the fastest-growing exchanges in the world.
- The Australian Stock Exchange, an all-electronic exchange that originated in the 19th century as an exchange to trade government-issued securities.
- OMX Exchanges, operating eight exchanges in Scandinavia.
- SWX, the Swiss exchange in Zurich.
- Korea Exchange, formed by the merger of the Korea Stock Exchange, KOSDAQ, and the Korea Futures Exchange.
- Borsa Italiana, in Milan, owned by the LSE.
- The Moscow Interback Currency Exchange (MICEX), responsible for 90 percent of the trading in Russia.
- The JSE Securities Exchange, in Johannesburg, the largest exchange in Africa.
- The Shenzhen Stock Exchange, mainland China's second-largest exchange.

Indices

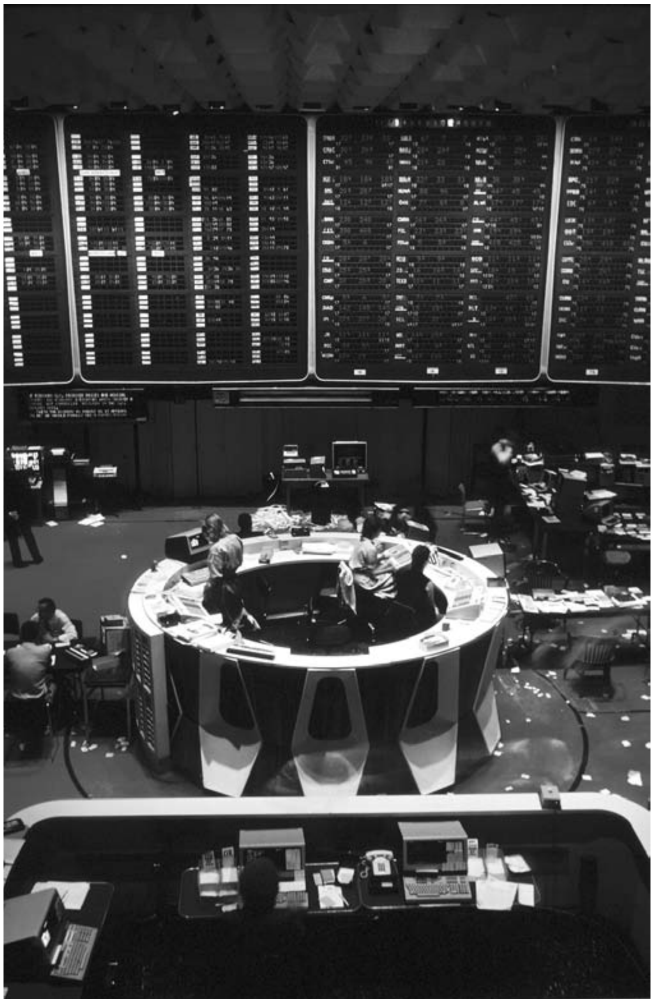
A stock market index tracks the performance of a section of the stock market, to various ends. There are various kinds of indices, but most indices are specific to a given exchange. Significant indices include the Dow Jones Industrial Average, or just "the Dow," an unweighted index tracking 30 stocks on the NYSE. The oldest such index in the world, the Dow is also the one most discussed as an economic indicator. The companies it lists are the giants of American industry, from Kraft Foods and McDonald's to ExxonMobil and Wal-Mart. The Dow is not maintained by the NYSE, but by the editors of the *Wall Street Journal*. The NYSE maintains the NYSE Composite Index, tracking over 2,000 stocks using free-float market cap weighting (in which the largest stocks impact the index the most).

The S&P 500 is another capitalization-weighted index, tracking 500 stocks (generally, those with the largest market capitalization) on the NYSE and NASDAQ. The FTSE Index, begun as a joint venture between the LSE and the *Financial Times*, is the leading indicator for the London market—tracking 80 percent of the market capitalization on the LSE, in a free-float market cap weighted index like the NYSE Composite. Most exchanges have an index tracking their top performers, prominent companies, or a large portion of the market; but there are indices designed along other lines as well. The Calvert Social Index, for instance, is a capitalization-weighted index tracking the most socially responsible companies on the market.

The Trading Floor

The trading floor of a stock exchange is where most trades occur. There is often, especially in older exchanges, a designated area for each stock on the exchange; on the floor of the NYSE, for instance, is a podium or desk for each of the 3,000 companies listed, and transactions are conducted face to face. A trading room, on the other hand—though traders at some exchanges use the phrase to mean the trading floor—is the office or set of offices set aside in a brokerage or investment bank for trading activity. In large firms, the trading room is often enormous; those of J. P. Morgan are so large that the six floors of trading rooms had to be cantilevered because they exceeded the footprint of the building itself. Trading rooms are filled with desks and phones for traders, and a good deal of expensive equipment for monitoring the markets both domestically and abroad.

Many trading floors use the open outcry system of communication between traders, an artifact of



Even in the age of e-trading, older stock exchanges reserve physical space on trading floors like this for each stock listed.

the pre-electronics age that persists on the major exchanges of North America and the United Kingdom. Open outcry uses a combination of shouting and hand signals to communicate orders from across the room or over a crowd. Hands away from the body, palms out, indicate a seller; hands up, palms in, indicate a prospective buyer. One hand is used to indicate the numbers one through 10 (six through 10 are indicated by holding the hand at a 90-degree angle), while the other hand indicates tens, hundreds, or thousands depending on its position. There are signals to indicate time frames of a trade, combination trades, options, and other information. Specifics vary some from exchange to exchange, but other near-universal signals include the thumbs-up to indicate that an order has been filled; an index finger, tilted, rotating forward to indicate that the order has not been filled yet but the trader is working on it (the open outcry equivalent of the hourglass icon in Windows); and the hand across the throat to cancel an order or show that an order has been cancelled. In most American exchanges, the part of the trading floor where open outcry takes place is called the pit, for its sloped sides, which make it easier for traders to see each other.

Electronic Trading

Electronic trading systems have replaced open outcry in many markets. One of the first was CATS, the Computer-Assisted Trading System, which was adopted at the Toronto Stock Exchange in 1977 and implemented at various exchanges throughout the 1980s, sometimes supplementing open outcry and sometimes replacing it. NASDAQ—the National Association of Securities Dealers Automated Quotations—originated as a computer bulletin board system in 1971, long before home internet access or even home computers were commonplace; originally it was not used to actually broker trades, but did lower the spread between the asking and bidding prices.

As NASDAQ developed into the first electronic stock exchange, it added the ability to make trades over the phone, and advertised itself directly to the public, the first exchange to do so. At the end of 1988, addressing complaints that stockholders had trouble reaching market makers on the phone in the wake of 1987's Black Monday market crash, NASDAQ adopted the Small Order Execution System (SOES), an electronic trading system for low-volume trades. Like NASDAQ itself, SOES was resented by many brokerage houses for—in general—reducing their profit margin on many transactions. NASDAQ would argue that this was offset by such systems attracting investors who might not otherwise enter the market.

Ten years later, in 1998, the SEC authorized the creation of electronic communication networks (ECNs) in response to the popularity of the internet and increasing ubiquity of home computers. ECNs facilitate trades outside stock exchanges, as a class of Alternative Trading Systems. Soon a number of electronic systems were being adopted to conduct trading at the exchange, rather than leaving the business of electronic trading to ECNs that bypass them. Retail brokers like Charles Schwab went online en masse in the late 1990s and turn of the century, offering e-trading options, often with significantly lower fees than more traditional services had charged. Automating more aspects of the trading process has brought transaction costs down, though many old-school traders resist the move away from open outcry because of the loss of the intangibles involved in the transaction; when you can see the other party, you can read body language and gauge the motivation of the trade.

Some exchanges have software for e-trading; others license software from a third-party provider. The development of e-trading software is quickly becoming a niche field in the computer software industry, and traders who deal with multiple exchanges find themselves required to stay on the technological cutting edge. One development, a case in which e-trading does much more than simply allow trades without face-to-face contact, is algorithmic trading. Sometimes called robo-trading or black-box trading, algorithmic trading relies on mathematical algorithms to determine one or more aspects of a trade—from the acceptable bid or ask price to the timing or size of the trade, and especially the relationship of those aspects to one another (buying more shares of a stock at a good price, for instance). On the one hand, it is the sort of decision making a human agent could do, using the same underlying logic; on the other hand, once such decisions are reduced mathematically, the process transpires much faster, allowing opportunities to be captured before the window closes.

By 2006 a third of stock trades made in Europe and North America were conducted algorithmically; the popularity of the software continues to steadily rise. Algorithmic trading is also popular, if slightly less so, on the futures, options, and foreign currency markets. Different common algorithms have developed, including the Guerrilla algorithm developed by Credit Suisse, which determines in real time which available offers or bids can be accepted without disrupting the stock's trading pattern. Another Credit Suisse algorithm, Sniper, is designed to detect "dark pools of liquidity," not shown on the trading platforms provided by stock exchanges as a result of algorithmic trading performed by other parties. Snipers are sophisticated algorithms, useful only in an environment where a significant amount of algorithmic trading is going on—and they are not the only one of their type. Sniffer algorithms are designed specifically to detect and identify trading algorithms in use, while Bespoke algorithms cloak algorithmic activity. The prevalence of electronic trading has led some to predict, plan, or hope for an online-only stock exchange.

Listing Requirements

Stock exchanges typically have certain requirements for companies that want to have their stock listed on the exchange. These requirements can include the minimum annual income, minimum shares outstanding, and minimum market capitalization. The NYSE requires that a company have at least one million shares of stock, that the total shares be worth at least $100 million, and that the company has earned at least $10 million over the last three years. NASDAQ requires 1.25 million shares, worth $70 million, and $11 million in three years of earnings. The London Stock Exchange has a different set of requirements entirely—12 months of working capital, three years of audited financial statements, 25 percent public float, and 700,000 pounds market capitalization.

See Also: AEX General Index (Amsterdam); ATX Index (Vienna); Bel-20 Index (Brussels); Bid/Ask Spread; Bloomberg; Bonds; BSE Sensex Index (Bombay Stock Exchange); Buyout; CAC 40 Index (Paris); City, The; CMA Index (Egypt); DAX Index (Germany); Dow Jones Index; Economic Indicators; Financial Markets; Foreign Exchange Market; FT Index; FTSE; Gnomes of Zurich; Initial Public Offering; IPC; ISE National 100 Index; KLSE (Malaysian Stock Index); MerVal; MIBTel Index (Milan); Nikkei Index; NZSE 50 (New Zealand Stock Index); OSE All Share Index (Oslo); Prospectus; S&P 500 Index; Securities and Exchange Commission; Stockholm General Index; Straits Times Index (Singapore); Swiss Market Index; Taiwan Weighted Index; TA-100 Index (Tel Aviv); Trading Volume; Wall Street.

Bibliography. M. T. Bohl, P. L. Siklos, and D. Sondermann, "European Stock Markets and the ECB's Monetary Policy Surprises," *International Finance* (v.11/2, 2008); James E. Buck, *The New York Stock Exchange: The First 200 Years* (Greenwich Publishing Group, 1992); Charles R. Geisst, *Wall Street: A History—From its Beginnings to the Fall of Enron* (Oxford University Press, 2004); Mark Jickling, *Sarbanes-Oxley and the Competitive Position of U.S. Stock Markets* (Nova Science, 2009); Zachary Kent, *The Story of the New York Stock Exchange* (Scholastic Library Publishing, 1990); C. Pierdzioch and A. Schertler, "Investing in European Stock Markets for High-Technology Firms," *Global Finance Journal* (v.18/3, 2008); Leonard Sloane, *The Anatomy of the Floor* (Doubleday, 1980); Robert Sobel, *N.Y.S.E.: A History of the New York Stock Exchange, 1935–1975* (Weybright and Talley, 1975); Tony Southall, *European Stock Markets: The Effects of European Union Membership on Central and Eastern European Countries* (Physica, 2008); Paul Temperton, "Trading With the Help of Guerrillas and Snipers," *Financial Times* (March 19, 2007); D. Tokic and S. Tokic, "Time to Leave Foreign Stock Markets?" *Journal of Corporate Accounting and Finance* (v.19/6 2008).

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Stockholm General Index

The Stockholm General Index—or the Affarsvarlden General Index—now usually known as the OMX Stockholm 30 (although this has a slightly different balance of companies), is a weighted listing of major companies traded on the Stockholm Stock Exchange in Sweden. Founded in the Swedish capital in 1863, the stock exchange is the primary securities exchange for the Nordic countries.

Since its creation, the Stockholm Stock Exchange has been important for raising capital in Sweden and also other parts of Scandinavia, particularly Norway, which was a part of the United Kingdoms of Sweden and Norway from 1814 until 1905. The Stockholm General Index was established to provide an easily accessible measure of the performance of the stock exchange by including the major companies, but weighting them against their importance and market capitalization.

Traditionally, the market has generally been buoyant, but it was badly affected by the start of the Great Depression, and indeed, in 1931, the index of shares on the Stockholm Stock Exchange registered the biggest fall of any major stock exchange in the world, more than Wall Street. This was accompanied by a major fall in the price on world markets of the Swedish kronor, which forced the temporary closure of the Stockholm Stock Exchange from September 29, 1931. Indeed, in March 1932, the Riksdag, the Swedish parliament, had to rush through legislation to stabilize the economy after the suicide of Ivar Krueger, which once again shook the nervous stock exchange. As a result, this period has attracted interest from historians, and by January 1934, the shares were trading at about 10 percent of their prices seven years earlier.

In the early period of World War II, the Stockholm General Index fell, and the market remained depressed, although it did pick up as Sweden benefited from its position of neutrality. In contrast to the economic performance of Sweden in the 1930s, after World War II the Swedish economy boomed, and this led to a dramatic rise in the values of many shares quoted in Stockholm, which was reflected in a steady increase throughout that period in the Stockholm General Index, regularly achieving "all-time highs," reaching 1,002.99 on January 9, 1989, buoyed in spite of the decision by the Swedish government in December 1988 to introduce a 15-percent tax on profits. It continued to rise and by January 1994 reached 1,603.9, but fell by July 1994 to 1,334.7, reaching 1,440.90 in September of the same year.

In the previous year, the Stockholm Stock Exchange had achieved much attention around the world because of a stock market competition that was played out in August–September 1993 when five Swedish stock analysts were given a nominal sum of $1,250, which they had to invest to see whether they could achieve better results than the Stockholm General Index. These competitions had been staged since the early 20th century, but this time, the newspaper *Expressen* managed to get Ola, a chimpanzee in the Stockholm Zoo, to stick pins into a board that had names of companies that were taken to represent the primate's "choice" for a share portfolio. Within four weeks, Ola was well ahead of the analysts, having made $190, about 15 percent.

All trading took place on the floor of the Stockholm Stock Exchange Building until June 1, 1990, when electronic trading changed that, and this helped encourage computer buying and selling which, in turn, not only increased the volume of shares bought and sold, but also led to more fluctuation in the Stockholm General Index. In 1998 the Stockholm Stock Exchange was bought by OMX, and five years later, its operations were merged with those of the Helsinki Stock Exchange. There are currently 79 members of the Stockholm Stock Exchange with 310 companies being listed and a market capitalization of 2,521 billion Swedish kronor (approximately $394 billion).

The 30 companies that make up the OMX Stockholm 30 are weighted heavily toward the largest companies. H&M is involved in the retail of apparel, with Nordea, representing diversified banks, TeliaSonera, for integrated telecommunication services, together making up a third of the shares traded. Probably one of the most well-known Swedish companies, Volvo, makes up 5.2 percent of the Index. The other companies that make up the OMX Stockholm 30 are ABB, Alfa Laval, Assa Abloy, AstraZeneca, Atlas Copco (class A), Atlas Copco (class B), Boliden, Electrolux, Eniro, Ericsson, Investor, Lundin Petroleum, Nokia, Sandvik, SCA, SCANIA, SEB, Securitas, Skanska, SKF, SSAB, Svenska Handelsbanken, Swedbank, Swedish Match, Tele2, and Vostok Gas.

See Also: Company Profiles: Western Europe; Nokia; Norway; OSE All Share Index (Oslo); Sweden; Volvo.

Bibliography. Tommy Bengtsson, ed., *Population, Economy and Welfare in Sweden* (Springer-Verlag, 1994); Jonas Bernhardsson, *Tradingguiden* (Bokförlaget Fischer, 2002); Jonathan Fuerbringer, “The Yin-Yang of Rates and Earnings,” *New York Times* (February 10, 1991); Richard W. Stevenson, “Still Ungainly, Sweden Holds Promise,” *New York Times* (September 11, 1994).

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Straits Times Index (Singapore)

The Straits Times Index (STI) is compiled by the Singapore *Straits Times* newspaper (which is owned by Singapore Press Holdings) and is considered Singapore’s premier equity index. STI is Singapore’s main market benchmark, which has evolved as part of a partnership between Singapore Press Holdings (SPH), FTSE Group, and Singapore Exchange (SGX). The STI is calculated by using data from SPH, FTSE, and SGX. The aim of the collaboration is to create a comprehensive suite of indices that will better reflect the performance of various sectors of the Singapore stock market and meet the needs of both retail and institutional investors.

STI was formed in August 1998 to replace the Straits Times Industrials Index (STII), which saw the removal of the “industrials” category from the index. Since 1998, the STI has comprised between 30 to 55 of the exchange’s most valuable firms. Together, these components represent more than 60 percent of the total market value of all issues traded on the Singapore Stock Exchange. STI is a modified weighted index that ensures that the largest firms have the greatest impact on the index’s value. Designed to provide both domestic and international investors with opportunities to access the Singapore market, the STI currently represents the performance of the top 30 Singaporean companies by market capitalization.

STI is the headline index of the FTSE. Stocks are free float weighted and liquidity screened to ensure that the index is tradable. This means that portfolio investments, nominee holdings, and holdings by investment companies represent more than 15 percent of any one company’s listing, and that stocks retain a median daily turnover value of at least .05 percent of the value of its free float–adjusted shares in issue for 10 out of the past 12 months.

To qualify for inclusion in any index, the market capitalization of a listed company must fall within the top 98 percent by full market capitalization of all SGX main board companies. As of December 31, 2007, the STI top 10 companies held 69 percent of the net market capitalization share and include Singapore Telecom, DBS Group Holdings, United Overseas Bank, Overseas Chinese Banking Corporation (OCBC), Keppel Corp., Singapore Exchange, Hong Kong Land, Singapore Airlines, City Developments, and Capitaland. With a net market capitalization of more than SG$232 million, banks retain the highest sector representation on the STI, accounting for over SG$65 million of the net market capitalization of the index, followed by general industries (SG$31 million), real estate (SG$29 million), and travel and leisure (SG$22 million).

A transparent and public set of rules is used to manage the indices to ensure that a continuous and accurate representation of the market is maintained. To achieve this, the STI is overseen by an independent advisory committee comprised of market practitioners and/or representatives from SPH, SGX, and FTSE, with reviews taking place semiannually in March and September. One such review in 2005 raised the number of stocks from 45 to 50. In doing so, the change increased its total market capitalization to 75 percent, while reducing the index representation of the average daily traded value to 60 percent. Other changes have included stock additions (e.g., Suntec REIT, Olam, Genting International, Labroy Marine, CapitalCommerical, and Thai Beverage in February 2007) and stock removals (e.g., Dairy Farm, Haw Par Corporation, BIL, and TPV Technology). The most significant change occurred in December 2007, in which the SPH, SGX, and FTSE announced a major overhaul of the STI. In 2008, the revamped STI dropped from 55 to 30 component stocks, with 18 new indices being created. A new family of FTSE ST indices consists of 5 benchmark and 13 industry indices, which includes an index to represent China stocks listed in Singapore. To facilitate cross-border analysis and comparisons, the new indices adopt FTSE's international methodology and are based on the International Classification Benchmark (ICB), the renowned classification system created by Dow Jones Indices and FTSE. The STI currently comprises 30 blue-chip companies ranked by market capitalization as of August 31, 2007.

See Also: Dow Jones Index; FT Index; FTSE; Liquidity (or Market Liquidity); S&P 500 Index; Singapore.

Bibliography. "The FTSE ST Series of Market Indices," *Straits Times* (May 5, 2008); *Straits Times Index (STI) Fact Sheet* (FTSE The Index Company, 2007).

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Strategic Alliance

An informal or formal agreement between two or more companies with a common business objective is a strategic alliance. Strategic alliances can take forms ranging from informal cooperation to joint ownership of worldwide operations. Some contractual agreements are also treated as strategic alliances when those agreements involve a long-term, continual strategic partnership and thereby provide strategic gains for partners.

Strategic alliances are being used for many different purposes by the partners involved. A long-term and trust-based agreement between a manufacturer and supplier firm is considered a strategic alliance because it is beyond going to open market and choosing the best deal each time and affords mutually rewarding cost savings, consistency, and quality improvements for the manufacturer and stable sales and certainty for the suppliers. In banking, the "exporting" of services through alliance partners rather than direct investment or contracting (licensing) was common. That is, banks use correspondents with whom they maintain parallel (corresponding) balances of deposits and offer services to each other's clients in each country. Large banks tend to have many such relationships around the world, in addition to any overseas affiliates they may operate. Additionally, banks will use multiple-bank alliances to provide automatic teller machine (ATM) access to their clients in many locations, operate credit card alliances through Visa and MasterCard to offer such services globally to their clients, working closely with actual or potential competitors. Banks also often contract out parts of their activities to alliance partners in a vertical deintegration context, for example, contracting out their mortgage loan servicing activity to specialist firms or selling off their mortgages to intermediaries that create mortgage-backed bonds in a secondary market.

Penetrating foreign markets is a primary objective of many companies entering strategic alliances; others are aimed at defending home markets. Another focus is the spreading of the risk and cost inherent in production and development efforts. Technology companies have joined forces to win over markets to their operating standard. Each form of alliance is distinct in terms of the amount of commitment required, the extent of equity involved, and, therefore, the degree of control each partner has, as well as the number of partners.

In informal strategic alliances, partners work together without a binding agreement. This arrangement often takes the form of visits to exchange information about new products, processes, and technology or may take the more formal form of the exchange of personnel for limited periods of time. Such partners are unlikely to compete for markets and tend to be of modest size, making collaboration advantageous if not absolutely necessary. The relationships are based on mutual trust and friendship, and may lead to more formal arrangements, such as contractual agreements or joint projects.

Formal, contractual agreements between strategic alliance partners may be used for joint research and development (R&D), joint marketing, joint production, or outsourcing. Contract manufacturing allows the corporation to separate the physical production of goods from the research and development and marketing stages, especially if the latter are the core competencies of the firm. Such contracting improves company focus on higher value-added activities, provides access to world-class capabilities, and allows partners to reduce their operating costs. Contract manufacturing provides many companies, especially in developing countries, the opportunity to gain the necessary experience in product design and manufacturing technology to allow them to function in world markets.

In Japan, vertical alliances or *keiretsu* are very popular and have supported the rapid growth of many high-tech companies and enabled parallel enhancement of the technology used by component suppliers and assemblers. Pharmaceutical, automotive, and electrical goods industries are examples of this. Toyohiro Kono attributes the appeal of alliances to the group orientation of Japanese firms, as opposed to independence that characterizes Western firms.

Strategic alliances may also be used to aid development and produce economies of scale in production; for example NKK entered into an alliance with Tetint (of Argentina) to produce and market a seamless pipe, while Mitsui Ship Building is cooperating with Kawasaki Heavy Industries in the design and construction of ships. In Poland, production-oriented strategic alliances predominate in the food processing industry, whereas in Romania there are a greater number of consultancy relationships for managerial and organizational improvements, including foreign consultancies.

Government intervention continues on a major scale in some countries. Socialism puts serious restrictions on capitalism. The social contract in many nations of full employment and a good safety net requires boundaries on free capitalism. In some parts of the world and in certain industries, governments insist on complete or majority ownership of firms, which has caused multinational companies to turn to an alternative method of enlarging their overseas business; for example, a management contract in which the firm sells its expertise in running a company while avoiding the risk or benefit of ownership. Increasingly, governments are publicizing alliance opportunities, like the recent Chinese government promotion of foreign direct investment opportunities in the growing traditional Chinese medicines area or the Indian government's promotion of foreign direct investment opportunities in infrastructure projects.

In his analysis of strategic alliances, Kono identifies six major reasons for failure: financial loss, opportunity loss, goal differences, differences in corporate culture, lack of mutual trust, and lack of competitive power. Kono also identifies success factors, specifically mutual trust, first-class complementary capabilities to create competitive core competencies, and continuous mutual learning to enhance competencies.

There are other reasons for strategic alliance breakup. In the case of Eli Lilly and Ranbaxy in India, the breakup of the joint venture, another form of strategic alliance, came when both partners had developed sufficient strength to stand on their own in their chosen market. This has become a common occurrence in rapidly developing economies.

See Also: Economies of Scale; Entry Mode; Foreign Direct Investment, Horizontal and Vertical; Internationalization; Joint Venture; *Keiretsu*; Vertically Integrated Chain.

Bibliography. Yair Aharoni and Lilach Nachum, *Globalization of Services: Some Implications for Theory and Practice* (Routledge, 2000); Refik Culpan, *Global Business Alliances: Theory and Practice* (Quorum, 2002); Cyrus Freidheim, *The Trillion-Dollar Enterprise: How the Alliance Revolution Will Transform Global Business* (Perseus, 1998); Victor A. Gilsing and Charmianne Lemmens, *Strategic Alliance Networks and Innovation: A Deterministic and Voluntaristic View Combined* (Eindhoven Centre for Innovation Studies, 2005); Hans-Werner Gottinger, *Strategic Alliances in Biotechnology and Pharmaceuticals: Sources and Strategies for Alliance Formation in a Global Industry* (Palgrave Macmillan, 2008); Toyohiro Kono, *Trends in Japanese Management: Continuing Strengths, Current Problems and Changing Priorities* (Palgrave, 2001); Francis McGowan et al., *The Emerging Industrial Structure of the Wider Europe* (Routledge, 2004); Peter R. Murray, *The 'a-Form' Strategic Alliance Archetype: Patterns of Organisation* (Macquarie University, 2003); Susanne Royer, Roland H. Simons, and Robert W. Waldersee, *Perceived Partner Reputation and Strategic Alliance Structuring: Comparing Public and Private Sectors* (Queensland

University of Technology, 2000); Malcolm Warner, Eden Yin, and Chong Ju Choi, *Global Strategic Alliance Membership: Market Versus Institutional Criteria* (Judge Institute of Management, 2002).

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Structured Notes

Structured notes are a debt-based type of structured product, which the Securities and Exchange Commission (in rule 434) defines as

> securities whose cash flow characteristics depend upon one or more indices or that have embedded forwards or options or securities where an investor's investment return and the issuer's payment obligations are contingent on, or highly sensitive to, changes in the value of underlying assets, indices, interest rates or cash flows.

Those embedded components may be straightforward or may include exotic options; there is a wide variety of structured notes.

Structured notes originated with, and are still issued primarily by, investment banks. Investment banks wanted to increase the appeal of convertible bonds—bonds that could be converted into shares of the company issuing them, at a particular predetermined ratio, which encouraged investors to accept bonds of lower interest rates in exchange for the possibility of a higher profit after such a conversion. Because that higher return to the investor is tied to a greater success for the company, convertible bonds are an especially appealing way for investment banks to raise funds. Some such bonds were structured with additional features, such as risk protection or extra income; sometimes these extra features came with extra limits of their own, making structured notes potentially complicated, full of contingencies and multiple paths, always preserving a balance between investor appeal and a high profit margin for the investment bank. Such notes can be tailored very specifically to different types of investors.

Structured notes combine a debt security such as a bond with various derivatives, usually options. Most do not guarantee repayment, for instance if the company should go bankrupt; some offer guaranteed protection of the principal investment, in whole or in part, as a feature. The exotic options may include shout options (allowing the investor to lock in the price of the note at any time), capped-style options limiting the profit (to offset some investor benefit and preserve the issuer's profit margin), or involve one of the so-called mountain range options pioneered in the late 1990s, in which the value of the option depends on the performance of multiple underlying assets in the "basket."

See Also: Bonds; Collateralized Debt Obligations; Collateralized Loan Obligations; Debt (Securities); Equities; Interest Rates; Investment Banks; Option.

Bibliography. Erik Banks and Paul Siegel, *The Options Applications Handbook: Hedging and Speculating Techniques for Professional Investors* (Wiley, 2007); Espen Gaarder Haug, *The Complete Guide to Option Pricing Formulas* (McGraw-Hill, 2007); Andreas E. Kyprianou, Wim Schoutens, and Paul Wilmott, *Exotic Option Pricing and Advanced Levy Models* (Wiley, 2005); Riccardo Rebonato, *Interest-rate Option Models: Understanding, Analysing and Using Models for Exotic Interest-rate Options* (McGraw-Hill, 1998).

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Subprime Loans

Subprime loans are loans offered to people who otherwise would not be able to afford a loan. People who are credit worthy are those who have a demonstrated ability to pay back the loan. Subprime borrowers are those who would be turned away by conventional lenders because their credit rating pointed to a reasonable probability that the loan would not be repaid, but would end in default.

Those who need to borrow are those who lack the capital to achieve some goal. In the case of subprime loans, in recent decades in the United States, a very common goal was home ownership. However, other types of subprime credit were granted for a number of reasons by lenders. While lenders who give the largest loans are banks for home ownership, many credit companies lend for the purchase of automobiles. These are the two largest purchases made by most people. Also, many companies including well-known brands of clothing, jewelry, and other consumer goods have created credit companies or joined with them to make subprime loans to keep sales flowing.

The interest rate on subprime loans is usually higher than traditional loans, making them more expensive for those getting the loan. Such loans are usually to people with limited or small incomes. The higher interest charged meant that the cost of the loan increased by thousands of dollars over the life of the loan. In addition, to make the loan affordable in terms of monthly payments for paying the interest and principal, the life of the loan was usually longer, thus also adding to the cost of the loan.

Getting a subprime loan for those with limited means may have been their only realistic option for getting a credit card, consumer loan, or home mortgage. Even with a higher interest rate, it was possible to get credit at a subprime rate to repair a bad credit rating due to unforeseen circumstances such as illness, job loss, bad debt management, or other reasons such as the damage done to a family unit through divorce. Subprime lending is also called near-prime, nonprime, and second-chance lending. Those who get subprime loans are sometimes referred to as underbanked, meaning they lack bank accounts with substantial deposits.

All borrowers have a credit history that tells the story of their borrowing and repayment. Those borrowers with excellent or good credit ratings are those who have repaid loans promptly. Those borrowers with low or bad credit ratings have repaid slowly with delinquencies in prompt repayment or have defaulted on the loan. In contrast, lenders also have a lending record that tells the story of loans made, repaid, not repaid, and the money made and lost on the loans. All lenders, to stay in business, have to recover the principal on loans plus interest. They must incur only a few losses to make money for the creditor for the risks incurred and for increasing the capital available for lending.

C-paper is a subprime loan security that is expected to have a return that is above the prime rate of interest. Nonconforming loans in the United States are those that do not meet the standards of Freddie Mac and Fannie Mae. The reason for not meeting the standard can be any one of a long list of factors. In addition, bank loans to self-employed persons or on property that cannot be sold in the usual real estate markets may be subprime.

In 2007 the subprime mortgage industry collapsed amid the steepest plunge in U.S. home sales since the 1980s.

In the credit crisis of 2008, accusations against some subprime lenders claimed they engaged in predatory lending practices. The unscrupulous practices included playing on the ignorance of borrowers, lending to those who were unlikely to even make the interest payments, withholding information, and other fraudulent practices. In general, most predatory loans are subprime loans, but it is important to note that most subprime loans were not predatory.

Despite problems with predatory lending practices in the subprime market, most loans including those in the subprime category were bundled into securities issued by Real Estate Mortgage Investment Conduits (REMICs), which issued Residential Mortgage Backed Securities (RMBS) or other securities. These new types of securities were then sold to investors including pension funds, which historically invested in commercial mortgages or traditional real estate mortgages. The fees generated from these types of financial "products" were very profitable until the credit crisis bankrupted a number of large investment institutions involved in the business because the value of the RMBS seemed to vanish almost overnight.

Defenders of subprime lending claim that it gives credit to people who would not otherwise get loans.

In many cases these are people who will, unless harsh unforeseen circumstances arise, repay the loan even if occasionally delinquent. The higher interest rates and loan origination fees reflect the issues involved in making a subprime loan including the risk of default to the lender.

See Also: Freddie Mac; Mortgage Credit Crisis of 2008; Securitization.

Bibliography. Adam B. Ashcraft, *Understanding the Securitization of Subprime Mortgage Credit* (Now Publications, 2008); Richard Bitner, *Confessions of a Subprime Lender: An Insider's Tale of Greed, Fraud, and Ignorance* (John Wiley & Sons, 2008); Frank J. Fabozzi and Robert Paul Molay, eds., *Subprime Consumer Lending* (Wiley, 2001); Melissa B. Jacoby, "Home Ownership Risk Beyond a Subprime Crisis: The Role of Delinquency Management," *Fordham Law Review* (v.76/5, 2008); Douglas J. Lucas et al., *Subprime Mortgage Credit Derivatives* (Wiley, 2008); Robert J. Shiller, *The Subprime Solution: How Today's Global Financial Crisis Happened, and What to Do About It* (Princeton University Press, 2008); Mark M. Zandi, *Financial Shock: A 360° Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis* (FT, 2009).

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Subsidiary

The term *subsidiary* covers a range of organizational units and subunits, be they part- or wholly owned, foreign or domestic, acquisition or spin-off, formally or informally integrated. This term does imply significant legal ownership and a measure of control from the corporate headquarters (or upper) level of the organization, although, as already implied, contemporary parlance is to allow a broader range of relationships. *Affiliate* is a broader term used more and more to include legal subsidiaries as well as joint venture alliances and even outsourcing partners.

A corporation may have several national subsidiaries (in different countries). Each subsidiary may or may not be in a similar line of businesses, with identical or different brand names and market foci. For example, HSBC has several wholly owned national subsidiaries, each of which has a name that reflects their product-market focus—for example, HSBC Bank USA and HSBC France. Time Warner, Inc., has several subsidiaries—AOL, Warner Brothers, HBO, and Time, Inc., to name a few—each aiming at different product-market domains. Interestingly, the Time Warner Web site (www.timewarner.com) refers to them as "businesses" rather than subsidiaries. Similarly, GE refers to its six "businesses" (GE Healthcare, GE Commercial Finance, GE Money, GE Industrial, GE Infrastructure, and NBC Universal), each of which are multinationals in their own right, with subsidiaries of their own.

Traditionally, the international business literature was characterized by a top-down, headquarters-centric view of the multinational organization. According to Stuart Paterson and David Brock, there is more recognition these days that the subsidiary is the significant unit of analysis for competing and actually doing business. Thus, the management of multinational subsidiaries has quite recently emerged as a distinct field of research from within the fields of international and strategic management. Lars Otterbeck was one of the earliest authors to try to define the field with the publication *The Management of Headquarters-Subsidiary Relationships in Multinational Corporations.* A subsequent collection by Hamid Etemad and Louise Seguin Dulude contributed by bringing attention to Canada's policies encouraging world product mandates.

More recently, Julian Birkinshaw and various colleagues have made a relatively systematic effort to not only define the field, but also to delineate three substreams—namely HQ-subsidiary relationships, subsidiary roles, and subsidiary development—and, in subsequent work, build on this with a four-part classification of the field's base literature, as well as three other categories of more contemporary developments. More than just being pawns in the multinational corporation, this body of thinking describes proactive roles and strategies for subsidiaries such as various mandates and centers of excellence.

Contemporary thinking—both by researchers and in practice—is that multinationals now expect more from their subsidiaries than simply a return on their financial investment. Subsidiaries are expected to be sources of ideas and innovation. For example, an inventory control application developed by BMW's New Zealand subsidiary has been implemented in several other BMW subsidiaries; and innovations in furnishings and menu trialed in McDonald's Australia and France are now being adopted by some McDonald's restaurants in the United States.

Another view, expressed in the "global strategy" concept, is that subsidiaries' uniformity of branding and offerings enables clients to feel at home—be it at Avis, KPMG, Microsoft, or Starbucks—wherever they are in the world. Other advantages of the global strategy are cost savings via economies of scale and scope, and the ability to use global value chains. Thus, there is often pressure for subsidiaries to conform to corporate-wide policies, standards, and systems even if local managers feel they are not necessarily good for the subsidiary's home market. Chris Bartlett and the late Sumantra Ghoshal referred to these pressures as forces for global integration and see them as pervasive in the multinational arena. They explain how firms need to balance them with forces for local responsiveness—as illustrated in the BMW and McDonald's examples above—to maximize the benefits of their internal resources and external opportunities in global markets.

See Also: Acquisitions, Takeovers, and Mergers; Economies of Scale; Economies of Scope; Global Brand Strategy; Globalization; Global Product Divisions; Home Country; International Division Structure; Multinational Corporation.

Bibliography. C. A. Bartlett and S. Ghoshal, *Managing Across Borders: The Transnational Solution* (Harvard Business School Press, 1989); Julian Birkinshaw and Neil Hood, eds., *Multinational Corporate Evolution and Subsidiary Development* (Macmillan/St. Martin's, 1998); H. Etemand and L. S. Dulude, *Managing the Multinational Subsidiary: Response to Environmental Change and the Host Nation R and D Policies* (Croom Helm, 1986); T. S. Frost et al., "Centers of Excellence in Multinational Corporations," *Strategic Management Journal* (v.23/11, 2002); Ellen V. Fuller, *Going Global: Culture, Gender and Authority in the Japanese Subsidiary of an American Corporation* (Temple University Press, 2008); Katrin Männik, *The Impact of the Autonomy on the Performance in a Multinational Corporation's Subsidiary in Transition Countries* (Tartu University Press, 2006); L. Otterbeck, ed., *The Management of Headquarters-Subsidiary Relationships in Multinational Corporations* (St. Martin's, 1981); Stuart Paterson and David M. Brock, "The Development of Subsidiary Management Research: Review and Theoretical Analysis," *International Business Review* (v.11/2, 2002).

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Subsidies

Subsidies (or subventions) are forms of financial assistance, economic concessions, or privileges granted by government to a company, businesses, segment of an industry, or industry for the purpose of encouraging their continued existence, growth, development, and profitability (subsidies may also be granted by government to individuals as a redistribution of income, and to local governments by central governments to promote public policy objectives). Subsidies are often "hidden" due to their various types, inherent objectives, and complex economic effects. It is, however, ultimately a political decision to grant a subsidy. When government grants a subsidy, it is ostensibly in the public interest that a company, business, or industry continues as a viable entity and provides needed business activities in the domestic economy.

In general, there are two forms of subsidies: direct subsidies involve a direct cash transfer to an economic entity, while indirect subsidies are forms of government subventions that usually do not involve direct money transfers. From a purely economic perspective, the use of subsidies may be inefficient as compared to not offering any subsidies or another policy instrument for achieving similar socioeconomic results or, contrarily, an efficient means of correcting a market failure and providing a public good. Furthermore, direct subsidies, that is, cash transfers, are considered more efficient than indirect subsidies, for example, trade barriers sought by domestic industries seeking protection from international competition.

The economic impact (total costs) of a subsidy is explained through the application of supply-and-demand curves and the concept of elasticity of supply and demand, that is, the subsidy per unit times the new equilibrium quantity. For example, a subsidy that encourages a business's production will tend to lower the product's price, that is, it shifts the supply curve downward along the demand curve; contrarily, a subsidy encouraging demand tends to increase a product's price, that is, it shifts the demand curve upward along the supply curve. Public goods tend to be less impacted by elasticity of demand, given that there is sufficient supply of such public goods and the total costs of subsidies remain constant (regardless of the volume of consumers). An exception to this public good tendency is when the number of suppliers of this good rises (reflecting a rise in demand for this subsidy "benefit") and increases cost.

Direct subsidies are considered preferable to indirect subsidies, as they allow for greater transparency in the political process. This political transparency can result in the opportunity for government representatives to eliminate economically inefficient "hidden" government subsidies benefiting rent-seeking business entities. In the United States, these so-called pork barrel federal subsidies, that is, unnecessary or wasteful subsidies, are popularly referred to as "corporate welfare" by government reform nonprofit organizations that publish lists of such pork barrel projects for public scrutiny.

Subsidies take many different forms and are best described by the means by which the subsidy is distributed to the business entity:

- Labor: A business receives a government payment to help cover employment costs and/or training expenses.
- Tax: A company receives a tax credit or deduction, accelerated depreciation (applied against business income) for equipment, or an outright exemption from a sales tax.
- Production: An industry will receive direct cash payments to encourage manufacture of a specific product or provision of a service.
- Procurement: As a consumer, a government may pay higher-than-market prices for goods or services it purchases.
- Consumption: A government may simply give away a good or service, offer the use of a government-owned asset or service at a price lower than production cost, or provide direct cash incentives to a business for the purchase of a good or service.
- Infrastructure: The public provision of infrastructure for a restricted number of business entities is a form of an indirect production subsidy provided by taxpayers.
- Regulatory Preferences: A public policy may directly or indirectly favor a class of products, company, segment of an industry, or industry over competitors, thus reducing a potential input into production costs.
- Trade Protection: Import limitations, such as a quantity limit, offer a hidden subsidy for a domestic industry.
- Export: To promote domestic industries in their bid to be competitive in a global market, certain tax measures are offered to encourage trade promotion.

International Trade

In the arena of international trade, the World Trade Organization (WTO) enforces the Agreement on Subsidies and Countervailing Measures. The agreement is designed to regulate two areas of international trade: first, it circumscribes the use of subsidies by a national government, and second, it regulates the actions that a national government can take to counteract the negative effects of subsidies. Under the agreement, a country may use the WTO's dispute settlement procedure to obtain the removal of the subsidy or its adverse effects on a nation's domestic industry, or the national government may initiate its own investigation into the prohibited use of a subsidy and, if the evidence supports the action, charge a countervailing duty on the subsidized import.

There are two categories of subsidies defined under the agreement: prohibited and actionable. Prohibited subsidies require companies or industries to meet government-prescribed export targets, or to use domestic inputs in the manufacturing process rather than imports, and are intended to negatively influence the free trade environment. With actionable subsidies, an aggrieved nation must provide evidence that the government-supplied subsidy has an adverse effect on its domestic industry or the subsidy is allowable. While so-called dumping is when a company exports a product and charges a price below what it charges in its domestic market, subsidies are offered only by government.

See Also: Banana Wars; Countervailing Duties; Dumping; Export Subsidy; General Agreement on Tariffs and Trade; World Trade Organization.

Bibliography. Dirk Czarnitzki and Andrew A. Toole, *Business R&D and the Interplay of R&D Subsidies and Market Uncertainty* (Wirtschaftsforschung, 2006); G. C. Hufbauer and J. Shelton-Erb, *Subsidies in International Trade* (MIT Press, 1984); David N. Hyman, *Public Finance: A Contemporary Application of Theory to Policy With Economic Application* (Cengage Learning, 2004); Malgorzata Kurjanska and Mathias Risse, *Fairness, Export Subsidies, and the Fair Trade Movement* (Harvard University, 2006); New Zealand, *An Employer's Guide to the Subsidies We Offer* (Work and Income, 2007); Office of Fair Trading (UK), *Public Subsidies: A Report by the Office of Fair Trade* (Office of Fair Trade, 2004); Anna Purinton, *The Policy Shift to Good Jobs: Cities, States and Counties Attaching Job Quality Standards to Development Subsidies* (Good Jobs First, 2003); Volker Reinthaler and Guntram B. Wolff, *The Effectiveness of Subsidies Revisited: Accounting for Wage and Employment Effects in Business R&D* (ZEI, 2004); World Trade Organization, "Anti-Dumping, Subsidies, Safeguards: Contingencies, etc.," www.wto.org (cited March 2009).

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Sudan

The largest country in Africa and also one of the poorest, Sudan has traditionally been reliant on Egypt, which controls the mouth of the River Nile. In ancient times, the region that became Sudan, then known as Nubia, helped provide a workforce for Egypt and also supplies of grain. Europeans started exploring it in search of the source of the River Nile, but there was little economic interaction, although a small cotton industry was developed. When the Anglo-Egyptian Condominium was established in 1899, the government of what was called the Anglo-Egyptian Sudan helped introduce cotton gins to help the industry, and also built mills for oilseed pressing. They were also able to improve the irrigation system and communications by extending the railway line that covered a large part of central Sudan, linking that area to the capital Khartoum, to Egypt, and to the Red Sea.

Under the British, a number of agency houses operated, one of the major ones being Cotts, Drake & Co. Ltd., which was part of the British Mitchell Cotts Group of companies. They advertised themselves as "importers and exporters of general merchandise and Sudan produce," also being agents for General Motors, Michelin Tires and Tubes, and other companies. Other firms that operated in Sudan at the time included the Imperial Chemical Industries, Imperial Typewriter Service, and other British companies.

Sudan gained its independence from Egypt and Great Britain in 1956, but it was not until 1960 that the government of President Ibrahim Abboud started to revitalize the economy and introduced a national development plan. The first of these was the Ten-Year Plan, which started in late 1960, was formally adopted in September 1962, and lasted until 1970. However, the goals were ambitious and the private sector did not provide enough of the capital, with the result that some of the projects were abandoned. However, there were some successes with the Khashm al Qirbah and the Manaqil irrigation projects, and the Al Junayd Irrigation Project, as well as the building of a new sugar factory. The per capita income of the country also rose from US$86 in 1960 to US$104 by 1969.

The government soon faced problems implementing reforms; some of this came from the south of the country, which during the 1960s led to the outbreak of a civil war. In 1967 the implementation of the Ten-Year Plan was finally abandoned and few countries would consider investing in Sudan or lending money. A new plan was drawn up, but this was discarded after General Gaafar al-Nimeiri seized power in a coup d'état in May 1969. He drew up and started implementing the Five-Year Plan of Economic and Social Development, which was expected to run from 1970 to 1974. It benefited much from Soviet technical advisers with the aim of establishing a socialist economy and this led to a steady increase in prosperity. It faced many problems, including those over the failure to improve the transportation system in the country. This hurt the agricultural sector, and schemes were then drawn up to lengthen the implementation process in the Five-Year Plan. Furthermore, income from government companies fell far short of the projected figures, leaving the government seriously short of money.

Sudan has long been plagued by conflict, most recently in the Darfur region. Despite an influx of oil revenue and GDP growth of over 10 percent 2006–07, much of the population, like this fisherman washing clothes in the White Nile, lacks basic amenities.

A Six-Year Plan of Economic and Social Development from 1977 until 1982 was then drawn up, and in October 1983, the government decided to introduce a three-year public investment program. By this time, the government was extremely unpopular with many people in the country, a situation exacerbated by an austerity program that was introduced after the ousting of General Nimeiri in 1985. The new government sought help from the International Monetary Fund, but was unable to push through the most rigorous of reforms. As a result, many countries stopped providing financial aid, although nongovernmental organizations did continue to provide food relief during periods of hunger and famine.

With corruption rife in the country and widespread embezzlement of government monies and assets, few investors wanted to risk their money in Sudan. However, there were profits to be made, and with the discovery of oil in Sudan—450,000 barrels of oil being piped daily by 2004—there has been much renewed interest in the country. However, the apportioning of the oil wealth was one of the factors that have kept the civil war in the country going, bringing heavy criticism internationally of the Sudanese government's actions and inactions in Darfur. This has served to isolate Sudan further from the world economy. Some 64 percent of Sudan's exports (overwhelmingly oil) goes to China, with Japan and Saudi Arabia also taking some of the oil. Saudi Arabia and China each make up about 11 percent of the imports entering Sudan.

See Also: Africa; Company Profiles: Africa; Egypt.

Bibliography. Martin E. Adams and John Howell, "Developing the Traditional Sector in the Sudan," *Economic Development and Cultural Change* (v.27/3, 1979); A. Ahmed and

John Adams, *Technology Transfer in Sudan* (Napier University, 2000); Tony Barrett and Abbas Abdelkarim, *Sudan, State, Capital and Transformation* (Croom Helm, 1988); Coalition for International Justice, *Soil and Oil: Dirty Business in Sudan* (Coalition for International Justice, 2006); *The Europa Year Book* (Europa Publications, 2008); Ali Mohamed el-Hassan, *An Introduction to the Sudan Economy* (Khartoum University Press, 1976); Badr-el-din A. Ibrahim, *Poverty Alleviation Via Islamic Banking Finance to Micro-Enterprises (MEs) in Sudan: Some Lessons for Poor Countries* (University of Bremen, 2003); Pablo Idahosa, "Business Ethics and Development in Conflict (Zones): The Case of Talisman Oil," *Journal of Business Ethics* (v.39/3, 2002); International Business Publications, *Sudan: Starting Business (Incorporating) in Sudan Guide* (International Business Publications USA, 2008); Leif O. Manger, ed., *Trade and Traders in the Sudan* (University of Bergen, 1984).

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Suez

The Suez Canal, completed in 1869, was one of the major engineering feats of the mid-19th century, helping with the European access to India and east Asia. Since ancient times, many goods were carried by land along the route of where the Suez Canal was built, but offloading and then reloading all the goods was expensive and time consuming. This meant that some shipping companies preferred to go around the Cape of Good Hope, but this added much time to the journey.

It is believed that the pharaoh Senusret III (reigned 1878–1839 b.c.e.) started work on a canal that would join the River Nile to the Red Sea to allow direct trade with the fabled kingdom of Punt, and also to the Mediterranean, reducing the need for the Egyptians to have a navy in both places. However, over the next 1,200 years, the canal fell into disuse, although there were later attempts to rebuild it. In 1799, when Napoleon was in Egypt, he considered building the canal as it would not only help with trade, but it would also allow access to India. However, the survey work undertaken by the French showed that the Red Sea was 10 m higher than the Mediterranean, which was incorrect. Based on this, however, they felt that the locks needed would make the construction too complicated and far too expensive.

In 1854 the French diplomat Ferdinand de Lesseps managed to get a concession from the viceroy of Egypt, Said Pasha, to build a canal, and on December 15, 1858, he established the Compagnie Universelle du Canal Maritime de Suez (Suez Canal Company). Work started immediately and it took almost 11 years and work by as many as 30,000 people to build the canal, which stretched from Port Suez to Ismailia. It was opened for the first time on November 17, 1869. Because of the importance of trade to the British, they wanted to have a role in the construction of the canal, but when the company shares were sold, most were bought in France, with Ismail Pasha, the new viceroy of Egypt, being given a number of shares. However, he had severe debts and sold the shares in 1875 for £4 million, thus ensuring a major British interest in the company. The loan by which the British bought the shares was made possible by the good offices of the Rothschilds. By the Convention of Constantinople in 1888, the British undertook to protect the canal and it was to be a neutral zone in times of war. The Anglo-Egyptian Treaty of 1936 confirmed British control of the canal, and this was important in both World War I and World War II, as well as trade throughout the first half of the 20th century.

Egyptian nationalists resented the British control of the canal, the stationing of British soldiers in the Suez Canal Zone, and also the revenue from the canal which went to the Suez Canal Company. In 1951 the Egyptian government repudiated the Anglo-Egyptian Treaty, and in 1954, the British agreed to remove their soldiers, completing this in July 1956. Soon afterward, the Egyptian government of Gamal Abdel Nasser announced on July 26, 1956, that it was nationalizing the canal, buying all the company shares for the price they were quoted on the French stock market on the previous day. The British and the French objected to this and threatened to intervene, with Israel offering to launch a land attack. The British and French sent in their soldiers and they fought the Egyptians. However, the United States opposed the war, and the United Nations voted to create a peacekeeping force, the Canadian politician Lester Pearson being awarded the Nobel Peace Prize in 1957 for his work on this. The sinking of ships in the Suez Canal resulted in its being closed until 1957.

The Suez Canal was now under Egyptian management, but in 1967, the Israelis launched a strike against the Egyptian forces and attacked across the Sinai Peninsula to take the canal. It was then closed by an Egyptian blockade, with Egypt attacking Israel in the Yom Kippur War of 1973. The canal started operations again on June 5, 1975, and it has been open since then, under the control of the Suez Canal Authority. All ships going through it needed to take on pilots who were, until 1956, foreigners, and from then on Egyptians. The largest ships that are allowed through are supertankers known as "supermax." It costs about $150,000 for an average ship to pass through the canal, which between July 2005 and May 2006, raised $3.246 billion, helping finance many projects for the Egyptian government.

See Also: Africa; Egypt; Panama; Transportation.

Bibliography. R. E. B. Duff, *100 Years of the Suez Canal* (Clifton Books, 1969); John Pudney, *Suez: De Lesseps' Canal* (Dent, 1969); Hugh J. Schonfield, *The Suez Canal in Peace and War 1869–1969* (Valentine, Mitchell, 1969); Derek Varble, *The Suez Crisis 1956* (Osprey, 2003).

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Sumitomo Mitsui Financial Group

The Sumitomo Mitsui Financial Group, Inc., (SMFG) is a financial services group established in December 2002 with ¥1.42 trillion in capital. In 2001 Sumitomo Mitsui Banking Corporation (SMBC) was created through the merger of Sumitomo Bank and Mitsui's Sakura Bank with ¥1.277 trillion in capital. It was Japan's second-largest bank. In Japanese, the corporate name is reversed to Mitsui Sumitomo Financial Group, a sign that Sumitomo was the stronger entity in the merged financial group.

SMFG is a holding company comprised of SMBC, Sumitomo Mitsui Card Company, Ltd., Sumitomo Mitsui Finance and Leasing Company, Ltd., the Japan Research Institute, Ltd., SMBC Friend Securities Co., Ltd., and is linked to Daiwa Securities SMBC Co., Ltd., Daiwa SB Investments Ltd., and Promise Co., Ltd. The Japan Research Institute was established in 2002 and the following year, two wholly owned subsidiaries were established: Sumitomo Mitsui Card (founded in 1967) and the SMBC Finance and Leasing Company (founded in 1963). From 2004, the SMFG formed an alliance with the Promise Co., Ltd. SMBC Friend Securities Co., Ltd., founded in 1948 as Meiko Securities Co., Ltd., became an SMFG subsidiary in 2006.

SMFG created a group corporate identity based on three strengths: the spirit of innovation, speed, and solutions and execution. The three strengths are said to be "the sources of our corporate value, on our way to becoming a team of professionals." The group slogan is "Lead the Value," which focuses on customers, shareholders and markets, and society in conjunction with the three strengths.

SMFG offers a wide variety of financial services including commercial and investment banking, credit card services, leasing, research, and securities. Specifically, SMBC offers services such as lending, deposit, securities retail sales and trading, investment trust sales, fund transfer, foreign exchange, corporate bond trustee and custody services, trust banking, and retail sales of insurance products. The Sumitomo Mitsui Finance & Leasing supports services such as corporate leasing and installment, rental business, international business, real estate leasing, finance, investment, and management support services. The Japan Research Institute offers services such as computer system development, information processing, consulting, and think tank services. Sumitomo Mitsui Card, which specializes in credit card services and credit financing, established in 2005 the Mitsui Sumitomo Card iD, a "wallet phone" service, in cooperation with NTT DoCoMo, Japan's largest mobile phone network service provider. It allows customers to pay for goods and services with their mobile phone functioning as a credit card.

Background and Global Presence

SMFG traces its establishment back to the Sumitomo company founded in 1630 by Masatomo Sumitomo, who began by selling medicine and books near Kyoto. His brother-in-law, Riemon Soga, and his eldest son, Tomomochi Sumitomo, expanded their business and became the leading copper mining, smelting, and trading company. The company expanded through warehousing and banking with their first Sumitomo Bank established in 1895 by Teigo Iba. Sokubei Mitsui began as a sake and soy sauce merchant near Kyoto, and his son, Hachirobei Takatoshi Mitsui, established the House of Mitsui in 1673 as a dry goods store in Tokyo, the precursor to the Mitsukoshi Department Store. Hachirobei Mitsui is said to have opened his first bank in 1683, next to his dry goods store in Nihonbashi, Tokyo. The Mitsui Bank, Japan's first private bank, was established in 1876 with ¥2 million in capital and headed by Takashi Masuda.

The Sumitomo Bank engaged in rapid expansion through the establishment of overseas offices. From 1916 to 1918, the Sumitomo Bank opened offices in Shanghai, Bombay, San Francisco, New York, London, and Hawaii. The company later expanded to South Korea, China, and Taiwan, and in 1952, it established the Sumitomo Bank of California. Today, the Sumitomo Mitsui Financial Group is active throughout the world, with 20,322 employees as of March 1, 2006.

See Also: Asia; Japan; Mitsui; Nippon Telegraph and Telephone.

Bibliography. Sumitomo Mitsui Banking Corporation, *Corporate History*, www.smbc.co.jp (cited March 2009); Sumitomo Mitsui Financial Group, Inc., www.smfg.co.jp (cited March 2009).

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Sunoco

Sunoco is the leading manufacturer and marketer of petroleum and petrochemical products. With headquarters in Philadelphia, Pennsylvania, Sunoco is one of the largest independent refiner-marketers in the United States. As of December 2007, Sunoco operated five domestic refineries with a total 910,000 barrels per day of crude oil processing capacity. Sunoco owns and operates approximately 5,500 miles of crude oil and refined gasoline products and has 4,700 retail sites selling its gasoline.

Sunoco is a major producer of petrochemicals. The company sells approximately 5 billion pounds of chemicals synthesized from petroleum, mostly intermediates that are used to make fibers, plastics, films, and resins. Through its subsidiary, Sunoco Chemicals, the company produces and sells such petrochemical intermediates as phenol, acetone, nonene, tetramer, alphamethylstyrene, toluene, xylene, and benzene. Sunoco also manufactures over 2.5 million tons of metallurgical-grade coke for consumption by the steel industry. The company is the "operator of, and has equity interest in, a 1.7 million tons-per-year coke making facility in Vitoria, Brazil."

Sunoco is a global company in terms of its markets: it has over 80 export markets in Europe, the Middle East, Africa, and Australia. Its subsidiaries in Belgium and Japan continue to produce and sell industrial oils and lubricants throughout Europe and Asia, respectively. Sunoco has seen impressive growth over the last few years. Between 2003 and 2007, sales more than doubled from nearly $18 billion to close to $45 billion; during this same period, net income for the company also increased about 2.5 times, from $312 million to $891 million.

Sunoco's first successes depended on developing and exploiting major technological change. By the end of World War II, technological leadership went to other, larger refiners and petrochemical producers. Unlike other oil and chemical companies, Sunoco did not rely ultimately on riding the growing wave of globalization. Foreign operations were, and still are today, of subsidiary importance to the company. Indeed, by the 1990s, Sunoco actually reduced its international presence. For example, Sunoco concentrated the vast bulk of its refining capacity to the United States. The strategy that set the company onto its growth trajectory after the 1970s was in general undertaken in its U.S. operations. However, at the same time, by maintaining a wide-ranging marketing and distribution system for its gasolines, oils, lubricants, and specialty products, Sunoco today has been able to transfer the benefits it receives at home to its commercial network worldwide.

History

Sunoco began its business as the Peoples Natural Gas Company of Pittsburgh, Pennsylvania, providing natural gas for business, commercial, and residential

While Sunoco has over 80 export markets on five continents, its foreign operations are secondary to those in the United States.

demand. The founders, Joseph. N. Pew and Edward O. Emerson, looking to expand and diversify, entered the oil business in 1886 by purchasing oil leases in the then-promising oil fields of Pennsylvania and Ohio. In 1890 the company officially became the Sun Oil Company of Ohio. By the 1890s, Sun Oil was "producing, transporting and storing oil as well as refining, shipping, and marketing petroleum products." By 1895 the company was operating a large refinery in Toledo, Ohio, a consequence of the purchase of the Diamond Oil Company. In 1899 Pew bought out Emerson's interest in the company and became sole head of Sun Oil. Two years later, Pew further extended the company's hold on the country's oil industry by obtaining leases and crude oil in the newly discovered Spindletop oil field of Texas. With a growing supply of oil now coming from the Southwest, additional refinery capacity had to be secured. Pew purchased 82 acres of land in Marcus Hook, Pennsylvania, as the site for the company's second refinery. The death of Joseph Pew in 1912 ushered in a new era for the company. His two sons took over the reins of power in the company: J. Howard Pew succeeded as president of the company and Joseph N. Pew, Jr., as vice president.

Over the next two decades, Sun Oil continued to expand and diversify. It entered the shipbuilding industry through the establishment of the subsidiary Sun Shipbuilding and Dry Dock Company. This was an important aspect of the business because it assured Sun in-house capability of available transportation of oil from field to refinery. In addition to shipbuilding, Sun produced oil field equipment through a joint venture with Sperry Gyroscope, and marketed its own gasoline through the owning and operating of its first retail service stations in Pennsylvania and Ohio. In 1925 the company went public under its new name, Sun Oil Company.

The most important developments during the decades between the world wars were technological in nature. Prior to 1937, the most advanced technology for cracking oil was thermal in nature: the refining process was conducted with the application of high heat and under increasingly elevated pressures. The major problems in these processes were poor efficiencies and quality of the gasoline. Developing the pilot project of the Frenchman Eugene Houdry, Sun Oil constructed the first workable catalytic process for cracking oil to produce gasoline at the Marcus Hook refinery. The entrance of catalytic cracking produced a revolution in the industry. It meant that the results were the highest-quality gasoline products then available. At this time as well, Sun Oil began to internationalize by opening a subsidiary in Belgium to produce and market branded motor oil, grease, and industrial petroleum products throughout Europe.

During World War II, Sun Oil participated in the production of high-quality gasoline and synthetic rubber for the U.S. government. However, problems with Sun's catalytic process (a.k.a. the Houdry fixed-bed process), limited its role in the government's fuel and synthetic rubber programs. Other companies had begun research and development activities on newer and improved catalytic technologies. In particular, Standard Oil of New Jersey successfully developed the famous fluid catalytic cracking technology, which became the gold standard for the cracking of oil during and following the war, both in the mass production of high-grade fuel and commercial synthetic rubber (which consumed the petrochemical intermediates produced by the process). Sun Oil, remaining dedicated to improving the older Houdry process that Sun patented, was deposed by Jersey Standard as the industry's technological leader.

Postwar Developments

The decades following the war became the era of change for the company that can be characterized as a growth through focusing strategy. The first non-family member to head the company came in 1947 when Robert G. Dunlop replaced J. Howard Pew as president (however, the first president to come from outside the company would not appear until the mid-1990s). During the 1940s and 1950s, Sun Oil expanded the reach of its oil and natural gas production operations internationally, notably in Venezuela's Lake Maracaibo and off the coast of England through offshore North Sea drilling.

In the late 1950s, the company heightened its marketing abilities. By 1956, Sun Oil became known for "custom blending," which allowed customers to choose from different octane-rated gasolines. The Sunoco stations would offer customers up to eight different grades of octane, all available through the same pump. In 1966 Sun Oil established a subsidiary in Japan to produce and sell industrial oils and lubricants throughout Asia. Besides this, Sunoco grew with the acquisition of other companies, including Sunray DX Oil Company (Tulsa, Oklahoma) in 1968. This acquisition gave Sunoco the advantage of refining and marketing gasoline under the DX name and expanded Sunoco's markets into the midwestern states.

By the 1970s and 1980s, the company saw that it had to compete in the future against larger oil producers and gasoline retailing chains. It made itself more competitive through a strategy that focused on cost consciousness, restructuring and streamlining of functions, and updated company image. Restructuring occurred on a regular basis, such as selling off its slower-growing operations. Thus, it disposed of its shipbuilding and "of all domestic oil and gas exploration and production," including its international exploration businesses. It also sharply curtailed its domestic retail business. By the early 1990s, Sun Oil closed down virtually all of its service stations in the southwestern United States and west of the Mississippi River.

At this time, the company's strategic direction was to focus on its two core competencies: refining and marketing. This meant increasing refining capacity and honing and expanding its gasoline marketing capabilities through strategic acquisition. With respect to its refining capabilities, between 1990 and 2005, Sun Oil, which had changed its name to Sunoco, acquired a number of refining companies in the Northeast that significantly increased its refining capacity. It also upgraded and modernized its facilities. Its most ambitious project involved the acquisition in 1994 (from Chevron Oil) of a 177,000-barrels-per-day refinery located in Philadelphia and located next to its Sun Refinery (purchased from Atlantic Petroleum in 1988). This acquisition meant that Sun could link the two refineries into one large and cost-efficient operation and then connect this refinery complex to its Marcus Hook plant by means of a 19-mile pipeline. Overall, by 2000, Sunoco's strategy allowed the company to significantly cut its costs in refining a barrel of crude oil.

Beyond optimizing refinery operations, Sunoco has also acquired new retail marketing outlets, including the Coastal and Speedway service stations located in Delaware, Maryland, Virginia, Florida, and Washington, D.C., and so reintroduced its Sunoco brand to areas in the United States that it had pulled out of only a few years before. As part of its marketing campaign to brand its new image to the public, Sunoco (in a manner similar to British Petroleum) has presented itself as environmentally responsible.

See Also: BP; ConocoPhillips; ExxonMobil; Indian Oil; LUKOIL; Marathon Oil; Nippon Oil; Petrobras; Petronas.

Bibliography. F. Aftalion, *A History of the International Chemical Industry,* 2nd ed. (Chemical Heritage Press, 2001); A. Arora et al., eds., *Chemicals and Long-Term Economic Growth* (Wiley, 1998); D. W. Carlton, "A New Concept in Gasoline Marketing," *Journal of Marketing* (1958); J. Enos, *Petroleum, Progress and Profits: A History of Process Innovation* (MIT Press, 1962); FundingUniverse.com, "Sunoco, Inc.," www.fundinguniverse.com (cited March 2009); A. Giebelhaus, *Business and Government in the Oil Industry: A Case Study of Sun Oil, 1876–1945* (JAI Press, 1980); S. Moskowitz, "History of Petroleum Refining," in *Macmillan Encyclopedia of Energy* (Macmillan Reference USA, 2001); P. Spitz, *Petrochemicals: The Rise of an Industry* (Wiley, 1989); Sunoco, *Annual Report* (Sunoco, 2007); H. Williamson et al., *The American Petroleum Industry: The Age of Energy, 1899–1959* (Northwestern University Press, 1962).

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Supply Chain Management

Supply chain management oversees the businesses providing a product or service, through all stages from raw materials to purchase of a final product. The supply chain begins with natural resources and the cultivation, development, or discovery thereof. It proceeds from there to encompass the harvest, removal, or extraction of those resources, their processing into usable forms, the construction of components of the product, the assembly of those components, the use of storage and transportation resources, and the sales venue.

The supply chain of Coca-Cola, for instance, involves something like this: the agricultural concerns producing corn, vanilla, spices, and citrus; the processing and sale of clean water; the processing of the agricultural goods into corn syrup and flavor extractives; the production by the Coca-Cola Company of Coca-Cola syrup from those ingredients and water; the sale of that syrup to soda fountains and the Coca-Cola Bottling Company; the dilution and carbonation of that syrup by same, and subsequent packaging and distribution by the Coca-Cola Bottling Company; and the final sale to a customer of a fountain drink or canned or bottled Coca-Cola; as well as all transport of goods from one company or facility to another. Most consumer goods can be expected to involve at least four companies or subsidiaries: the provider of the raw material, the manufacturer of components, the manufacturer of the product, and the vendor of the product.

The group of businesses allied together in the production of a good or service is often called the *Extended Enterprise*, a term that emphasizes their mutual interests. These businesses can be subsidiaries of some larger company, or part of formal partnerships or alliances, or may only be linked by contracts. In the Coca-Cola example, the company has a long-standing association with the Coca-Cola Bottling Company, for instance, and long-term vending contracts with various chains of convenience stores, restaurants, sporting venues, and so forth. But many of the items it uses in the production of its product are purchased on the open market, its association with those providers thus maintained transaction to transaction, and likewise the majority of the locations where Coca-Cola products are purchased have no formal relationship with the company, having acquired the product from a distributor and nearly always stocking the company's competitors' products as well. The Extended Enterprise includes advertisers, marketing agencies, public relations firms, franchise attorneys, real estate lessors, consultants, IT firms, and other companies who are involved in the life of the product—the extended family thereof, so to speak—but not in the supply chain as such. As business processes like customer service, tech support, and accounting procedures become standardized in the international community, the Extended Enterprise increasingly includes outsourcing firms.

For that matter, businesses in general are less likely to perform every task themselves anymore, making most supply chains multicompany. The farmer driving his goods to market represents a smaller and smaller portion of the pie, and considering how many farmers' markets are patronized by restaurants' kitchen staffs, even that farmer often is not selling to the end consumer. The involvement of multiple businesses in a supply chain makes management of that chain a thing of mutual benefit to all, just as a single company doing multiple operations benefits from streamlining the operations. The term supply chain management dates from the 1980s, when business growth and the sophistication of business philosophy led to the recognition of the benefit of integrating and streamlining the processes involved in bringing a product to market.

Fundamentally, supply chain management involves sharing information among the companies participating in the supply chain. If there is a vanilla shortage on the horizon, Coca-Cola needs to know; if Coca-Cola is premiering a new flavor in the coming quarter, manufacturers of soda fountains need to know. Everyone's business runs more smoothly when they understand the supply chain they are part of. Ideally, optimizing the supply chain rather than optimizing each business's operations individually at the local level will benefit everyone. To an extent, supply chains form competitive units, competing against other supply chains—here the Coca-Cola example is less than ideal, because too many parties involved in its supply chain participate in Pepsi's as well.

One of the principal objectives of supply chain management's optimization efforts is to keep inventory at a minimum: supply should hew as close to demand as is feasible, never undersupplying but also avoiding warehouse and spoilage costs as a result of oversupply. The techniques used to optimize manufacturing flow toward this end are often called Just-in-Time techniques.

Supply chain management approaches are operational, strategic, and tactical. Operational activities include the optimization of production and distribution, down to minute-by-minute scheduling of manufacturing production at every facility in the chain; demand forecasting, in order to better serve inventory optimization; and the managing of process outsourcing. Strategic activities include the negotiation of partnerships among the companies of the supply chain, the engagement of third-party logistics providers, the use of information technology to integrate supply chain operations, and an informed design of new products such that they are easily integrated into the existing supply chain. Tactical activities focus on customer demand and inform inventory optimization.

Since the 1990s, it has become more common to outsource supply chain management to companies called third-party logistics providers (3PLs), though some definitions limit the scope of logistics to distribution issues, leaving out manufacturing and retail concerns. 3PLs do often specialize in scalable warehouse and transportation services. There are four broad types of 3PLs: the common 3PL that offers warehousing and distribution services; the service developer that adds security and advanced services; the customer adapter that optimizes a company's in-house logistics; and the customer developer that takes over the whole of the logistics operations for a company. 3PLs do not always own their own warehouses and distribution facilities, and may merely liaise between them, like a travel agent, arranging discounts or special treatment that the business would be unable to secure on its own. The small but growing sector of such 3PLs is sometimes referred to as the 4PLs, distinguished by their expertise and intellectual capital, and low operating expenses.

See Also: Distribution; Inventory; Management Information Systems; Manufacturing; Manufacturing Strategy; Procurement; Supply Chain Risks; Value Chain.

Bibliography. Sunil Chopra and Peter Meindl, *Supply Chain Management* (Prentice Hall, 2006); Martin Christopher, *Logistics and Supply Chain Management: Creating Value-Added Networks* (Financial Times Press, 2005); John J. Coyle et al., *Supply Chain Management: A Logistics Perspective* (South-Western College Publishing, 2008); Stanley E. Fawcett, Lisa M. Ellram, and Jeffrey A. Ogden, *Supply Chain Management: From Vision to Implementation* (Prentice Hall, 2006).

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Supply Chain Risks

Supply chain risk may be defined as the risk created by any event that might interrupt the planned operation of a supply chain or network. To put this in context, Martin Christopher defines supply chain management as "the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole." Therefore, in essence, supply chain risk is any interruption to either the inward or outward supply of raw materials, components, or finished products.

While an interruption of the inward supply may result in bringing processes to a halt, with the consequent loss of machine time or labor cost, the outward supply chain is equally critical to customer expectation or contractual obligations. It also has the very real physical manifestation of a build up of stocks (inventory), incurring further expense. The traditional insurance against inward supply chain risk is buffer or safety stock. This is a stock of materials or components held at key points of the supply chain to ensure continuity of supply for a specified period of time without replenishment. Thus, the larger the buffer stock, the longer the anticipated requirements for processing may be met.

Just-in-Time (JIT)

The greater the buffer stock, the more money must be tied up in these unproductive stocks. Thus, with the increased cost of money in the 1970s and 1980s, it was realized that better supply chain management, leading to a reduction in buffer stock, would reduce the overall logistics bill.

JIT manufacture was introduced into the motor manufacturing industry in Japan, and Toyota developed *kanban* and other sophisticated techniques to call forward components only when required to be incorporated into the vehicle under construction. This was extended to delaying components at all levels (place postponement) to spread the costs of stockholding. However, the reduced stockholding increases the risks that may be consequent upon any break or delay in the supply chain. Physical, political, and financial risks in the supply chain include the following:

- Accident or breakdown of transport
- Act of God, such as flood or earthquake
- Loss due to misrouting
- Theft in transit
- War or civil disturbance
- Act of terrorism
- Labor stoppage or strike
- Political embargo against supply
- Insolvency of any tier of supplier, or even in some circumstances, of the carrier

Product risk is not strictly supply chain risk, but such factors as perishability or a hazardous cargo classification require special care to avoid supply chain risk and may lead to products in the supply chain suffering from damage, degradation, contamination, or other third-party risk.

Scale of Risks and Risk Reduction

Just as supply chain costs tend to increase over distance, so supply chain risk tends to increase in proportion to distance between supplier and customer. The obvious reason is that it takes longer for goods to make the transit, but one also needs to take into account greater inflexibility of transport systems, such as irregularity of shipping services, and increased complexity of the supply process between domestic and international distribution. Unproductive time is the greatest cost in the supply chain.

Methods to achieve a reduction in supply chain risks include the following:

- Keep suppliers close to the next link in the supply chain. The motor manufacturing industry created supplier parks to have their first-tier suppliers adjacent to their factory, so they may call forward components while maintaining a negligible or zero stockholding. However, this may only move the risk upstream to the next tier of suppliers.
- Site factories near ultimate customers.
- Maintain alternative sources of supply, particularly from different points of origin to avoid all suppliers being isolated by a single event.
- Contract with several carriers to eliminate risks because of a problem with any single carrier.
- Ensure that information flow moves at the same rate as product movement within the supply chain.
- Transparent operation of the supply chain between all partners.

See Also: Distribution; Inventory; *Kanban*; Management Information Systems; Manufacturing; Manufacturing Strategy; Procurement; Supply Chain Management; Transportation; Value Chain.

Bibliography. Donald Bowersox, David Closs, and Bixby M. Cooper, *Supply Chain Logistics Management* (McGraw-Hill College, 2009); M. Christopher, *Supply Chain Management: Strategies for Reducing Cost and Improving Service*, 2nd ed. (Financial Times, 1998); Christopher W. Craighead, Jennifer Blackhurst, M. Johnny Rungtusanatham, and Robert B. Handfield, "The Severity of Supply Chain Disruptions: Design Characteristics and Mitigation Capabilities," *Decision Sciences* (v.38/1, 2007); A. Harrison and R. van Hoek, *Logistics Management and Strategy* (Pearson Education, 2002); Marc J. Schniederjans, *Topics in Lean Supply Chain Management* (World Scientific Publishing, 2009); Janat Shah, *Supply Chain Management: Text and Cases* (Pearson Education, 2009); Charles C. Yang, Mulong Wang, and Xiaoying Chen, "Catastrophe Effects on Stock Markets and Catastrophe Risk Securitization," *Journal of Risk Finance* (v.9/3, 2008).

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Sustainable Development

Sustainable development is the use of resources in such a way as to preserve the environment in order to continue to meet future needs as well as present needs. In the words of the Brundtland Commission that popularized the term, it "meets the needs of the present without compromising the ability of future generations to meet their own needs." The simplest example is harvesting the seeds from tomato plants in order to replant them every spring so as to continue to have tomatoes every summer; as each plant produces more seeds than necessary, even bad weather or other incidents make this a sustainable system without the need of external involvement or even a reduction of tomato usage.

Sustainability is the ability to maintain an activity or the availability of a resource like those tomatoes. Sustainable development calls for the "long view," asking not just what is best now, but what is best now that will remain the best choice in hindsight, and with respect to the impact on the future. Sustainability is not something that is achieved so much as something that is continually maintained, and perhaps adjusted. A relatively new concern, it encompasses a broad range of prescriptions and interpretations as to the best course of action.

The 1992 Earth Summit

The Brundtland Commission, named for its chair Gro Harlem Brundtland, the former Norwegian prime minister, was invited in 1983 by the United Nations (UN) to establish a World Commission on Environment and Development. The commission's findings were published in 1987, in a report entitled *Our Common Future*. The report was notable for its evenhandedness, placing environmental concerns square in the mainstream of political thought—indeed, doing everything possible to make "environmental concerns" as a notion not tied to any segment of any political spectrum, any more than is the notion of "economic concerns."

The publication of the report helped to stimulate the organization of the 1992 United Nations Conference on Environment and Development, or Earth Summit, where 172 governments sent representatives (most of them sending the head of state) to address environmental and sustainability issues. In particular, the summit discussed the production of toxic by-products in industrial nations; the possibility of alternatives to fossil fuels; the reduction of vehicle emissions; and water scarcity.

The Earth Summit produced the legally binding Convention on Biological Diversity and the Framework Convention on Climate Change, along with other nonbinding "principles" pertaining to the issues at hand. The Convention on Biological Diversity was the first document of international law concerned with biodiversity, naming it "a common concern of humankind." While emphasizing the preservation of biodiversity—then becoming a prominent issue due to the destruction of the highly biodiverse Brazilian rain forest, and it is no coincidence that the Earth Summit was held in Brazil—this is also a key legal document for sustainable development. The convention calls for the fair and equitable sharing of all benefits of genetic resources and biotechnology, and approaches conservation from a sustainability-minded point of view.

The Earth Summit also led to the creation of the Commission for Sustainable Development (CSD), which has remained the UN's forum for sustainability discussion since, and meets annually at the United Nations headquarters. CSD works to implement Agenda 21—the 21 stands for the 21st century—a series of principles composed at the Summit. Agenda 21 is a 900-page document divided into four sections: Social and Economic Dimensions (exploring consumption patterns, the impact of environmental and sustainability issues on health and poverty, and demographics); Conservation and Management of Resources for Development (protection of atmosphere, forest, and biodiversity); Strengthening the Role of Major Groups; and Means of Implementation (devoted to scientific and technological issues, as well as institutional and financial ones).

The Precautionary Principle

The Earth Summit built on *Our Common Future* by emphasizing the role of the precautionary principle in sustainable development. The precautionary principle is increasingly important in international business, having been adopted as a compulsory principle of law in the European Union, with all indications of inevitable adoption in some form in legal systems throughout the industrialized world. Under this principle, if a policy or act has the potential to cause severe environmental damage or bring harm to the public, the burden of proof falls to policy advocates. In other words, if it is unclear whether a company's planned actions are safe, it must be assumed that they

These children joined in a USAID project to plant sea grapes beside the Birán River in the Dominican Republic. The ecotourism cluster project aimed to promote sustainable development by drawing more low-impact ecotourism to the country.

are not until the company can prove otherwise. This is related to the "duty of care" concept in English common law, which states that if you can foresee that your conduct will cause harm, you are responsible for preventing that harm. What the precautionary principle introduces is a "better safe than sorry" carefulness, because of the history of vast environmental damage caused as science lagged behind industry, too often unable to say for certain whether an action would be safe or not. It is the sort of attitude one takes when recovering from a severe stomach upset, eating with the greatest of care, giving the benefit of the doubt to nothing but the blandest pieces of toast and lukewarm glasses of flat Coca-Cola.

One reason for the necessity of the precautionary principle is that market forces will not necessarily recreate it. The precautionary principle says that in the face of uncertainty, precautionary actions must be taken regardless of cost, and therefore regardless of cost-benefit analysis—requiring seatbelts even if they cost more than the medical bills incurred by not wearing them, in a sense, because of the unacceptability of accidental death, which cannot simply be paid for after the fact. The necessity of clinical trials for medication reflects the precautionary principle, though specific invocations of the principle are generally concerned with climate change issues, biodiversity, and threats to public health. The regulations concerning cloning, genetically modified organisms, and biosafety issues certainly fall under the purview of the principle, though some charge that GMOs are underregulated from a precautionary standpoint.

Interestingly, the recent slippery-slope arguments surrounding same-sex marriage and similar social change initiatives strongly resemble the precautionary principle, invoking as they do the uncertainty of the societal impact of social change rather than the uncertainty of scientific consensus vis-à-vis environmental change.

Sustainable development is not the same thing as environmentalism or "green" concerns. That is, it is not focused solely on ecological issues, climate change, and the physical environment; it is just as interested in social and economic issues, from the prescription of proper business practice from a sustainability-minded perspective to the interrelationship between poverty and environmental issues. Not only is environmental impact most likely to affect the poor, for instance, who will be forced by circumstance to live in the least healthy neighborhoods and who are least able to fight back if victimized by negligence that impacts public health, but in the broad scope of things they are the least able to minimize their environmental impact. Alternative energy is priced too high even for most of the middle class, let alone the poor; for various reasons, recycled products and environmentally safe products, while within the price range of the middle class, are not competitively priced with respect to the lowest-priced products in their category, and so are rarely if ever purchased by the lower class. A similar problem has long been recognized in the field of nutrition, due to the low cost and high calorie content of junk food compared to fresh produce, whole grains, and safe lean meat.

Goals

The global discussion of sustainable development has articulated a number of primary objectives:

- The prevention of irreversible ecological damage. The damage to the ozone layer and other atmospheric change is one obvious example, and climate change can be considered irreversible given the glacial pace at which it transpires.
- The prevention of long-term human health consequences, including but not limited to the impact of pollution, air and water quality, the handling of toxic products and by-products, the spread of disease, and the public health impact of genetically modified organisms and other biotechnology.
- Finessing the relationship between economic growth and environmental impact, which especially since the Industrial Revolution has essentially been negative. Ideally, the technology exists or can be developed such that economic growth can be environmentally positive or environmentally neutral, without the long-term necessity of government incentives to encourage "green" business. In other words, in the long run, businesses will ideally operate in environmentally friendly and sustainable ways, not merely because it is the right thing to do or because legal and tax codes have forced them to, but because it is the profitable thing to do.
- The integration of environmental, economic, and social concerns such that they are developed in tandem rather than independently or in inadvertent opposition.
- The achievement of intergenerational equity: avoiding present benefits at the expense of future generations.
- The achievement of distributional equity, avoiding the placement of the burden of negative impact on the poorest or most vulnerable populations, either regionally or globally.

Social, Natural, and Economic Capital

The three kinds of capital involved in sustainable development—social, natural, and economic—cannot be substituted one for another. We will undoubtedly find an adequate substitute for fossil fuels, but we will not find one for water, not least because natural resources are very often multifunctional. The Amazon rain forest contains trees that represent one sort of resource for the making of paper and wood products, but they also process CO_2 into oxygen, and the forest as a whole because of its size and unique characteristics contributes to the conditions of the global climate and the world's biodiversity. And diversity, unlike trees, is essentially nonrenewable. Even if eradicated species could be replaced with new species, it is debatable whether that constitutes replenishment of the resource.

In the social sphere, cultural diversity is sometimes discussed in the context of sustainable development, as a similarly nonrenewable human resource. The European Union has adopted this attitude faster than other bodies, perhaps made aware of the importance of cultural diversity in light of the cultural institutions that the Union has replaced, such as national currencies—and perhaps sensitive to the issue because of the history of groups like the Basques who have coexisted with the French and Spanish but had to fight for the survival of their culture. Because biodiversity is necessary for the survival of life on Earth, it is argued—not least by indigenous peoples and their advocates—that cultural diversity is similarly necessary for the survival of humankind, that there must be significant variation among human cultures. This opens up a difficult argument: It is problematic to argue against cultural diversity, and virtually untenable to argue for the eradication of any culture in particular. But that does not mean everyone agrees that cultural diversity itself is necessary in the same sense as biodiversity; a family with six members will, certainly, consider each member to be a necessary part of the family, but this does not support a position that the good of family, in the abstract, is furthered by the condition of having at least six members.

Cultural diversity is also harder to quantify. Biodiversity can be quantified to a certain extent by counting species, though this is much less clear-cut than the general public thinks: The difference between two species or one species with two mild variations is a thin one, and because there is professional and political cachet in identifying a new species, there is a certain amount of species inflation in the field. Even so, it is far simpler than quantifying cultural diversity, because there is no discrete unit of culture. Countries can be counted, ethnic groups can be counted, languages can be counted, but culture is not purely a product of any one or any particular combination of the three. Furthermore, the relationship between cultural change and cultural diversity is much more complicated than between extinction and biodiversity. The loss of a culture does not necessarily mean the death of its members, and though it can be tricky to argue that a member of one culture who becomes a member of another represents a loss to the first culture, on some level we must consider that to be what is happening if that process is repeated by enough members. Further, even when members do not switch cultures, the change within a culture still represents an abandonment of the culture being left behind, just as the evolution of a species leaves some traits behind in favor of others. Is that a loss of diversity? Clearly it is not always. Life on Earth is not less biodiverse as a result of evolution. But if globalism leads to cultures evolving closer and closer together, even if they never meet, they might be said to be less diverse.

See Also: Antiglobalization Movement; Biodiversity Convention; Democratic Globalization; Economic Development; Environmental Standards; Globalization; Green Revolution; Kyoto Protocol.

Bibliography. Susan Baker, *Sustainable Development* (Routledge, 2006); Herman E. Daly, *Beyond Growth: The Economics of Sustainable Development* (Beacon Press, 1997); Andres R. Edwards, *The Sustainability Revolution: Portrait of a Paradigm Shift* (New Society Publishers, 2005); Chad Holliday, Stephan Schmidheiny, and Philip Watts, *Walking the Talk: The Business Case for Sustainable Development* (Berrett-Koehler Publishers, 2002); Peter Rogers, Kazi Jalal, and John Boyd, *An Introduction to Sustainable Development* (Earthscan Publications, 2007).

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Swap

In the financial derivatives markets, a swap is an agreement between two parties (counterparties) to swap cash flows for a specified period. A swap is a risk management technique. Swaps are used for hedging (insuring) against adverse movements in interest rates and foreign exchange rates. They provide certainty about future interest payments or foreign exchange liabilities, either through fixing payments or matching variable cash in-flows with variable cash out-flows.

The advantages of swaps are that they are flexible in size and duration and can be tailored to the requirements of the parties. The duration advantage is important because the parties can arrange swaps for as long a period as they wish. Swaps are over-the-counter (OTC) instruments with counterparty (default) risk. The international swap markets have grown enormously since the late 1970s and deal in interest rates, currencies, and commodities. The vast bulk of business is in interest rate swaps. Participants include the counterparties and swap dealers and brokers, who act as intermediaries. Central banks also use swaps to obtain foreign exchange for short-term market intervention. The principal swaps are in interest rates and currencies.

An interest rate swap is based on the interest rates differential between two parties with a common currency. If one party enjoys better borrowing terms than another party, then it is possible for the first party to sell part of its advantage to the other so that both can pay lower rates than they would by borrowing independently. The differing interest rates reflect the differing credit ratings of the parties (the quality spread).

For the swap to work, one party will want to pay a fixed rate and the other a variable rate on a common principal amount of borrowing. For example, Party A may be able to borrow fixed-rate funds at 12 percent and variable (floating)-rate funds at 9 percent, while Party B may be able to borrow fixed-rate funds at 10 percent and variable-rate funds at 8 percent. By negotiation, the parties could agree that B will raise money at 10 percent fixed rate and A will raise the variable funds at 9 percent. They will pay each other's interest commitments. If A also compensates B 1.5 percent, a situation will be produced where A is paying an effective fixed rate of 11.5 percent and B is paying an effective variable rate of 7.5 percent. Both parties are paying 0.5 percent less on their borrowing than they would by acting independently. The principal amount is not exchanged because each party raises the same amount in the same currency. Effectively, one party to an interest rate swap is selling some of its superior credit rating advantage to the other party to their mutual advantage.

The simplest currency swaps are where two parties agree to swap regular payments in each other's currency for a specified period at a mutually agreed exchange rate. For example, an American company might want to invest in France and a French company in America. The American company would provide the French company with dollars and the French company would provide euros to the American company at the agreed exchange rate. Each would make periodic payments to the other to cover the interest payments on the funds each had raised. At the termination of the agreement, each would exchange principal payments at the agreed exchange rate, enabling both to settle their borrowings. This would be an entirely private arrangement divorced from the currency market itself. A more complex swap would be the fixed-for-floating currency swap involving both a fixed-for-variable interest element and a currency element. One party will pay a fixed rate of interest on borrowings in one currency while the other pays a variable rate on borrowings in another currency. In this form of swap, the principal is also exchanged at the end of the agreement period to meet the repayment to the respective creditors.

Swaps can be arranged directly between parties who know each other. However, on such a basis, the scope for swaps would be very restricted. Consequently, most swaps will be arranged through dealers and brokers who will bring parties together. Brokers will introduce parties to each other, while dealers will arrange the swap and, for a fee, assume counterparty (default) risk. This is the risk that one party will fail to meet its obligations to the other. A further development of the swap instrument is the swaption. This is an option on a swap at a future date on terms agreed now. The holder can choose to exercise the option or not. This represents a derivative instrument in a derivative.

See Also: Credit Ratings; Debt-for-Equity Swaps; Exchange Rate Risk (or Currency Exposure); Financial Hedge; Hedging; Interest Rate Swaps; Option; Risk Management.

Bibliography. Carol Alexander and Andreas Kaeck, "Regime Dependent Determinants of Credit Default Swap Spreads," *Journal of Banking and Finance* (v.32/6, 2008); Wolfram Boenkost and Wolfgang M. Schmidt, *Cross Currency Swap Valuation* (HfB, 2004); R. W. Kolb, *Financial Derivatives* (Blackwell, 2000); K. Pilbeam, *Finance and Financial Markets* (Palgrave, 2005).

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Sweden

Sweden, with approximately 9 million inhabitants, is characterized by its highly developed welfare state and an economic history and performance where exploitation of natural resources has been combined with refining such materials for export. Sweden is one of the world's leading producers of iron ore, and also extracts copper, lead, zinc, and pyrite. Manufacturing activities include iron- and steel-based products, machinery, precision equipment, and motor vehicles, and trade balance has in usual years been slightly positive in Sweden's favor. Sweden joined the European Union (EU) in 1995.

Sweden was like most European countries, a late but rapidly industrializing country that was predominantly agrarian until the latter half of the 19th century, with exports dominated by basic agriculture, mining, and forestry products. From the mid-19th century onward, new types of machinery (e.g., for producing pulp and paper) allowed for refinement of such products, and engineering as an industry by itself subsequently developed in terms of both employment and export shares (3 percent in 1880, 10.5 percent in 1910–11, and 20 percent in 1950) reaching an international status in the 1950s surpassed only by the United States. But until the 1980s and early 1990s, the more fast-growth high-technology sectors were not dominant within the Swedish economy. In fact, the proportion of production in industries that are intensive in research and development (R&D) efforts declined during 1975–91.

As pointed out by C. Edquist and L. Hommen, the entry into the EU in 1995 was in part motivated by the insight that the domestic market did not provide a sufficient basis for the growth and the development of new technologies and industries, and there was subsequently a need for increased exposure to international demand. This strategy did not immediately result in a more diverse structure of the economy, but rather in a consolidation of the preexisting structure dominated by engineering; however, the development during 1980–94 has been a modest increase in the share of employment in knowledge-intensive service industries in parallel with the general increase in service sector employment. Swedish production of high-technology products as a share of all manufacturing production also increased from 1993 (8.8 percent) to 1996 (12.5 percent). However, these exports were dominated by the two high-technology sectors in which Sweden was already specialized, that is, telecommunications equipment and pharmaceuticals.

The Swedish economy is experiencing a kind of paradox similar to the so-called European paradox, where there are high investments in knowledge-intensive activities such as research and innovation efforts, but seemingly limited payoffs in the form of innovative output and employment. Partly, this can be explained by the continued importance of industries that are not so knowledge-intensive. Also, according to Edquist and Hommen, the paradox is in part linked to globalization processes in the sense that Swedish multinational corporations and in particular those specialized in high technology simultaneous with domestic investments have also pursued a strategy of foreign direct investment.

Government

Sweden is also known as one of the prime examples of social policies for wealth distribution and intergender equality. State-administered minimum old-age pension was instituted in 1946 and followed by universal child benefits (1947), Occupational Safety and Health Act (1949), three-week statutory holiday (1951), compulsory health insurance (1955), compulsory nine-year education (1960), and a so-called million-homes housing program (1965–74).

Specific reforms focusing on families and female labor force participation include extension of maternity leave to six months (1963), separate taxation for married couples (1971), Parental Leave Act (1974), Working Environment Act (1977), Equal Opportunities Act (1979), and separate paternity leave (1995). From 2003 onward, the social policies have been organized as a comprehensive public health policy, meaning that there are 11 domains of objectives for both the prevention and amelioration of social problems (ranging from participation and influence in society to reduced consumption of tobacco and alcohol) where public health efforts are to be concentrated.

Swedish politics have been dominated by long and relatively stable government structures firmly held by the Social Democratic Party, who until 2006 were in power during all but nine years since 1932. While most of the other political parties to a large extent share the basic ideas behind the welfare state, there are profound differences regarding funding principles, extent of coverage, and so forth. In 2006 a conservative Alliance for Sweden won the general elections and ousted the Social Democrats. This led to a series of liberalization and privatization measures targeted at the public sector, although the Social Democrats had initiated a number of modest reform processes already prior to the power shift.

As for the current and future prospects of the Swedish economy and its welfare state provisions, the Organisation for Economic Co-operation and Development (OECD) has evaluated the macroeconomic performance as "excellent," with high rates of growth, low unemployment, and stable inflation expectations. They also point out challenges such as employment rates not having recovered to traditionally high levels, with unemployment rates particularly high among immigrants and young persons. In addition, disability and sickness rates are high in international comparison.

See Also: Finland; Social Contract; Stockholm General Index; Volvo; Western Europe.

Bibliography. David Domeij, "Rising Earnings Inequality in Sweden: The Role of Composition and Prices," *Scandinavian Journal of Economics* (v.110/3, 2008); Christian Dufour, "Industrial Relations in Small Companies: A Comparison: France, Sweden and Germany," *Work and Society* (v.56, 2007); C. Edquist and L. Hommen, eds., *Small Country Innovation Systems: Globalization, Change and Policy in Asia and Europe* (2008); International Business Publications, *Doing Business and Investing in Sweden Guide* (International Business Publications USA, 2007); Inge Ivarsson, "Transnational Corporations and the Geographical Transfer of Localised Technology: A Multi-Industry Study of Foreign Affiliates in Sweden," *Journal of Economic Geography* (v.2/2, 2002); Magnus Jonsson and Paul Klein, "Tax Distortions in Sweden and the United States," *European Economic Review* (v.47/4, 2003); Organisation for Economic Co-operation and Development (OECD), *Economic Survey of Sweden, 2007* (OECD, 2007); Gerhard Schnyder, *Does Social Democracy Matter?: Corporate Governance Reforms in Switzerland and Sweden (1980–2005)* (University of Cambridge, 2008); J. Sundin and S. Willner, *Social Change and Health in Sweden* (2007).

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Swiss Market Index

The Swiss Market Index (SMI) is a weighted index for the Swiss Exchange (SWX), the stock exchange for Switzerland, which is based in Zurich. Because of its location in central Europe and also its neutrality in so many conflicts, as well as its well-known banking system, several stock trading operations had been established in Switzerland: in Geneva in 1850, Zurich in 1873, and Basel in 1876. Zurich took over from the other two, and has been one of the major stock exchanges in the world. Indeed, it was the first stock exchange anywhere in the world to introduce a fully automated trading, clearing, and settlement system in 1995. Controlled by 55 banks, each with equal voting rights, the Swiss Exchange is used to raise capital for Swiss companies and also companies operating in nearby countries.

To help with a measure of the "health" of the Swiss Exchange, as well as to allow investors to balance their portfolios, the SMI was established, made up of the 20 most important equity securities, the position being based on the market capitalization of the companies concerned. Essentially, it consists entirely of blue-chip stocks, and was introduced on June 30, 1988, with a baseline value of 1,500 points. It then rises or falls in line with the movement of the stocks that make up the index, as with other stock exchange indices. The level of the SMI is now calculated throughout the day of trading, with changes made every time there is a transaction involving shares that are a part of the index. The new figure for the SMI is then displayed in the trading room, a process made possible by the automated buying and selling on computers. Each year, the companies that make up the share index are examined and adjustments are made. The index is also weighted with the more important companies having far more influence on the SMI than smaller companies.

In August 2008 the major companies represented on the SMI were Nestlé (22.19 percent), Novartis, pharmaceuticals (18.76 percent), and Roche, also pharmaceuticals (15.3 percent). The other companies are UBS (banking) with 7.26 percent; ABB (electronic equipment) with 6.95 percent; Credit Suisse (banking) with 5.73 percent; Zurich Financial (insurance) with 4.63 percent; Richemont (clothing and accessories) with 3.75 percent; Syngenta (chemicals) with 3.26 percent; Swiss Re (reinsurance) with 2.83 percent; and another 10 companies with less than 2 percent each: Adecco (business training), Bâloise (insurance), Clariant (chemicals), Holcim (building materials), Julius Baer Group (investment), Nobel Biocare (medical equipment), Swatch Group (clothing and accessories), Swiss Life (insurance), Swisscom (telecommunications), and Synthes (medical equipment).

To ensure that the shares that make up the SMI are all "blue chip," there are stringent requirements regarding the liquidity and market capitalization of the companies. There are also analyses of trading volumes that help shape quarterly rankings, with the composition of the index reviewed each year on the third Friday in September. However, there has been a concern by some investors that the SMI does not represent the true value of stock because it does not take into account dividends. This makes the SMI not such a good guide of investment, but only of stock prices. For this reason, the Swiss Exchange has introduced the SMIC, the SMI Cum Dividend, which analyzes prices and takes into account dividends. However, this has not stopped the SMI from being used for many derivative financial instruments such as index funds, futures, and options.

See Also: AEX General Index (Amsterdam); ATX Index (Vienna); Bel-20 Index (Brussels); CAC 40 Index (Paris); Company Profiles: Western Europe; DAX Index (Germany); Dow Jones Index; FT Index; Madrid General Index; MIBTel Index (Milan); S&P 500 Index; Switzerland.

Bibliography. James Fuerbringer, "When a Name Outweighs a Market," *New York Times* (May 10, 1992); "SWX Swiss Exchange," www.swx.com (cited March 2009).

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Switzerland

The Swiss Confederation (15,940 sq. mi., population 7,676,500, gross domestic product $301 billion in 2007) is a quadrilingual, landlocked, alpine country in western Europe, long known for its neutrality in international conflicts, its banking, and as home to the Red Cross and the World Trade Organization. The four national languages of the country reflect its history, location, and ethnic makeup: German, French, Italian, and Romansh, a Romance language spoken by some 60,000 people and, like the Occitan of southern France, descended from the Latin used by the Roman settlers in the region. Romansh is spoken by so few speakers that spelling was not standardized until 1982; half of its speakers are bilingual.

Switzerland has been inhabited since the Paleolithic period, and had been settled by Celtic tribes long before the arrival of Germanic peoples in the aftermath of the fall of Rome. The Swiss Confederacy was formed in 1291 by cantons (regions) forming a union in opposition to the Habsburg dynasty. The conflicts with the Habsburgs and the Holy Roman Empire contributed to the reputation of Swiss soldiers, and thus to Pope Julius II hiring the Swiss Guard as the personal army of the papacy in 1506—a tradition that continues to the present day. The present Swiss government dates to the adoption of a federal constitution in 1848, in the aftermath of a civil war between the Catholics and Protestants of the country. Significantly, that war remains the most recent armed conflict on Swiss land. Even in World War II, Germany never acted on the invasion plans it had prepared for an attack on Switzerland, and the country had already become famous for its neutrality during the previous world war.

Most powers in the Swiss government are left to the cantons, while the federal government is responsible for trade, defense, and legal matters. The Federal Assembly is a bicameral parliament, consisting of the Council of States with 46 representatives elected from the 26 cantons (each canton decides how to elect its representatives) and the National Council with 200 members elected according to proportional representation. The Federal Court oversees judicial matters. The Federal Council is the executive branch of the federal government, made up of seven members who jointly act as the head of state; traditionally the seven members rotate through one-year terms as president of the Confederation, a practical role that carries no additional powers or authority.

The Swiss constitution calls for a system of "half-direct" democracy. Although the people turn over much of their power to their representatives, that power is borrowed and may be reclaimed: any group of citizens can challenge a federal law by presenting 50,000 signatures (less than one percent of the population) within 100 days, at which point a national vote on the law is held and a simple majority wins. Constitutional amendments can also be made through popular vote, an unusual feature in systems of constitutional law.

Because of its neutrality, Switzerland and its capital city of Berne are home to many international organizations, most notably the Red Cross and the International Olympic Committee. Interestingly, it is not a member of the European Union (EU), the Swiss citizenry having rejected a referendum on the matter by popular vote. Only in 2002, amid considerable debate among citizens, did Switzerland join the United Nations, concerned—as with the EU—that membership in such an organization would compromise the more than 150-year tradition of international neutrality. It is also a member of the Council of Europe, a UN-like organization of 47 European member-states that works toward economic growth and human rights.

One of the stablest economies in the world, with the longest history of policies protecting monetary and bank security, Switzerland is integral to the global economy and increasingly a target of foreign investment funds. Industrialized since the 19th century, the country's main industries are machinery, chemicals, timepieces, and precision instruments. Switzerland is more protective of its agricultural sector than some industrialized countries are, and works to promote domestic production of farm goods like dairy products, pork, beef, and produce. If the alpine pasturelands are included, about two-fifths of the country's land is used for agriculture, providing some two-thirds of the nation's food. The cost of living is high, but so is the average income.

Switzerland is, of course, famous for its banking. Zurich, the largest city, is the cultural and economic center of the country, its bankers sometimes derisively called the "gnomes of Zurich" by foreigners. The Swiss government treats the right to privacy as a fundamental human right necessary to protect all democracies, and the confidentiality between a banker and customer is like that between a lawyer and client or doctor and patient—sacrosanct, but occasionally broken by court order during a criminal investigation. Because federal law distinguishes between tax evasion and tax fraud, it can be difficult for foreign powers to get the cooperation of Swiss banks to provide financial data necessary to prove that a foreigner has been using a Swiss bank account to avoid paying taxes on assets. Swiss bank accounts remain popular among foreign customers for that reason, among others.

See Also: Credit Suisse; European Union; Gnomes of Zurich; Nestlé; Novartis; Roche Group; Swiss Market Index; UBS; World Trade Organization; Zurich Financial Services.

Bibliography. Clive H. Church, *The Politics and Government of Switzerland* (Palgrave Macmillan, 2004); Christian H. Kalin, *Switzerland Business and Investment Handbook: Economy, Law, Taxation, Real Estate, Residence, Facts and Figures, Key Addresses* (Wiley, 2006); James Murray Luck, *A History of Switzerland: The First 100,000 Years: Before the Beginnings to the Days of the Present* (SPOSS, 1985); Daniel K. Tarullo, *Banking on Basel: The Future of International Financial Regulation* (Peterson Institute, 2008).

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Syria

The contemporary Syrian economy has passed through two main eras: the first in which Syria was moving toward building a social economy (early 1960s through the 1980s), and the second in which Syria was moving toward liberalizing its economy. The latter era witnessed the adoption of the social market-based economy (1990s until present). In the former era, the Syrian government led by the Syrian leader party (Al-Baath) nationalized many of the main sectors and assets, such as the banking and insurance sector, the transportation sector, water, electricity, and refineries. It also took control of the importation of main products and restricted the importation of so-called luxury products. Moreover, it controlled the ability of the private sector to get foreign exchange to finance its needs.

Instead of achieving the goal of further developing the country and protecting its new industrial sectors, the strict control and overprotection, along with an acute principal-agent problem in public sector corporations, worked against developing Syrian industries.

In the 1990s Syria started changing its policy to create a less controlled environment. In 1991 Syria adopted the so-called Number 10 Act for Investment. This act aimed at encouraging foreign and domestic investments in Syria through some tax exemptions,

Syria's unemployment fell to 7.6 percent in 2007, improving the outlook for laborers like this construction worker.

and allowed exceptions regarding the restrictions imposed on the import of goods by these new investments. The adoption of this act caused a booming era for the transportation sector in particular, in which many private companies were established.

In 2001 Syria made serious steps toward the liberalization of its economy, starting with the banking sector. A new act was adopted to allow private banks to operate and finance foreign trade. In 2004 several private banks were created and commenced serving the Syrian market. Afterward, Syria liberalized its insurance sector, where the Law No. 43 of 2005 was enacted. This law allowed private insurance companies to operate in the Syrian market. Moreover, in 2005, Syria adopted a new law by which the Damascus Stock Exchange was created. This new development was considered a big step toward the liberalization of the Syrian economy.

In terms of liberalizing its trade, Syria finished working on the Greater Arab Free Trade Agreement January 2005. Moreover, it signed a free trade agreement with Turkey in January 2007. Syria is still to sign the Association Agreement with the European Union, although Syrian economists are still skeptical about the benefits that Syria could get out of this association. Syria continued the liberalization of its trade and in May 2008, it liberalized the importation of 20,000 products.

In 2007 the country experienced an increase in the gross domestic product (GDP) growth rate from 5.1 percent in 2006 to 6.5 percent in 2007, which is considered one of the highest levels that the Syrian economy has reached for a long time. However, the trade deficit reached 83 million Syrian liras, because both imports and exports increased.

The role of the private sector in developing the Syrian economy has recently grown. The private sector accounted for 65 percent of the GDP compared to 35 percent for the public sector. The deficit faced by public sector corporations (288 million lira) is mainly responsible for the declining role of the public sector in the growth of the GDP. The deficit is attributed to several factors such as bureaucracy, corruption, and, most importantly, the subsidies that the Syrian government is paying through the selling of some basic products (diesel) at nominal prices. In April 2008, the Syrian government made a decision to halt the subsidies for the consumption of diesel beyond a certain limit (1,000 liters for each family). This decision was thought to have a long-term impact on the Syrian economy. This impact would be in terms of an increase in the prices of both products and services.

Although the financial figures in 2007 reveal a significant decrease in the inflation rate (from 10.6 percent in 2006 to 4.4 percent in 2007) and in the unemployment rate (from 12 percent to 7.6 percent), and an increase in the GDP per capita, Syria is still facing serious problems in terms of the high population growth rate and the concentration of its exports on few products (mainly crude oil, where the production is decreasing, and raw cotton). Moreover, the persistent rejection of privatizing the public sector constitutes a serious obstacle toward further developing the Syrian economy.

See Also: Company Profiles: Middle East; Lebanon; Middle East.

Bibliography. Andrew Jeffreys, *Emerging Syria 2006* (Oxford Business Group, 2006); Igor Oleynik, Natasha Alexander, and Karl Cherepanya, *Syria: Investment & Business Guide* (International Business Publications USA, 2004); "Syria: The Economy," countrystudies.us (cited March 2009).

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Sysco

Sysco is a North American food distributing company. Through its subsidiaries, Sysco engages in the marketing and distribution of a range of food and related products primarily for foodservice or food-prepared-away-from-home industries in the United States and Canada. Its customers include restaurants, hospitals, nursing homes, schools, colleges, hotels, and motels. Sysco was incorporated in 1969 and employed around 51,000 people as of January 1, 2007. Sysco is a Texas-based company with headquarters located in Houston, Texas. Sysco is quoted in the New York Stock Exchange with the ticker symbol of SYY. It has approximately 13,500 shareholders (as of August 1, 2007).

Sysco's key products include fresh and frozen meats, canned and dry products, frozen fruits, vegetables, baked goods, poultry, dairy products, paper and disposables, seafood, beverages, and janitorial products. Sysco, while distributing nationally branded merchandise, also provides products packaged under Sysco's private brands. The company uses the following brands in marketing its own products: Sysco, Arrezzio, Jade Mountain, Casa Solana, Block and Barrel, and House Recipe.

The company operates through three business segments: Broadline, Sygma, and Others. The Broadline segment provides the distribution of a full line of food products and a wide variety of nonfood products to both Sysco's traditional customers (e.g., restaurants, hospitals, schools, dormitories, hotels, and industrial caterers) and chain restaurant customers (e.g., regional and national hamburger, sandwich, pizza, chicken, steak, and other chain operations). The Sygma segment is a network of foodservice distribution facilities, experienced in distributing to chain restaurants. The segment distributes a line of food products and a variety of nonfood products to chain restaurants. These services are supported by special physical facilities, vehicles, material handling equipment and techniques, and administrative and operating staffs. Diverse products are distributed by the Sygma segment. These include a line of frozen foods, fresh meats, fruits, and vegetables. The Sygma segment also provides a wide range of nonfood items, including tableware, such as silverware; cookware, such as pans and utensils; restaurant and kitchen equipment and supplies; paper products, such as disposable napkins, plates, and cups; and cleaning supplies.

The Others segment includes the company's specialty product services, which include custom-cut meat and lodging industry products subsegments. The specialty meat subsegment distributes custom-cut fresh steaks, other meat, seafood, and poultry. This subsegment also provides special foods for the Asian cuisine foodservice market. The lodging industry products subsegment, on the other hand, distributes personal care guest amenities, equipment, housekeeping supplies, room accessories, and textiles to the lodging industry.

Sysco was founded in 1969 by John Baugh in Houston, Texas, as a wholesale food distributor. The company went public in 1970. Sysco expanded its operations by choosing to grow by acquiring other companies. Today, the company operates in 177 distribution facilities throughout North America to provide its services to about 391,000 customers (as of July 1, 2007). Ninety-two percent of the company's 2006 revenues come from the United States, whereas its Canadian operations account for only 8 percent. Throughout its operations, Sysco uses its subsidiaries, which are more than 180 companies scattered in different parts of the American market, including Sysco Kingston, Buckhead Beef Northeast, Fowler and Hunting, FreshPoint Central Florida, Sysco Food Services of Jackson, and Sysco Food Services of Calgary.

There are many reasons why Sysco may be regarded as a successful company. One of the reasons may be its strong market positioning. Sysco is the largest marketer and distributor of foodservice products in North America with a large market share in the highly fragmented foodservices industry. Sysco's market dominance drives it to expand its business with less hindrance. The second reason may be its gigantic distribution infrastructure, which extends throughout the United States and Canada. Sysco has strong distribution infrastructure compared to its competitors, and this distribution network gives the company a competitive advantage against its rivals. Another reason may be the company's thriving financial management. Sysco's revenues have grown continuously in previous years. A consistent revenue increase paves the way for future growth for the company and strengthens its market position.

See Also: Hospitality Sector; Nestlé; PepsiCo.

Bibliography. Philip Graber, *Selling to SYSCO: A How-to Guide* (Technomic Information Services, 2003); Andrew McAfee and Alison Berkley Wagonfeld, *Business Intelligence Software at SYSCO* (Harvard Business School Publishing, 2004); SEC-EDGAR, www.sec.gov (cited March 2009); Sysco, www.sysco.com (cited March 2009).

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Taiwan Weighted Index

The full name of the Taiwan weighted index is the Taiwan Stock Exchange Capitalization Weighted Stock Index (TAIEX). TAIEX is maintained by the Taiwan Stock Exchange Corporation (TSEC), and therefore is also called the TSEC Index.

Among the indices maintained by TSEC, TAIEX is the most widely recognized one, and it represents the overall performance of Taiwanese stock market. TAIEX is a market capitalization–weighted index—similar to the Standard & Poor's Index—in contrast to price-weighted indices, such as the Dow Jones Industrial Average and the Nikkei Stock Average.

TAIEX is adjusted in the event of new listing, delisting, and new shares offerings, to offset the influence of nontrading activities on TAIEX. The base year value was set at 100 in 1966. Currently, there are more than 600 constituents in TAIEX.

Besides the major all-stocks index, the TAIEX series also derives subindices such as Electronics subindex, Finance subindex, and so on. Investors can gain exposure to the index through the futures and options traded on the Taiwan Futures Exchange. TAIEX is heavily weighted on technology-related firms, reflecting Taiwan's important position in the global computer industry.

TAIEX covers all of the common stocks listed on TSEC, excluding preferred stocks, full-delivery stocks, and stocks listed for less than one calendar month. It is calculated as

*Index = Current aggregate market value / Base value * 100.*

The current aggregate market value is the aggregate of the market values obtained by multiplying the price of each component stock by the number of issued shares; however, stock of newly listed companies included in the calculation of the index may be accounted for on the basis of the number of shares currently listed. The base value at the time of commencement of calculation of the index base period is the current aggregate market value at that time. The formula for adjustment of the base value is as follows:

*New base value = old base value * (aggregate market value after the change / aggregate market value before the change)*

Aggregate market value after the change = aggregate market value before the change + the sum total of all changes in market value.

Subindices and TSEC Price Indices

The subindices are calculated and adjusted based on similar rules of TAIEX except for different groupings of the constituents. The subindices include the Finance subindex, the Electronics subindex, the Nonfinance subindex, the Nonelectronics subindex, the Nonfinance Nonelectronics subindex, and several Industrial subindices. Among all the sub-indices, the Finance subindex and Electronics subindex futures and options are also traded on the Taiwan Futures Exchange.

The Industrial subindices are calculated for different industrial sectors. In December 1986, eight Industrial subindices were introduced: Cement/Glass/Ceramics, Textiles, Foods, Plastics/Chemicals/Rubber, Electric Machinery/Electric Appliance/Cable/Electronics, Paper/Pulp, Construction, and Finance. In August 1995, TSEC introduced 14 additional Industrial subindices: Cement, Plastics, Electric Machinery, Electric Appliance/Cable, Automobile, Chemicals, Glass/Ceramics, Iron/Steel, Rubbers, Electronics, Transportation, Tourism, Retail, and Others. This expansion gave a broader perspective of industrial performances and a more comprehensive comparison with the overall market trend.

TSEC publishes TAIEX Price Indices and Total Return Indices. All of the TSEC Price Indices are constantly updated every minute during trading hours through the TSEC MIS system and information vendors' networks. The Total Return Indices adjusted for dividends are only published at the end of each trading day, giving a better indicator to measure the performance of funds. The information can be easily accessed on the systems of local and international information vendors, such as Reuters, Bridge, Quick, Bloomberg, or Primark.

Currently, the total market capitalization of TAIEX is TWD 20.471 trillion ($623 million). The 10 largest companies of TAIEX, in terms of market capitalization in 2007, are (1) Taiwan Semiconductor Manufacturing, (2) Hon Hai Precision Industry, (3) Formosa Petrochemical, (4) Nan Ya Plastics, (5) Chunghwa Telecom, (6) Cathay Financial Holding, (7) Formosa Plastics Corp, (8) China Steel, (9) AU Optronics, and (10) Formosa Chemicals & Fiber.

Investors interested in Taiwan stock indices may also explore the TSEC Taiwan index series, which is introduced through cooperation between TSEC and FTSE Group. The most widely quoted one is the TSEC Taiwan 50 Index, which includes the 50 blue-chip stocks with the largest market capitalization and represents 70 percent of the Taiwanese stock market.

See Also: Asia; Dow Jones Index; FTSE; Futures Markets; Nikkei Index; S&P 500 Index.

Bibliography. M. H. Chiang and C. Y. Wang, "The Impact of Futures Trading on Spot Index Volatility: Evidence for Taiwan Index Futures," *Applied Economics Letters* (v.9/6, 2002); Taiwan Stock Exchange Company (TSEC), www.tse.com.tw (cited March 2009); Yi-Hsien Wang and Chin-Tsai Lin, "Empirical Analysis of Political Uncertainty on TAIEX Stock Market," *Applied Economics Letters* (v.15/7, 2008).

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Tanzania

Tanzania, known for its natural wonders, from Mt. Kilimanjaro to the Serengeti, borders the Indian Ocean between Kenya and Mozambique. Its land mass, including the islands of Mafia, Pemba, and Zanzibar, totals 550,557 sq. mi., which makes it the largest east African nation. It also borders war-torn Burundi, Democratic Republic of Congo, and Rwanda, and still hosts over 500,000 of their refugees. It is a diverse country, with over 120 ethnic tribes, and nearly equal representation on the mainland of those practicing Christianity, Islam, and indigenous beliefs.

Tanzania achieved independence from Britain in the early 1960s. Dar es Salaam is the capital and the largest city, and a major seaport for the Tanzania mainland and its landlocked neighbors, although Dodoma, located in the center of Tanzania, has been designated the legislative capital. Kiswahili is the official national language, while English is the official language of commerce, administration, and higher education. The currency, the Tanzanian shilling, had an exchange rate of 1,255 TZS to one U.S. dollar in 2007.

Tanzania has tremendous potential for robust economic growth because of its stability in an unstable region, 885 miles of coastline, and a wealth of resources, including hydropower, tin, phosphates, iron ore, coal,

Tanzanian men hoe rice paddies on a Tanzania Social Action Fund (TASAF)-funded irrigation project in the Mtwango District. The economy of Tanzania relies heavily on agriculture, which makes up 45 percent of its GDP.

diamonds, gemstones, gold, natural gas, nickel, and wildlife. Its 2006 real Gross Domestic Product (GDP) of $11.98 billion grew at a rate of 6.2 percent, compared to 5.5 percent for Africa and 5.4 percent for the rest of the world. The inflation rate of 7.3 percent (2006) also compared favorably to Africa's 9.5 percent. Although only 4 percent of the land is suitable for farming, the economy depends heavily on agriculture, which accounts for 45 percent of GDP, provides 85 percent of exports, and employs 80 percent of the workforce. Agricultural products include coffee, sisal, tea, cotton, pyrethrum, cashew nuts, tobacco, cloves, corn, wheat, grains, cassava, fruits, vegetables, and livestock.

Accounting for less than 10 percent of GDP, Tanzania's industrial sector is one of the smallest in Africa and is hindered by poor infrastructure in water and electricity supply systems. The main industrial activities (90 percent) are dominated by small and medium-sized enterprises specializing in food processing, including dairy products, meat packing, preserving fruits and vegetables, textile and apparel production, leather tanning, and plastics. A few larger factories (10 percent) manufacture cement, rolled steel, corrugated iron, aluminum sheets, cigarettes, beer and bottling beverages, fruit juices, and mineral water. In general, Tanzania's manufacturing sector targets primarily the domestic market with limited exports of manufactured goods.

The largest service industry is tourism because of the country's concentration of wild animals and spectacular and diverse landscape, including the islands with their beaches, and the highlands, which include Mt. Kilimanjaro, Africa's highest mountain. Tanzania features famous national parks, game reserves, and the Olduvai Gorge, where the Leakeys discovered footprints estimated to be over 3 million years old.

Unfortunately, an unattractive investment climate has discouraged foreign investment. Inadequate infrastructure investment is mirrored in human capital investment. Although 85 percent of children are enrolled in primary education, 20 percent drop out before finishing and barely 5 percent complete secondary school. Life expectancy is 51.45 years, while the median age is only 17.8 years. The 2005 human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) adult prevalence rate was 6.5 percent compared to 6.1 percent for the rest of Africa. Malaria accounts for 30 percent of the national burden of disease and loss of productivity in Tanzania, and is the number one killer among children in Tanzania. The result has made Tanzania among the poorest countries in the world, with approximately 36 percent of the 38 million people below the poverty line, and a per capita income of $319.

Significant measures were taken in 1986 to liberalize the Tanzanian economy along market lines and move away from its socialist past, rehabilitate the infrastructure, and encourage both foreign and domestic private investment, with assistance from the World Bank, the International Monetary Fund (IMF), and bilateral donors.

These measures included a comprehensive package of policies that reduced the budget deficit and improved monetary control, substantially depreciated the overvalued exchange rate, liberalized the trade regime, removed most price controls, eased restrictions on the marketing of food crops, freed interest rates, and initiated a restructuring of the financial sector. Continuing these initiatives while reducing external debt (Tanzania has an external debt of $7.9 billion, which amounts to 72 percent of GDP) and dependency on donors are goals designed to achieve the country's potential.

See Also: Africa; International Monetary Fund; Socialism; World Bank, The.

Bibliography. Mark Blackden et al., *Gender and Economic Growth in Tanzania: Creating Opportunities for Women* (World Bank, 2007); Samuel M. Jonathan, *Developing an Entrepreneurial Economy: How Tanzania Can Create Five Million Jobs in Five Years* (Moshi University College of Co-operative and Business Studies, 2006); Tidiane Kinda and Josef L. Loening, *Small Enterprise Growth and the Rural Investment Climate Evidence from Tanzania* (World Bank, 2008); Stein Kristiansen, "Social Networks and Business Success: The Role of Subculture in an African Context," *American Journal of Economics and Sociology* (v.63/5, 2004); Robert J. Utz, *Sustaining and Sharing Economic Growth in Tanzania* (World Bank, 2008).

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TA-100 Index (Tel Aviv)

The TA-100 Index is a weighted index reflecting the major shares traded on the Tel Aviv Stock Exchange (TASE), the only stock exchange in Israel. Although there are a number of indices reflecting the various different sectors of the economy, the TA-100 Index is the most broadly based and it provides the best reflection on the health of the Tel Aviv Stock Exchange.

The TASE has its origins in a securities market, the Exchange Bureau for Securities. It started in 1935 with support from the Anglo-Palestine Bank, and held brief meetings—sometimes lasting only three or four minutes—until the TASE was officially founded in 1953. In 1960, it started operating from premises at 113 Allenby Road in Tel Aviv. In its first eight years of operation, it gained a reputation for being one of the fastest-growing stock exchanges in the world. In 1960, the market capitalization of stocks quoted on it doubled in value, as compared to a rise of 33 percent in Tokyo, the stock exchange with the next-highest rise in capitalization at the time. This was from a small base, however, and in 1961, the exchange had only 28 members and 50 stocks and bonds traded, unlike the 1,366 members and 1,089 common stocks traded in New York. Unlike New York, whenever a stock was traded, it was offered to all members, who bid for them. Large profits were made, however, and this attracted more people to stocks and shares. As this increased, it became necessary for clients to be kept informed of the status of their investments, which also helped some people balance their portfolios. In 1964, it was reported that trading had risen 700 percent in six years, and there were about 40,000 stockholders in the entire country, which had a population of 2.5 million. The initial weighted index for share prices was the Tel Aviv Exchange General Share Index. It rose quickly as people started to balance their portfolio investments, using the share index as a way of reflecting the general trend of the market. The market had been through shaky periods, such as during the Suez crisis, but the major impetus for a rise in the early 1960s was the abolition of the market gains tax on July 13, 1965. This led to the Tel Aviv Exchange General Share Index rising from 138.36 at the end of June to 151.49 within two weeks—this was an unprecedented rise in such a short period of time.

By 1977, the investor base had increased and there were about 500,000 Israelis active in the market. By this time, there were some 200 stocks listed on the TASE, but only about 80 of these were traded regularly. Gradually the number increased, and there are currently about 660 stocks traded, with 60 of these listed on stock exchanges in other countries. Initially many people used the TA-25—the flagship index of the TASE—which included the 25 largest stocks by market capitalization. It was established in 1992 and is often known as the MAOF Index. However, some people did not feel that this provided sufficient balance for a portfolio that could be badly affected by as little as one stock trading badly. Therefore, the TA-100 was also established in 1992, consisting of the 100 largest stocks. Another index was created, the TA-75, which covers stocks that are included in the TA-100 but not in the TA-25. Of the stocks on the TA-100, the most significant four are Teva Pharmaceutical Industries, ICL, Bank Leumi, and Bank Hapoalim—these four companies each make up 9.5 percent of the exchange. It is interesting to note that Bank Leumi was originally the Anglo-Palestine Bank, the company that did so much to set up the stock market. Historically, the TA-100 has been a relatively stable indicator of the Israeli economy. It climbed from 412.20 in August 2003 to 1,005.33 in February 2007, fell back and then climbed again to 1,155.44 in December 2007, and then fluctuated from the 890s to the low 1,000s. There is a safeguard in the TASE whereby if the index falls by 10 percent, the market is immediately closed for the day to try to stop a crash. However, this was lifted on August 21, 1994, when the market closing time was extended by four hours, a move that will be introduced at other times should the market regulatory authorities deem it necessary.

See Also: Company Profiles: Middle East; Investor Protection; Israel; Stock Exchanges.

Bibliography. Elizabeth M. Fowler, "Activity on Tel Aviv Stock Exchange Widens Sharply," *New York Times* (October 28, 1964); Clyde Haberman, "Israel's Paradox: Surging Stock Market (And a Shaky Rabin)," *New York Times* (February 1, 1995); Chris Hedges, "New Tax Hits Stocks in Israel," *New York Times* (August 22, 1994); Avner Kalay, Orly Sade, and Avi Wohl, "Measuring Stock Liquidity: An Investigation of the Demand and Supply Schedules at the TASE," *Journal of Financial Economics* (v.74/3, 2004); Nathaniel C. Nash, "The Bulls of Tel Aviv," *New York Times* (January 16, 1983); Jessica Steinberg, "Israeli Exchange Hopes Domestic Companies Keep One Foot at Home," *New York Times* (July 5, 1998); Tel Aviv Stock Exchange, www.tase.co.il (cited March 2009).

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Target

Target is an upscale discount department store that provides high-quality, on-trend merchandise at very competitive prices in the United States, and recently in Bangalore, India. Target Corporation ranks among the top 20 corporate contributors in the nation, giving back $2 million each week to the communities it serves. The company now has more than 1,600 stores in 47 states, and employs more than 300,000 team members.

The Target Corporation (NYSE: TGT) was originally known as the Dayton Dry Goods Co., and was founded in Minneapolis, Minnesota, in 1902. In 1962, the first Target store was opened in Roseville, Minnesota.

On March 10, 2004, Target Corporation hired Goldman Sachs Group to analyze options for selling its Marshall Field's and Mervyns chains of department stores. A few months later, on July 31, 2004, Target Corporation sold the Marshall Field's chain and several Mervyns stores to St. Louis, Missouri–based May Department Stores.

In 2005, Target reached 1,397 units and $52.6 billion in sales, and in 2006 it expanded to 1,488 units and sales reached $59.4 billion.

In May 2005, Target began operation in Bangalore, India, and these operations currently support all Target business units. In 2006, Target completed construction of the Robert J. Ulrich Center in Embassy Golf Links in Bangalore, and Target plans to continue its expansion into India with the construction of additional office space at the Mysore Corporate Campus.

On January 9, 2008, Bob Ulrich announced his plans to retire as CEO and named Gregg Steinhafel as his successor. This is because of Target Corporation's policy requiring its high-ranking officers to retire at the age of 65. Ulrich's retirement as CEO was effective May 1, 2008, but he remained the chairman of the board through the end of the 2008 fiscal year.

Target Stores in the United States

The breakdown of Target stores in the 47 states it operates in is Alabama (18), Arizona (47), Arkansas (6), California (225), Colorado (38), Connecticut (16), Delaware (2), District of Columbia (1), Florida (118), Georgia (52), Idaho (6), Iowa (21), Illinois (82), Indiana (32), Kansas (18), Kentucky (12), Louisiana (14), Maine (5), Maryland (33), Massachusetts (30), Michigan (58), Minnesota (72), Mississippi (4), Missouri (33), Montana (7), Nebraska (14), Nevada (15), New Hampshire (8), New Jersey (38), New Mexico (9), New York (59), North Carolina (45), North Dakota (4), Ohio (63), Oklahoma (11), Oregon (18), Pennsylvania (48), Rhode Island (3), South Carolina (18), South Dakota (4), Tennessee (31), Texas (138), Utah (11), Virginia (51), Washington (34), West Virginia (5), Wisconsin (34), Wyoming (2).

Target also has 218 SuperTarget Stores in 22 states: Alabama (6), Arizona (6), California (3), Colorado (17), Florida (34), Georgia (10), Iowa (8), Illinois (12), Indiana (7), Kansas (6), Louisiana (4), Minnesota (24), Missouri (3), Nebraska (6), North Carolina (8), North Dakota (1), Oklahoma (4), Tennessee (4), Texas (43), Utah (6), Virginia (4), Wisconsin (2).

Its distribution centers in 26 states are as follows: Fridley, Minnesota; Tifton, Georgia; Tyler, Texas; West Jefferson, Ohio; Little Rock, Arkansas; Oconomowoc, Wisconsin; Wilton, New York; Midlothian, Texas; Fontana, California; Albany, Oregon; Huntsville, Alabama; Topeka, Kansas; Pueblo, Colorado; Indianapolis, Indiana; Kalamazoo, Michigan; Lugoff, South Carolina; Bakersfield, California; Stuarts Draft, Virginia; Phoenix, Arizona; Amsterdam, New York; Cedar Falls, Iowa; Rialto, California; Woodland, California; Midway, Georgia; Chambersburg, Pennsylvania; DeKalb, Illinois. Target also maintains four import warehouses (Lacey, Virginia; Suffolk, Virginia; Rialto, California; Savannah, Georgia), and one fulfillment center servicing its online operations in Woodbury, Minnesota.

Target Subsidiaries

- Target Financial Services (TFS): Issues Target's credit cards, known as the Target REDcard, consisting of the Target VISA and the Target Card, issued through Target National Bank for consumers and through Target Bank for businesses.
- Target Sourcing Services/The Associated Merchandising Corporation (TSS/AMC): Locates merchandise from around the world for Target and helps import the merchandise to the United States. TSS/AMC has 27 full-service offices, 48 quality-control offices, and seven commissionaires located throughout the world. TSS/AMC employs 1,200 people.
- Target Commercial Interiors: Provides design services and furniture for office space and has six showrooms in Illinois, Minnesota, and Wisconsin, including a first-of-its-kind retail concept store and showroom in Bloomington, Minnesota, that opened on June 23, 2005.
- Target Brands: Owns and oversees the company's private label products, including the grocery brands Archer Farms and Market Pantry, Sutton & Dodge, their premium meat line, and the electronics brand Trutech.
- Target.com: Owns and oversees the company's e-commerce initiatives, such as the Target.com domain. Founded in early 2000 as target.direct, it was formed by separating the company's existing e-commerce operations from its retailing division, and combining it with its Rivertown Trading direct marketing unit into a stand-alone subsidiary.

See Also: India; Retail Sector; Service Level; Wal-Mart Stores; Wholesale Sector.

Bibliography. Willard N. Ander and Neil Z. Stern, *Winning at Retail: Developing a Sustained Model for Retail Success* (Wiley, 2004); Manfred Krafft and Murali K. Mantrala, eds, *Retailing in the 21st Century: Current and Future*

Trends (Springer, 2005); Laura Rowley, *On Target: How the World's Hottest Retailer Hit a Bull's-Eye* (Wiley, 2003); Target corporate, www.target.com (cited March 2009).

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Tariff

A tariff is a tax on imports. Tariffs are typically used for two reasons: to raise tax revenues and to protect domestic industries. Successive rounds of multilateral negotiations have reduced tariffs to historically low levels.

When taxing imports, governments may state tariffs as a specific tariff, an ad valorem tariff, or a combination of both tariff types. A specific tariff is a per unit import tax that is independent of the underlying value of the import, for example, a per unit tax of $10 or $20. An ad valorem tariff is a fixed percentage of the import price, for example, 5 percent or 10 percent. The final tariff, a combination tariff, has both per unit and value added components, for example $2 + 2.5 percent. The form the tariff takes has implications for how the tariff is implemented in practice, but does not affect the economic impact of the tariff. Specific tariffs, because of their simplicity, are easier to implement than ad valorem and combination tariffs. Ad valorem tariffs, because their application relies on the valuation of imports, are more difficult to implement.

Economic Impact of a Tariff

In evaluating the economic effect of a tariff, the economics convention of comparing the equilibrium outcomes with tariffs to the equilibrium outcomes with free trade is initially adopted. If an economy is initially enjoying free trade, the imposition of a tariff will cause the domestic price of the import good to increase. Although domestic prices have increased, the posttariff receipts of foreign producers that export goods to the home market have not increased, and as a result, total imports fall. Domestic producers, unlike foreign producers, receive the now-higher domestic price. As a result, domestic producers expand their production levels. In effect, tariffs have resulted in an international reallocation of production. The tariff has had the effect of protecting domestic producers as evidenced by the reduced competition that they face from foreign producers. The tariff has also created tariff revenues. The protection of the domestic industry has come at a cost, however, as higher domestic prices hurt domestic consumers. Overall, the welfare of the economy is reduced as the consumer loss exceeds the combination of producer gain and increased tariff revenue.

If initially an import tariff was in place and subsequently reduced and/or removed, then the effects of such tariff reductions would be the opposite of that described above. A reduction in the tariff levels would reduce the domestic price of the good, and as a result, consumers would benefit. However, it would also cause the domestic sector to contract, because the price they receive for products is now lower. Additionally, a reduction in tariffs would make the domestic market more attractive to foreign producers, and as a result, imports in the domestic market would increase. Overall, the welfare of the economy is increased as the consumer gain exceeds the combined reduction in tariff revenues and loss to domestic producers. This illustrates that reducing tariffs will improve aggregate welfare in the economy.

One exception to the welfare-improving effect of tariff reduction is in the case of a large country. When a country is "large" in international economics terms, modest tariffs may actually increase welfare. A country is defined as being "large" in an international economics context if it can change world prices for its import good due to its trade policy choices. This occurs because the large country is a major consumer of the good in question, and any shifts in its demand for the good will affect the equilibrium price.

Starting from a position of free trade, if a large country imposes a tariff, both the domestic price and the international price of the good will change. The effects in the domestic market are as previously described, with domestic prices to consumers increasing. This will cause consumer welfare to decrease. However, the effect on the world price is different than previously discussed. Given the importance of a large country, foreign producers are willing to share the tariff burden with consumers in the large country by absorbing part of the tariff. This means that the net per unit revenue to foreign producers after the tariff is lower than the free trade price. In essence, the tariff has caused the world price to fall, and the import good is now cheaper to purchase than before. This creates a benefit to consumers, as the posttariff price is lower than it would have been otherwise, and offsets some of the consumer welfare loss. If the benefit from a reduction in the world price is more than sufficient to compensate for the net consumer welfare loss, then the tariff may actually increase welfare. When this occurs, the optimum tariff for the large country (that is, the tariff that maximizes welfare) is positive. It is possible, therefore, for a large country to lose from the removal of tariffs. Most countries are small, and therefore removing tariffs for most countries improves their welfare.

Effective Tariff

The overall economic effect of a nominal tariff depends on the tariff structure in the economy. A nominal tariff is simply the stated tariff on a product. For example, the average nominal tariff on industrial goods after the Uruguay Round of the World Trade Organization (WTO) is 3.8 percent. While 3.8 percent is the stated level of protection, the effective level of protection that industrial products receive may be different than this nominal tariff rate, as additional tariffs may have been imposed on goods at various stages of production. The economic effect of tariffs imposed on goods that are used at the early stages of the production process will be magnified, and will affect the effective tariff on goods that use these early products as inputs.

Consider a simplified three-stage production process with raw materials, intermediate goods, and final goods. The tariff structure is a simplified one, with zero tariffs on raw materials and intermediate goods, and a 5 percent tariff on final goods. The effective rate of protection on the final goods will be 5 percent, as the domestic producers of the final good face input prices that have not been distorted by trade policies. In this instance, the nominal tariff and the effective tariff are the same.

The tariff structure may be more complex, such as zero tariffs on raw materials, 3 percent tariff on imported intermediate goods, and a 5 percent tariff on finished goods. The impact of this tariff structure is twofold: the first effect is an increase in the domestic price of the intermediate good by 3 percent; the second effect is an increase in the domestic price of the final good by 5 percent. Both price increases affect final good producers. They continue to benefit from a 5 percent increase in the final good price, but are hurt by the 3 percent increase in the price of the intermediate good, which is an input in the production of the final good. The 3 percent tariff on the intermediate good dilutes the gains from the 5 percent tariff on the final good. The effective rate of protection in this case is no longer equal to the nominal rate of protection because of the transfer of some of these gains to the intermediate goods producers. In fact, the effective tariff for the final good is now lower than the nominal tariff of 5 percent. Further complexity in the tariff structure to include tariffs on raw materials will have similar effects on the effective tariff, faced at both the intermediate and final good stages.

The extent to which tariffs on intermediate goods erode the tariff protection afforded to the final good sector depends on the importance of the intermediate good in final good production, as measured as a share of input costs. When intermediate goods account for a small share of final good input costs, then the impact on the effective tariff on final goods will be smaller than when intermediate goods account for a large share of final good input cost. In extreme cases, tariffs on intermediate goods may become so burdensome that the effective tariff on the final good is negative. A negative effective tariff on the final goods would occur, for example, if the tariff on the final goods is zero percent while the tariff on intermediate goods is 3 percent.

In recognition of the forward cascading effect of tariffs, tariff structures are sometimes based on the tariff escalation principle, with lower tariffs for raw materials and increasing tariffs as the degree of processing increases. Tariff structures that are based on deescalation (that is, higher tariffs on raw materials and lower tariffs on finished goods) may result in negative effective tariffs for processed products.

See Also: Ad Valorem Duties; Comparative Advantage; Effective Rate of Protection; Taxes; World Trade Organization.

Bibliography. James E. Anderson and J. Peter Neary, *Measuring the Restrictiveness of International Trade Policy* (MIT Press, 2005); Jacques Gallezot and Vincent Aussilloux, "Collected Customs Duties: The Level of Taxation on Imports Applied by the US and the EU," *World Economy* (v.31/9, 2008); Carsten Kowalczyk, ed., "The Theory of Trade Policy Reform," in *International Library of Critical*

Writings in Economics, vol. 127 (Elgar Reference Collection, 2001); Philipp J. H. Schröder, *Real Versus Tariff Liberalization: A Welfare Comparison Under Monopolistic Competition* (Aarhus School of Business, 2004); World Trade Organization, "Understanding the WTO," www.wto.org (cited March 2009).

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Tata Group

Although a household name in India, the name Tata did not enter global consciousness until the 21st century. By 2008, Tata had acquired a bewildering set of associations: acquirer of luxury auto brands Land Rover and Jaguar; developer of the world's cheapest car, Nano; buyer of Corus, the company formerly called British Steel; India's top software and technology service firm; luxury hotelier; and rebuffed suitor of Orient Express luxury travel properties. With nearly $60 billion in revenue, almost two-thirds from outside India, Tata Group has emerged as the top multinational business from India.

In the second half of 19th century, Tata Group's visionary founder, Jamsetji Nusserwanji Tata, decided that India—even as a British colony—should have world-class technological capabilities. Starting with the formation of a trading company in 1868, Tata Group steadily climbed a diverse ladder of enterprise founding steps. A textile mill (1874), the luxury Taj Hotel in Mumbai (2003), a steel company (1907), and an electric utility (1910) became part of the growing Tata Group. The diversified evolution of the group continued with the creation of other pioneering enterprises: airlines (1932), automotive firm (1945), software consultancy firm (1968), and telecom venture (1996).

Like other business group structures of Asia—for example, *keiretsu* of Japan and *chaebols* of South Korea—India's business groups such as Tata Group are characterized by cross-ownership of companies, overlapping directorates, and control through loyalty and moral persuasion. From its relatively simple headquarters at Bombay House in Mumbai, the controlling entities Tata Sons and Tata Industries direct the far-flung global Tata enterprises.

Tata Group and Indian nationalism have always gone hand in hand. For example, the founder Jamsetji Tata lived to see the completion of the iconic Taj Mahal Hotel in Mumbai, a hotel he launched because the British colonial rulers barred Indians from entering elite hotels and clubs.

Tata Group views itself as being entwined with the foundation of a technologically and scientifically capable India. The group helped establish key scientific institutions that laid the bedrock for, among other things, India's space and nuclear programs, the Indian Institute of Science (1911), Tata Institute of Social Sciences (1936), Tata Institute of Fundamental Research (1945), Tata Memorial Center—focusing on cancer research (1952), and JRD Tata Ecotechnology Center (1998).

Ratan Tata, a descendant of the Group's founder, has been credited with the aggressive global thrust of Tata Group since the mid-1990s, and with innovative ideas such as the launch of the Nano, the "people's car," priced at $2,500. Included in 2008 lists such as *Time* magazine's 100 most influential people and *Fortune* magazine's 25 most powerful businesspeople, Ratan Tata has a reputation of leading a simple life and providing exemplary leadership and inspiration to Tata Group. He announced his intention to retire after the successful market introduction of the Nano car.

The long history of Tata Group, while punctuated by many entrepreneurial triumphs, has also had its share of setbacks and middling performance. Tata entered the consumer products business as early as 1917, and launched Lakme, India's first cosmetics line, in the 1950s. The consumer businesses, however, have been overtaken by competition, and Tata has divested from many of these. Similarly, in chemicals, late entrants such as Reliance have overtaken Tata.

While some of the Tata Group companies have had international trade relationships and other connections for decades, the group began to attract global attention through high-profile acquisitions in the 21st century. Among the most prominent Tata Group global acquisitions are Tetley Tea (2000), Daewoo's truck division in Korea (2004), Corus—formerly British Steel—in 2007, and the Land Rover and Jaguar brands from Ford in 2008.

See Also: Acquisitions, Takeovers, and Mergers; Chaebol; Company Profiles: South Asia; Ford Motor; India; *Keiretsu*.

Bibliography. R. Fisman and T. Khanna, "Facilitating Development: The Role of Business Groups," *World Development* (v.32/4, 2004); R. E. Hoskisson et al., "Diversified Business Groups and Corporate Refocusing in Emerging Economies," *Journal of Management* (v.31/6, 2005); B. L. Kedia et al., "Indian Business Groups: Evolution and Transformation," *Asia Pacific Journal of Management* (v.23/4, 2006); R. M. Lala, *The Creation of Wealth: The Tatas from the 19th to the 21st Century* (Penguin, 2007); A. Nath, *Horizons: The Tata-India Century 1904–2004* (India Book House, 2006).

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Taxes

Taxes are exactions on income, property, services, sales, value added, labor, luxuries, or on any form of wealth. There are two main reasons for levying a tax: to raise revenue or to regulate the uses of goods or services, or to suppress behavior authorities have deemed to be socially unacceptable.

Revenue taxes are raised to support the many functions and services of government. These include defense, policing, fire, flood, health, and other forms of protection, including maintaining prisons. In addition, revenue funds may be used to support the general cost of government, to supply education, mental health services, and general health services, or for other needs of the country's people. Regulatory taxes appear similar to revenue taxes, but the goal of these taxes is not to gain revenue, but to control. They are imposed to regulate products or behavior that government policy seeks to eliminate or control.

Regulatory Taxes

While the revenue from a regulatory tax may be a lucrative source of income for a government, regulatory taxes exist to penalize or even prevent the sale of a product, or to prevent socially undesirable behavior. Alcohol and tobacco, if not banned outright, have often been heavily taxed to reduce consumption. Part of the regulatory scheme could involve, for example, forcing companies producing alcohol to pay a regulatory tax in the form of a license fee.

Narcotics are tightly regulated drugs. In the 19th century, attempts by the Chinese to regulate the opium trade evoked the Opium Wars. In the 20th century, taxes have been used to regulate a range of narcotics and other drugs, such as marijuana. These regulatory taxes were later expanded to control organized crime. The taxing of the manufacturing and distribution of firearms and other weapons, such as machine guns, was enacted in part to control organized crime. Governments have sought to control drugs and gambling through taxes on a license to administer drugs or on those engaged in the gambling profession.

Regulatory taxes can also be used to protect producers. For example, tariffs were used extensively by the United States in the 19th century to protect American manufacturing from cheaper foreign goods. The protective tariffs made the cost of domestic goods seem cheaper because of the tariffs levied on imported goods.

Favored domestic corporations can be the beneficiary of regulatory taxes. Oleomargarine was taxed in the early decades of its use to protect the dairy industry. The tax was imposed because dairy farmers voted in greater numbers than did the oleomargarine manufacturers. Congress and the states have taxed futures in grain commodities and cotton at the behest of agricultural groups.

Regulatory taxes have been designed to protect public health. Congress sought to protect the health of children with a prohibitive tax on child labor. It also imposed a regulatory tax in the early 1900s to protect industrial workers making phosphorus-tipped matches from developing a degenerative disease ("phossy jaw") caused by prolonged exposure to phosphorus. Heavy taxes on smokestacks (effluent tax) seek to regulate air quality conditions.

In recent years numerous proposals have been floated that, if adopted, would tax the carbon dioxide emissions of business, manufacturing facilities, and other business activities. A tax on carbon dioxide emissions, if adopted, would be a regulatory tax. If allowed, even home fireplaces could be taxed. The justification for this form of taxation is the belief that global warming is occurring and that it is anthropogenic. Carbon dioxide is a natural gas that is breathed in by plants to make chlorophyll. After making chlorophyll, they breathe out oxygen. The issue over carbon dioxide and greenhouse gases is centered on the level of carbon dioxide in the atmosphere. Carbon dioxide is a natural greenhouse gas that aids the earth by retaining some of the energy radiated into space by the surface of the earth. The tax is being justified by hailing the need to reduce global warming caused by an excess of carbon dioxide. The excess is alleged to be due mainly to the burning of fossil fuels. If adopted, a global tax on carbon dioxide emissions would require a global enforcement mechanism.

Many observers have concluded that the ensuing tax burden would be enormous. It also has the potential for establishing a global rule of law that may be more rule than law. Some observers believe that a global carbon dioxide tax is less a way to care for the environment than it is a way to penalize productive corporations in a global scheme to transfer wealth from industrial countries to poorer, less well-developed countries.

Taxation and Government

Governments have imposed taxes since the recorded beginnings of civilizations. Modern governments have developed a catalog of taxes to gain revenues for their functions and for regulatory purposes. The variety of taxes developed historically and in modern times demonstrates the existence of very inventive minds. However, schemes for taxation often run afoul of the consequences of taxation.

The common approach of many governments has been to tax and spend with only occasional regard for the consequences. However, the development of economically sound tax policies requires the careful scripting of tax laws, otherwise taxation may do harm to businesses and to the people who work for them.

Taxes may be either direct or indirect. Direct taxes are levied directly on income or labor as a pecuniary burden. Indirect taxes such as sales taxes, gasoline taxes, value added tax (VAT), or goods and services tax (GST) are indirect taxes. They can be passed along to others from the producer, the supplier, or the seller to the one with the final economic responsibility. This usually ends up being paid by consumers. Many act as consumption taxes.

The globalization of industry, the urbanization of the world, along with the huge increases in agricultural production and the great expansion of global trading since 1945, have given government ever greater opportunities to tax businesses. Tax policies are the result of a variety of forces. These may be the demands of business for protection, infrastructure, and services. Other forces may demand that governments supply a variety of services, such as water, sanitation, utilities, policing, education, recreation, cultural supports, heathcare, retirement benefits, and national defense. All of these services require income that has to come from somewhere. Unless a government is to engage in a program of looting from conquests, which in the modern world would be very risky, it has to pay for these needs and demands with taxes.

Corporate Taxes

Taxes experienced in the developed world are usually corporate income taxes, payroll taxes, property taxes, and other types of taxes, some of which are hidden in the costs of goods and services. The most visible corporate taxes are those on corporate incomes. These taxes are usually levied on the profits of a corporation after its costs for labor, materials, losses, depreciation of capital, and even some types of taxes have been deducted. This type of tax is used globally by most countries; however, the tax basis often varies. For instance, in some countries, depreciation of capital is not an allowable business deduction.

Investors, whether corporate or individual, are often faced with taxes on rental income derived from rental properties in foreign countries. In some cases, there is little tax relief from the cost of maintaining or improving the property. These kinds of taxes have encouraged some people to move to a foreign country, with little intention of ever returning to their home country.

A long-standing complaint against corporate taxes is that they hurt investors, workers, and consumers. In the case of investors, they are often taxed on the dividends they receive from the profits made by the corporation. Many people in Europe and elsewhere, schooled in socialist ideologies, believe that profits should be taxed to be used for social purposes, or for the authoritative reallocation by the government. The tax in this case expresses a distrust of capitalism that may be found among workers; however, the consequences for workers in a high-tax state can be quite negative.

Global Examples

For example, Sweden is a high-tax state with many social welfare programs that use revenues from the state's redistribution system. However, observers have noted that the price of goods in stores is very high. Moreover, the incentive to engage in extra work to gain an increased income is suppressed by the tax burden rendering it an exercise in futility, when most of the extra income will be taxed away.

In Great Britain, high corporate taxes have also had a negative effect. Not only is there a high corporate tax, but corporations with earnings abroad are forced to pay taxes on overseas income that has been taxed at a lower rate, as well as having to pay taxes on domestic profits. The fact that such policies can make business prohibitive is usually lost on such ideologues. The consequence is that businesses in Europe, including England, are moving from high-tax countries to other countries where taxes are much lower.

In contrast to England and to India (another high-tax country), South Korea has had a booming economy that has slowed in recent years. To stimulate it, the government is moving to cut taxes in South Korea by billions of dollars per year. The move is one used to shift income from the government to private individuals, where the use of the money would likely stimulate new business, investments, and consumption.

In even greater contrast are some of the dynamic business centers developing in the Third World, where taxes are either low or nonexistent. The United Arab Emirates and other tax-free zones have boomed in recent decades. The revenues from investments yielded huge incomes and negated the need for taxes. Usually, such places have special circumstances that encourage this form of activity, but the key is that taxes have not prevented development, including the general welfare of the people.

For people working overseas for either a company that is the same as their nationality or that is a foreign company, from the perspective of their citizenship, the issue of income taxes is significant. Income earned in a foreign country is often not taxed by the home country until it reaches a level that is a good deal higher than it would be if the worker had remained in his or her homeland. The tax advantages can be significant, because it allows expatriate workers to earn higher salaries, accumulate savings, and to gain valuable foreign experiences. Unless the expatriate employee is in a tax-free zone, such as Dubai, it may well be that the taxes owed to the foreign government where he or she is a resident are high, and that taxes are also owed to their home country. Oddly, those who propose global tax schemes do not propose uniform global tax rates. Such a move would reduce national sovereignty, but would stimulate business globally.

Governments faced with budget deficits created by generous social entitlements have found that they can do little to lower taxes, even if their tax base withers as companies emigrate. Ultimately, on a nationalist basis, tax policies have to be competitive or businesses will relocate. Most of the high income and corporate tax rates are found in the developed world of Europe, North America, Japan, and Australia. In recent years, emigration of businesses seeking a tax haven has been a phenomenon observed in Great Britain and elsewhere.

American Corporate Taxation

American corporations face taxation from both the federal and state governments. The combined rates make corporate taxation in the United States the highest or nearly the highest in the world. The pressure from stockholders to produce higher profits can lead to businesses leaving for more tax-friendly countries or reorganizing to avoid treatment as a domestic business, because tax treatment for a foreign business can be more favorable.

A significant tax issue faced by American foreign subsidiaries is the double-taxation policy of the United States. It taxes domestic corporate earnings at a rate of 35 percent, and then also taxes the earnings of American subsidiaries in foreign countries at the same rate. However, to prevent the tax rate from being effectively a full combination of the tax rate of the foreign country and the U.S. rate, a tax credit is allowed, which reduces the taxes owed so that the American subsidiary pays a rate that is the difference between the U.S. 35 percent and the tax rate of the foreign country in which it is doing business. However, a U.S. corporation may invest in its operations in the foreign country in which it is doing business and be allowed to "defer" its tax obligations.

Capital gains taxes are also a burden for investors and often for corporations as well. The tax is levied on the profit made when a capital asset is sold. The treatment of capital gains is often as if it were ordinary income when it is not. Inflation can also make profits from the sale of assets at an inflated price seem as if there has been a significant gain, when in actuality there has not been, because of the change in money values and the increase in the taxes taken for the higher "profit" from the sale. For companies that have international operations, this can cause significant tax issues.

Global Taxes

A variety of plans have been proposed in recent times that seek to grant the United Nations (UN) the power to tax. Currently, the UN is a confederation in which the member states have retained sovereignty. As a consequence, the UN lacks the authority to levy taxes on either its member states or upon their businesses or people. However, a plan has been unveiled to allow the United Nations Development Programme (UNDP) to tax currency exchanges. The tax plan was proposed at the World Economic Forum in Davos, Switzerland. The plan is called the "Tobin Tax," after Professor James Tobin of Yale University. The tax would be levied on worldwide currency exchanges. It is estimated that the Tobin Tax would gain $3 trillion in funds that could be used by the UN to eliminate poverty in the Third World. Another source of global taxation would be fines on countries that are judged to be polluting.

Other global taxes have been proposed to support poverty programs, to educate children without schooling in poor countries, to prevent the spread of human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), malaria, and for other noble causes. These proposals have met with fierce opposition in the United States. Assurances that there will be close exercise of democratic oversight by agencies of the UN have not been persuasive. This is especially the case when the tax schemes are tied to ideological perspectives that deny that prosperity in the Western world is not because of hard work, legal protection for property rights, and an excellent market system, and instead claim that global poverty is because of the exploitation of the industrialized world. A recent proposal calls for taxing airline tickets as a global tax to fund Third World poverty programs.

See Also: Corporate Income Tax; Emerging Economies; Expatriate; Public Finance Reform; Tariff ; Tax Havens; Tax Holiday; United Nations Conference on Trade and Development; Value Added Tax.

Bibliography. Jonas Agell and Peter Birch Sorensen, eds., *Tax Policy and Labor Market Performance* (MIT Press, 2006); Luigi Bernardi and Paola Profeta, eds., *Tax Systems and Tax Reforms in Europe* (Taylor & Francis, 2003); Luigi Bernardi et al., eds., *Tax Systems and Tax Reforms in South and East Asia* (Taylor & Francis, 2006); Richard M. Bird and N. E. Slack, eds., *International Handbook of Land and Property Taxation* (Edward Elgar, 2004); Kent P. Kimbrough, "Optimal Taxes and Tarriffs with Private Information," *Open Economies Review* (v.19/4, 2008); David McKenzie and Yaye Seynabou Sakho, *Does It Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability* (World Bank, 2008); Organisation for Economic Co-operation and Development, *The Convention on Mutual Administrative Assistance in Tax Matters: Twentieth Anniversary Edition* (Organisation for Economic Co-operation and Development, 2008); Alan Schek and Oliver Oldman, *Value Added Tax: A Comparative Approach* (Cambridge University Press, 2006); Myron S. Scholes, *Taxes & Business Strategy* (Pearson Prentice Hall, 2009); Zmarak Shalizi and Lyn Squire, *Tax Policy in Sub-Saharan Africa: A Framework for Analysis* (World Bank Publications, 1996).

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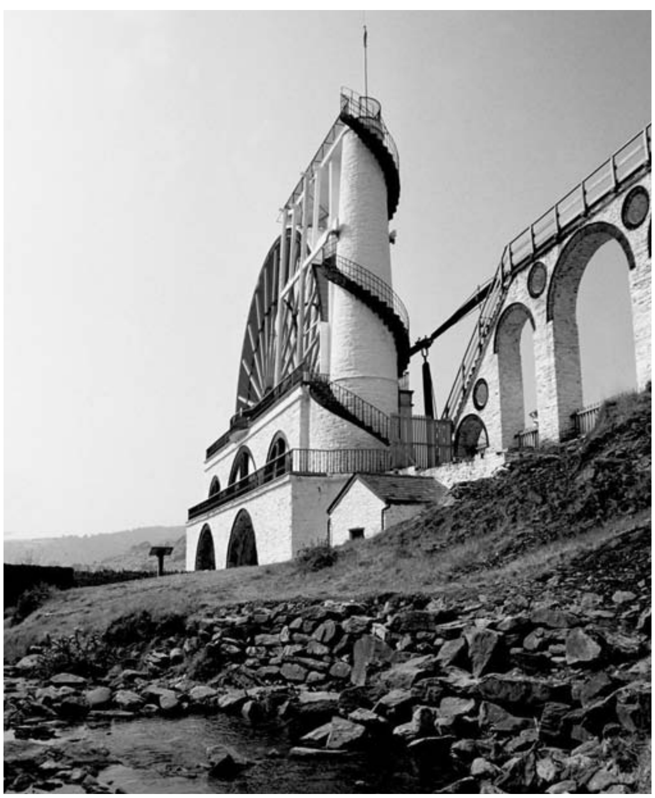
Tax Havens

Since World War II, a number of small jurisdictions have become "offshore financial centers" (OFCs), or "tax havens." Initially dubbed "tax havens" because they were associated primarily with opportunities for individuals and firms to lower their domestic tax bills by moving assets to jurisdictions that had low or zero tax rates, many of the offshore jurisdictions have branched out into providing highly specialized and sophisticated financial services. Although there are periodic disputes between relatively high tax jurisdictions, such as the United States, Canada, France, and Germany, and the offshore financial center jurisdictions, the offshore jurisdictions now play an indispensable role in the world economy and are unlikely to disappear.

Offshore financial centers are numerous. Anguilla, Aruba, the Bahamas, Barbados, Bermuda, Belize, the British Virgin Islands, the Cayman Islands, the Cook Islands, Cyprus, Dubai, Gibraltar, Guernsey, Ireland, the Isle of Man, Jersey, Liechtenstein, Luxembourg, Mauritius, Monaco, Montserrat, Nevis, Panama, Singapore, Switzerland, and Turks and Caicos all have significant offshore financial activity and other jurisdictions, from Mongolia to Native Americans in the United States, are investigating the feasibility of creating offshore sectors.

OFC jurisdictions share a number of characteristics. First, they are generally relatively small jurisdictions. Second, they are generally wealthy; several are among the top 20 gross domestic product (GDP) per capita jurisdictions each year. Third, successful OFCs are stable politically, giving investors confidence. The major difference between the activities in an OFC and the activities that take place in many onshore jurisdictions is that money invested in an OFC is generally later reinvested elsewhere, while onshore jurisdictions offer substantial domestic investment opportunities for foreign investors.



Taking advantage of a separate legal status, the Isle of Man offered wealthy Britons relief from high post–World War II taxes.

For example, money from outside the United States is regularly invested in American chartered companies and banks in New York. Just as OFCs do, the United States routinely reduces and even sometimes eliminates taxes on such investments as an incentive for foreign investors to put their money in the United States. Indeed, within the United States, Delaware plays a role with respect to corporate charters, and Vermont plays one with respect to insurance companies that are virtually identical to the roles of the Cayman Islands and Bermuda with respect to the United States as a whole.

The Growth of Offshore Financial Centers

The growth of OFCs began in North America, with the Bahamas, and in Europe, with the Channel Islands (Guernsey and Jersey) and the Isle of Man. Prohibition in the United States had brought great wealth to the Bahamas, which had become a center for smuggling alcohol into the United States. After the end of Prohibition, the Bahamian business sector looked for new opportunities. In 1934, Canadian mining magnate Harry Oakes moved to the Bahamas to escape a Canadian tax rate of 85 percent, and the colonial government soon began a campaign to lure other wealthy individuals to relocate to the islands. After the war, the Bahamas launched an ambitious tourism and business development program, which included establishing the Freeport complex with lucrative tax concessions and other steps that made the country a popular destination for tax exiles. The colony's access to both dollars from American tourists and pounds sterling through its ties to Britain also made it a favored business location for those attempting to avoid Britain's postwar capital and exchange controls. By 1960, the islands were the largest dollar earner in the entire British Empire.

British OFCs

As decolonization gathered steam, the ruling clique of "Bay Street Boys" lost control of the Bahamian government just as independence became inevitable. After a bribery scandal further eroded the former colonial elite's political clout, Prime Minister Lynden Pindling threatened to reduce the availability of work permits for expatriates in the financial sector. This prompted a rapid relocation of a large number of bank and trust companies to the Cayman Islands, one of Britain's few remaining Caribbean colonies.

Capitalizing on the Bahamas' mistake, Cayman quickly passed additional legislation to promote the offshore financial industry. Britain acquiesced in its Caribbean colonies' move into international finance because the British government recognized the lack of alternative development strategies for the small islands. The three islands that make up the Cayman Islands, for example, total only 100 square miles and have virtually no arable land and no natural resources. Cayman's maintenance of its ties with Britain (it remains a British Overseas Territory) is in part due to the value of retaining a final appeal from the courts to the British Privy Council as a means of reassuring investors.

In Europe, the Channel Islands occupied an important jurisdictional niche. Not part of Britain but separate possessions of the British Crown, the islands had originally been part of the English monarchy's continental possessions. Devastated by German occupation during World War II, the Channel Islands used tax incentives to lure investment for rebuilding.

Similarly, the Isle of Man had its own jurisdictional status, again through the Crown rather than through Parliament. While not devastated by the war, the Isle of Man faced an economic crisis of its own after the war and needed a development strategy. Taking advantage of their separate legal status, the islands offered wealthy Britons relief from the extremely high postwar income and estate tax regimes.

In particular, the Isle of Man proved adept at marketing its thousand years of experience with common law trusts to European clients from civil law jurisdictions that lacked such entities. As more and more trusts were established on the Isle of Man, the financial services industries of accountants, investment advisers, and lawyers emerged to service them. As in the Caribbean, the British government tolerated the islands' efforts because it recognized that without independent sources of income, the islands' populations would become dependent on British transfer payments for survival.

Cayman's development illustrates the transformation of the offshore financial sector from tax havens to OFCs. The earliest activities were company formations, to take advantage of the zero direct tax regime, and banking, to take advantage of confidentiality laws. Over time, however, Cayman developed a sophisticated business sector of its own, with virtually all of the world's 50 largest banks maintaining a presence, as well as international accounting firms and law firms that included partners with English, Canadian, and other Commonwealth qualifications.

Cayman passed additional laws, taking advantage of demand in America for alternative insurance company structures in the 1980s, and becoming one of the leading locations of hedge funds in the 1990s. In part because of its small size, Cayman was able to quickly respond when it identified an opportunity for a new financial product, and its reputation for responsive and stable government gave investors the confidence necessary for the jurisdiction to succeed. The focus on offshore financial services has paid handsome dividends for Cayman and Caymanians. The islands went from a barter economy in 1960 to among the highest GDP per capita jurisdictions in the world today.

Regulation of OFCs

OFCs have generally taken a quite different approach to financial sector regulation. Recognizing that customers for offshore transactions are generally sophisticated individual and institutional investors and corporate entities, OFCs' regulatory bodies tend to not pay as much attention to disclosure requirements as do regulators in countries with large retail investment sectors, like the United States. Thus, where American regulators shape regulations to protect unsophisticated individual investors from assuming too much risk, OFC regulators focus instead on ensuring that customers have legitimate business purposes for making use of offshore entities. As a result, it is harder to open an individual bank account in most OFCs than it is in the United States or the European Union (EU). The benefit of this regulatory approach is that it dramatically lowers compliance costs for the regulated entities, reducing the cost of doing business.

OFCs have had their share of difficulties as well as successes. One problem stems from their portrayal as shady places where criminals lurk with briefcases full of cash from illicit enterprises. Dubbed the "Grisham Effect," because novelist John Grisham used the Cayman Islands as a backdrop for such behavior in his crime novel *The Firm,* this reputation undercuts the leading OFCs' efforts to establish reputations as carefully regulated jurisdictions where fraud is less likely than in the onshore world. As part of this effort, many OFCs work closely with international institutions like the International Monetary Fund (IMF) to ensure that their adoption of best practices standards is recognized. (The IMF conducts regular assessments of OFCs' regulatory efforts.)

Despite these efforts, some OFCs have fallen victim to corruption. The chief minister and two other high government officials of the Turks and Caicos was arrested in the United States on drug charges in 2001, and Britain suspended the Montserrat government's authority over banking regulation. More generally, the EU and the group of large countries that are members of the Organisation for Economic Co-operation and Development (OECD) have launched periodic attempts to restrict what they term *harmful tax competition*. Using the threat of sanctions and blacklists, the EU, OECD, and the United States have all succeeded in persuading most OFCs to adopt tax information exchange agreements. In addition, several European countries, led by Germany, have purchased stolen financial information from former bank employees in Lichtenstein and have used the information to launch tax evasion investigations into their citizens' use of Lichtenstein business entities.

See Also: Financial Market Regulation; Global Capital Market; International Monetary Fund; Panama; Switzerland; Taxes.

Bibliography. Hoyt Barber, *Tax Havens Today: The Benefits and Pitfalls of Banking and Investing Offshore* (Wiley, 2007); Michael Craton, *A History of the Bahamas* (Media Enterprises, 1986); Mihir A. Desai et al., "The Demand for Tax Haven Operations," *Journal of Public Economics* (v.90/3, 2006); Mihir A. Desai et al., "Do Tax Havens Divert Economic Activity," *Journal of Public Economics* (v.90/2, 2006); Mark P. Hampton and Jason P. Abbot, eds., *Offshore Financial Centers and Tax Havens* (Ichor Business Books, 1999); International Tax and Investment Organization, *Towards a Level Playing Field: Regulating Corporate Vehicles in Cross-Border Transactions* (International Tax and Investment Organization, 2002); R. A. Johns and G. M. Le Marchant, *Finance Centres: British Isle Offshore Development Since 1979* (Pinter, 1993); Vassel Johnson, *As I See It: How Cayman Became a Leading Financial Centre* (Book Guild, 2001).

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Tax Holiday

A tax holiday is a temporary reduction or elimination of a tax. Internationally, tax holidays frequently apply to corporate income taxes. Sales tax holidays have become popular in the United States, excluding sales taxes on a variety of items. Rationales for income tax holidays include promotion of industrial policies or economic diversification, increased access to foreign markets, increasing exports, attraction of labor-intensive industries, stimulation of economic development in less-developed regions, human capital development, innovation, transfer of technology, and attracting foreign investment.

Switzerland's Bonny Decree was implemented in 1978 to improve the unfavorable economic structure of particular Swiss regions. It has now been replaced by the New Regional Policy (NRP), which does not expire. Under the NRP, a company may be fully exempt from income taxation for up to 10 years. To qualify, a company must establish a new business activity in a qualifying area of economic development, perform an industrial enterprise, and create new jobs. The project must also demonstrate economic relevance for the area in question. These developmental areas represent weaker economic areas of Switzerland where approximately 10 percent of the population resides.

India has several tax incentives designed to channel investments to specific industries, to promote economic development, and to encourage exports. Among the incentives offered are a 10-year income tax holiday for enterprises that build, maintain, or operate certain infrastructure facilities. Also offered is a 10-year holiday for companies engaged in scientific research and development, and for companies involved in power generation and distribution. Five-year holidays are granted to companies that begin refrigeration operations for agricultural produce; handling, storage, or transport of food grains; or agroprocessing units. A five-year holiday is granted to activities in the telecommunications industry.

The Association of Southeast Asian Nations (ASEAN) has been one of the more successful regions in attracting foreign direct investment. Tax holidays are one of a number of incentives utilized by these nations. Indonesia grants a three- to eight-year holiday for new enterprises in 22 specific sectors. Malaysia offers a full 10-year holiday for "strategic projects" and five years for high-tech, research and development (R&D), and certain knowledge-based companies. The Philippines has a six-year holiday for pioneer projects, three to six years for expansion projects, and three years for modernization projects. Thailand allows priority activities, an eight-year tax exemption, and other privileges, but limits tax holidays to 100 percent of invested capital. Vietnam gives a full two-year holiday from the first profitable year and a 50 percent reduction for two additional years for certain industries and regions.

To attract skilled workers, New Zealand offers a four-year holiday on foreign-sourced income to new migrants. The theory behind this approach is that the skilled workers will accept lower wages in return for the tax benefit received. It also gives the migrant time to arrange a move of their investments to New Zealand during the holiday.

U.S. Tax Holidays

Tax holidays in the United States take a distinctively different approach because they are usually related to a period of time in which sales taxes are not collected for specified purchases. These holidays have included purchases of back-to-school items, hurricane supplies, clothing, and purchases of energy star and other energy-saving items. Gas taxes have also been the target of several tax holidays.

Sales tax holidays originated in 1997 in New York. It was a one-week holiday, suspending the state sales tax on most purchases of clothing and shoes. Two years later, Florida and Texas served up their own versions of sales tax holidays. Today, many of these holidays are timed to coincide with back-to-school or Christmas shopping periods.

Some sales tax holidays are rather simple to administer, such as Massachusetts's two-day holiday in 2005. It exempted the tax on all items priced below $2,500. Other states do not have such a simple approach. North Carolina's annual holiday has five categories of exempt items, with different exemption ceilings, while Florida had 10 categories in its hurricane holiday. Compounding the complexity of such an approach is the problem of defining items included in each category. Some states exclude only state sales taxes, while others exempt local taxes as well. Rather than attempt to deal with the complexity of when to collect tax on a sale, some merchants have chosen to close for business during the holiday period. Tax holidays have increased in popularity, but because they are legislated from year to year, they are subject to suspension during tight budgetary years.

See Also: Duty; Economic Development; Market Development; Organisation for Economic Co-operation and Development; Taxes.

Bibliography. Neils Campbell, "New Zealand," in *International Tax Review* (2007); K. Hung Chan and Phyllis Lai Lan Mo, "Tax Holidays and Tax Noncompliance: An Empirical Study of Corporate Tax Audits in China's Developing Economy," *Accounting Review* (v.75/4, 2000); Economist Intelligence Unit Limited, *Country Commerce 2007,* EIU.com (cited March 2009); John Stancil, *Tax Policy and Reverse Taxes* (SEInfORMS Annual Proceedings, 2005); Stephen Thomsen, *Investment Incentives and FDI in Selected ASEAN Countries* (Organisation for Economic Co-operation and Development, 2004); U.S. House of Representatives, "Hearing on National Sales Tax Holiday: How Will This Proposal Impact America's Small Businesses," Hearing Before the Committee on Small Business, House of Representatives, 107th Congress, First Session (U.S. G.P.O., November 15, 2001).

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Teams

A team can be defined as two or more individuals who work in an interdependent and collaborative manner to achieve specified goals. Teams can be differentiated from groups primarily through the psychological contract that is assumed to exist between each of the members. This psychological contract establishes a sense of responsibility and accountability on the part of each member to the final outcome achieved. Unlike groups, teams create a coordinated positive synergy that ensures that the overall performance level is greater than the sum of the individual inputs.

Teams can be differentiated on the basis of four key dimensions. The first is the degree of permanence, or the temporal life, of the team. The duration of time that teams remain together can vary from short-term assignments that last only a few hours, to long-term, ongoing relationships that span several years. Another point of differentiation is the level of skill and competency possessed by the team. While some teams may possess a high level of technical know-how and are composed of highly qualified technical experts who are required to keep up to date with the latest knowledge and technologies, others may require only knowledge and skills relating to a specific area.

The extent of autonomy and influence exercised by the team is another differentiating factor. Here, the concern is with the real power held by the collective, in terms of decision-making discretion and the extent to which the team is able to exercise authority to implement decisions and change. This is related to the last point of differentiation, which relates to the level at which tasks are completed. On one hand, teams may occupy lower levels of the organizational hierarchy and be involved in relatively routine tasks. On the other hand, however, teams can occupy the top managerial ranks of organizations and be involved in decisions relating to the overall strategy and direction of the company.

Types of Teams

The most prominent types of teams visible in contemporary organizations are problem-solving teams, self-managing teams, cross-functional teams, and virtual teams. Problem-solving teams typically comprise a group of up to 12 individuals from the same department who come together to share ideas and discuss methods for improving the efficiency of work processes and methods. While these teams have the capacity to produce new ideas, they lack the authority to implement their decisions.

Self-managing teams represent a relatively recent variation on the traditional command work group. Also known as an autonomous group—self-managed teams go beyond problem-solving teams in their capacity to implement decisions and to accept accountability for the outcomes of their decisions. These teams manage themselves on account of the organization's objectives, and rather than having a formally appointed supervisor, these teams often nominate their own informal leaders. Fully self-managed teams also select their own members and have their members evaluate each others' performance. Comprising members with diverse skills and competencies, self-managed teams can represent an effective means of organizing skilled workers. Nevertheless, these arrangements may not be suitable for all organizations, with research showing that the advantages are situationally dependent.

The cross-functional team is a team structure that has been used for many years. However, their number and popularity has increased significantly over recent years. Cross-functional teams comprise members from the same hierarchical level, but from different work areas and units in the organization. Creativity is increased as information is shared and dispersed among people with diverse areas of expertise in the organization. Although the outcomes associated with these teams can be highly beneficial for organizations, these teams do take longer to develop because of the diversity and complexity associated with working with people from different experiences and backgrounds. Levels of conflict tend to be high and if not managed appropriately, can prove counterproductive to the organization's goals.

While the aforementioned team structures are based on face-to-face communication, the virtual team represents a group composed of geographically dispersed individuals who are brought together through the use of information and computer technologies to achieve a common goal. Virtual teams are an effective way of bringing together the knowledge and expertise of those not located in close proximity, and can allow for increased speed of communication and decreased costs, as well as overcoming time and space constraints. On the other hand, the lack of face-to-face interaction restricts rapport development between members, making it difficult to establish trust and social connection. There is also far greater room for incomplete information and misinterpretation, due to the absence of paraverbal and nonverbal cues.

See Also: Diversity; Employer–Employee Relations; Leadership; Motivation; Multicultural Work Groups and Teams.

Bibliography. Al Czarnecki, *Crisis Communications: A Primer for Teams: Roles, Resources, Processes, Principles* (iUniverse, 2007); Amy C. Edmondson and Ingrid M. Nembhard, *Product Development and Learning in Project Teams: The Challenges Are the Benefits* (Harvard Business School Publishing, 2008); Howard M. Guttman, *Great Business Teams: Cracking the Code for Standout Performance* (John Wiley & Sons, 2008); Harvard Business School, *Leading Virtual Teams* (Harvard Business School Publishing, 2009); Douglas Miller, *Brilliant Teams: What to Know, Do, and Say to Make a Brilliant Team* (Pearson Prentice Hall Business, 2008); Holger Patzelt et al., "Top Management Teams, Business Models, and Performance of Biotechnology Ventures: An Upper Echelon Perspective," *British Journal of Management* (v.19/3, 2008).

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Technology

Technology plays a major role in international business today. It impacts in myriad ways the internal mechanisms of globalization, the operations of international trade and commerce, and the relative competitiveness of small- and medium-sized firms (SMEs), multinational enterprises, countries, and multinational regions. Indeed, understanding global business today requires an appreciation of the nature and workings of technology in the 21st century.

Technology is a broad concept that refers to the means by which humans can control and adapt to their environment. The two general categories of technology are products and processes; the former are meant for final consumer markets and the latter provide the means to make the products. Technology needs to be distinguished from science: whereas science looks to expand knowledge of how the universe operates, technology is concerned with practical applications useful in the real world to do work more rapidly and efficiently. Consequently, technology is closely related to engineering, and the productivity that technology via engineering creates.

Technological Change

Technological change refers to the advance in the state of the art of making products and the carrying out of processes. There are different types of technological change, depending on the degree of change involved; that is, incremental or radical. Incremental technology change is generally perceived as modifying, refining, and improving an existing technology platform. It consists of relatively minor changes to an existing technology. The results of incremental change, when cumulative, are often significant. Cumulative technological change may take place within the research and development (R&D) department or may occur on a daily basis on the plant floor by departmental employees in the course of everyday business.

Radical technology, in contrast, introduces completely new designs that depart fundamentally from existing practice and platforms. In the modern corporation, radical technology is often the product of the R&D department and requires creative experimentation and out-of-the-ordinary insights. Incremental and radical innovation generally take place within novel economic and organizational contexts; incremental change generally remains tied to established applications and markets and operates within familiar organizational structures and networks; radical change often opens up new markets and displaces existing products and companies from their market position.

Nylon ushered in the age of synthetics that toppled natural fibers from their preeminent position; jet propulsion replaced propeller aircraft; steel replaced iron; electrification replaced steam power; and so on. This process is famously described by the economist Joseph Schumpeter as the "winds of creative destruction." In recent decades, radical innovation often proves difficult to achieve for larger, established firms, with their complex and relatively rigid organizational structures. Since the 1980s, radical innovation has become centered in the small start-up firm, which often licenses intellectual knowledge from universities, and obtains support from a large and specialized venture capital community. Larger firms increasingly capture innovation through acquisitions of small, innovative enterprises.

In reality, the distinction between incremental and radical technology change is not always clear, especially in assessing their relative impact on an economy. The significance of individual, truly radical technology—such as the assembly line and the atomic bomb—cannot be denied. However, over time the cumulative effect—technical, economic, and even social—of incremental innovation can be equally, if not more, important. Recent studies suggest that the bulk of the aggregate economic benefits to society derived from the introduction of new technologies are realized only during the often lengthy product and process improvement stages, when incremental modifications are made to the initial dominant design.

Technology and the Industrial Revolution

While technological change occurred throughout human history, the Industrial Revolution marks a watershed in the history of technology. This revolution meant that productivity in the factories, on farms, and in homes increased at a pace unprecedented in human history. While elements of the Industrial Revolution can be observed as early as the mid-18th century, it emerged in full force in England in the first half of the 19th century. Mechanization of production particularly characterizes this period. England applied mechanization to a number of industries, most notably textiles and apparel. Indeed, America's southern states shipped significant amounts of their cotton to England in the antebellum period to feed the latter's textile plants. The fact that Europe's Industrial Revolution supported the plantation economy of the southeast United States in the decades prior to the Civil War testifies to the geopolitical and socioeconomic reach of technological change.

The Industrial Revolution was first and foremost a revolution in mechanical technologies. In the post–Civil War period, the United States wrested world leadership in mechanization from England. The so-called American System—with its production based on interchangeable parts and standardization of products—brought manufacturing to a new level of sophistication and efficiency that was the envy of late 19th-century Europe. In the decades leading up to World War I, labor-saving technology, innovation in organizing work and process flow, and the coming of the mass production revolution continually raised the upper limit of efficiency with which factors of production were utilized to create final products and services. Productivity grew, not simply because of the introduction of new types of production technology onto the factory floor, but in the ability of enterprises to effectively link this technology to all phases of business operations, including supply, distribution, and marketing.

By the 1970s, certain industries that regularly expanded their productivity, such as power generation, reached the technological limit to these increases. Similar barriers to productivity growth are anticipated in computers and information technology by 2020. At that point, semiconductor chips reach the point of diminishing returns to specialization and Moore's law begins to break down. Another technological revolution will then be required involving a new generation of advanced materials and hardware to break through these barriers and set semiconductors on a new technological path.

The Drivers of Technological Change

The question of the root drivers of technological change has intrigued scholars for decades. The fundamental issue is why technology emerges when and where it does and why it takes the path it does at a given time and place. One might ask, for example, why the United States took over leadership from England in the Industrial Revolution in the late 19th century and what sustained America's technological performance over time to the present day. In this age of globalization, why does technological activity appear in robust form in some places and not in others?

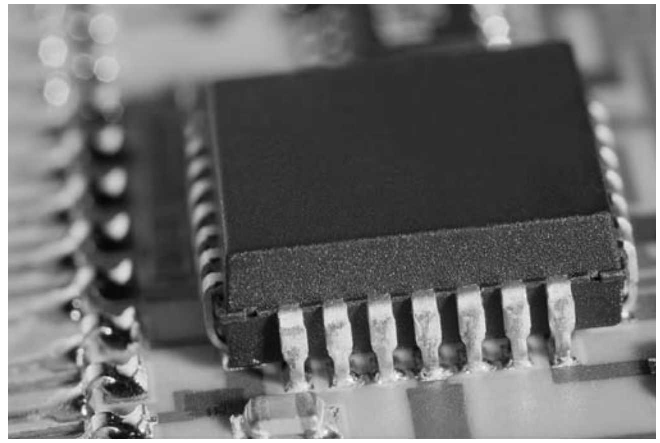
There are two main schools of thought on the root causes for technology change and observed differences globally in technological capability. On the demand side, economists and economic historians point to market pull as a potent driver of technology. In other words, technologies are created to satisfied society's needs and wants. Within the United States, for example, the existence of an expanding and relatively homogeneous market followed the Civil War, one that demanded standardized, inexpensive products, and spurred the growth of mass production technologies to make standardized products at low cost. The production of firearms in the 19th century and Ford's Model T automobile in the early 20th century is often cited to substantiate this point.

On the supply side, a number of theories for technological growth have been considered. As early as the 1930s, economists claimed that only large firms controlled sufficient financial, labor, and material resources to sustain large-scale technology creation. In this view, the lone inventor (i.e., Thomas Edison) no longer had a place in an increasingly corporate world. Evidence in support of this position was the rise of the research and development (R&D) function in large corporations, such as General Electric (GE) and Jersey Standard (later Exxon). Over the course of the 20th century, these departments housed increasing numbers of scientists, engineers, and technical personnel theoretically working in concert on increasingly costly technological innovation.

In some supply-side models of technological growth, scarcity of resources induces technological advance in an attempt to utilize limited amounts of resources more efficiently. Economic historians discuss relative, rather than absolute, resource supplies as the critical issue: a society creates technology that allows the substitution of more abundant (i.e., cheap) for scarcer (i.e., expensive) factors of production. In this view, for example, the United States outpaced England in industrial technology because of America's higher labor (wages) to capital ratios that compelled the creation of mechanization and mass production to effect the substitution of less expensive capital for higher-cost labor.

Another type of resource-based model concentrates on the interaction between intellectual capital and innovation. In particular, it focuses on the rise of modern science and its importance for technology creation. By this reckoning, scientific advance in a field leads directly to technological growth in a related industry. Advocates of this position point to the creation of the atomic bomb and its roots in modern physics as a case in point. The point, then, of corporate R&D is to push forward scientific inquiry, the results of which could then be used for the generation of new products and processes. On the other hand, recent research by historians of technology and management scholars points out that case histories and empirical analyses of innovation past and present show that technology is not simply "science grafted on," but operates according to a more complex scheme.

In fact, they claim that science and technology are actually two very separate communities with distinct cultures, each with its own specific language, goals, methods of approach, and reward systems. If the technological community dips into science, it does so occasionally and with great selectivity; it borrows only those elements from science that it can use, modifies them as technological necessity dictates, and then discards the rest. In this more sophisticated view of science-technology interactions, those individuals who can, through their backgrounds, interests, and experiences, span the worlds of science and technology and so serve as translator, so to speak, between the two communities, play an especially important role. Research continues on the functions and impact of such "gatekeepers" of technology creation.



Barriers to productivity growth are anticipated by 2020 when semiconductor chips reach the point of diminishing returns.

Recent research by management scholars uncovers other supply- or resource-based causes of technological change: organizational structure, social capital, and entrepreneurship. These models of technological growth, for example, downplay the role of the large firm in technology creation: the complex structures and professional barriers that have enveloped functional departments within the large corporation hinder critical communication between them and that is absolutely required for the essentially multidisciplinary process of innovation. Rather, it is the SMEs navigated by an entrepreneurial spirit and possessing a flexible, communication-friendly organization that now have taken the lead as centers of the most advanced technologies. Recent research by international business scholars points to the importance of entrepreneurship in SMEs as a future indicator of technology-based economic growth within the developing countries of eastern Europe, Asia, and Latin America.

Technology and Globalization

The relationship between technology and globalization is complex. Technological progress in information technology, telecommunications, the Internet, and transportation is often seen as a driver of the wave of globalization trends that we have experienced over the last few decades. However, one should be cautious in carrying this argument too far. It was, after all, soon after the end of World War II—that is, long before the rise of the microprocessor and World Wide Web—that average tariffs of the major industrialized economies began to dramatically fall and converge to the 4 percent level.

One can surmise that the desire of a war-torn world, in fear of the dire consequences of a World War III and the nuclear carnage that would be unleashed, pushed international agreements on trade and tariff policies in the 1950s, which, in turn, led to greater cooperation between, and convergence of, the major nations and their economies—the hallmark for advancing globalization. Moreover, the question of cause and effect is not clear-cut. It is possible, and some scholars do indeed argue, that it was this earlier move toward a global world in the years following World War II that established the appropriate market conditions that induced the need for new technology. In other words, the growing, coherent, unified global market that resulted from lowered tariffs and that emerged in the 1950s and 1960s, and the opening up of previously closed economies in eastern Europe and Asia, demanded—and therefore pointedly compelled—the creation of the electronic and telecommunications revolution of the 1970s, 1980s, and 1990s.

Effect of the Technological Revolution

Whatever the root causes of the globalization movement might be, there is little doubt that the technological revolution that took place during the last three decades of the 20th century has had a major impact on its pace and even direction, and continues to do so up to the present time. Innovative materials handling equipment and computer-aided operations—along with standardized "containerization"—has made the loading and unloading of global products at the docks highly time and labor efficient.

Telecommunications technology and systems and the World Wide Web have more closely linked production centers and product markets internationally, rapidly and effectively spreading Western tastes and products to all parts of the world and allowing companies to outsource both blue- and (increasingly) white-collar operations overseas to take maximum advantage of the benefits from the workings of comparative advantage. Information technologies have radically restructured the international monetary and financial systems to permit instantaneous recording and accounting of, and response to, transactions and events that occur virtually anywhere in the world. Technology is also a sine qua non of effective multinational strategies. Economies of scale are the handmaiden of "global" strategies; the linking of world markets through advances in transportation and telecommunications technologies facilitates the creation of global brands, the very foundation of "international" strategies; and flexible manufacturing systems lie at the very heart of "transnational" strategies.

The impact of these technologies on economies and societies has both encouraging, but also less sanguine, dimensions. On the one hand, technology-based globalization makes available a broader variety of products and services at lower costs to more people around the world than ever before; it provides the most precise and up-to-date economic, financial, and monetary information reflecting current conditions for accurate and strategic decision making by businesses than heretofore possible; it offers the prospects of economic growth to the less-developed parts of the world through integration with larger and more advanced market economies; and (according to some scholars) through the growing interdependence of international economies, it lessens the chances of another world war and provides negotiating leverage to mitigate and even defuse regional conflict.

On the other hand, some argue, the new technological world means lost jobs at home due to outsourcing; exploitation of labor and the environment by industrialized countries setting up operations in less developed areas, and a greater chance of international economic and financial crisis, because of the rapidity with which markets in one country or region feel the collapse of economies in other parts of the world. Additional factors may be an erosion in the economic, social, and cultural "uniqueness" of different countries and regions in the name of global homogenization of markets; and as the world has become smaller, increasing instances of "culture clash" between the so-called modern world and the less economically developed and fundamentalist "traditional" parts of society, with the September 11 tragedy and the ensuing war on terrorism serving as the prime example and harbinger of things to come.

Technology, Productivity, and National/ Regional Economic Competitiveness

Whatever the relative merits of arguments for the benefits and costs of technology in a global world, it is clear that international technology is a critical factor in a country's or region's ability to compete in world markets. As the World Economic Forum (WEF) emphasizes in its annual *Global Competitiveness Report*, technological prowess has become one of (if not the) most important indicator of a country's or region's current and future competitiveness, especially within the more developed parts of the world; and long-term productivity growth is commonly viewed as the speed limit for sustainable economic growth and prosperity.

More than any other type of technology, information and communications technology (ICT) ranks as the most vital of drivers of productivity. In the 1980s and 1990s in particular, these innovations entered into and transformed office and factory information and data processing systems. Memory and applications of computer technology expanded and new hardware and software products eased the adaptation of advanced systems to the workplace. These advances, in turn, had enormous advantages in workplace productivity, especially in such areas as data processing, inventory control, Just-in-Time (JIT) delivery, and the like. According to the WEF, the United States' robust productivity growth during these years, and continuing up to the present, is the result of the diffusion and adoption of the most advanced information technologies by manufacturing and the retail and wholesale service sectors. At the turn of the 21st century, about three-quarters of economic growth within the developed countries of the West rested on adoption of advanced technology, mostly residing in the electronics and IT sectors.

Over the course of the 21st century, biomedical and energy technologies will play increasingly important roles in the economic prosperity of developed (and developing) nations. Innovation in the energy sector results in greater efficiencies (and lower costs) in transportation (such as the automobile); oil refining, power generation, transmission, and distribution; and household and commercial appliances. It also means finding substitute energy sources for more expensive and environmentally problematic fuels. Innovation in biomedical devices and systems and in health care will significantly influence productivity growth, in part because such technologies increase the quality in the performance, and extend the useful working life, of a society's workforce.

Feeding into all these technologies are a new generation of advanced materials. Since the 1980s, these materials—in the form of advanced polymers, microcrystals, thin films, metals and metal compounds, advanced ceramics, and high-performance fuels—have been completely revolutionizing a broad spectrum of industries and their products and processes. These materials are particularly relevant to the advance of ICT, energy, and biotechnology, and indeed provide the very foundations for these sectors' continued technological advances.

By 2000, more than half of ICT's growth was attributable to advanced materials, and by 2030 this figure is likely to reach 85 percent. Advanced materials technologies will also continue to penetrate the energy and biotechnology sectors. Overall, by 2030, a significant portion of total productivity growth within the industrialized countries, and thus, their ability to remain globally competitive, will depend on their ability to develop a new generation of advanced materials and apply them to society's industrial base.

See Also: Competition; Diffusion of Innovation; Economic Indicators; Economies of Scale; Globalization Index; Outsourcing; Productivity; Research and Development; Technology Transfer.

Bibliography. K. Aiginger and R. Wieser, "Factors Explaining Differences in Productivity and Competitiveness," Presentation given at the Competitiveness Conference, Brussels, Belgium (January 30, 2002); Stephen J. Andriole, *Technology Due Diligence: Best Practices for Chief Information Officers, Venture Capitalists, and Technology Vendors* (Information Science Reference, 2009); Paige Baltzan et al., *Business Driven Technology* (McGraw-Hill Irwin, 2009); T. Friedman, *The World Is Flat: A Brief History of the 21st Century* (Picador, 2005); Philipp Koellinger, "The Relationship Between Technology, Innovation, and Firm Performance: Empirical Evidence from E-Business in Europe," *Research Policy* (v.37/8, 2008); Ellen R. McGrattan and Edward C. Prescott, *Technology Capital and the U.S. Current Account*

(National Bureau of Economic Research, 2008;) S. L. Moskowitz, *The Advanced Materials Revolution: Technology and Economic Growth in the Age of Globalization* (Wiley, 2009); J. A. Schumpeter, *Capitalism, Socialism and Democracy* (Harvard University Press, 1942); Scott Andrew Shane, *Technology Strategy for Managers and Entrepreneurs* (Pearson Prentice Hall, 2009); World Bank, "Growth of Output," *World Development Indicators Database* (World Bank, 2005); World Economic Forum (WEF), *Global Competitiveness Report* (WEF, 2007).

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Technology Transfer

As with technology itself, technology transfer plays a critical role in 21st-century international business. Instances of technology transfer have increased manifold with the advance of globalization. It occurs between companies within different countries as well as within firms, such as between subsidiaries of a multinational firm located in different countries. The technology transfer process impacts the major developments in the world today, including outsourcing, cluster formation, the product life cycle, productivity, and competitiveness.

Technology transfer is the process of sharing skills, knowledge, and methods, and creating and applying new products and processes. Technology transfer can occur between industries, companies, organizations, governments, or countries. Technology transfer should be distinguished from the diffusion of technology. Diffusion generally refers to the penetration into an economy of a given product or process without the expectation that the diffusion process will significantly alter the dominant design. The goal for diffusion of technology is to find markets and a distribution system that can deliver the technology to the markets. In contrast, technology transfer generally results in modification or reformulation of a design as a result of the different context into which the technology finds itself.

For example, when the early electrical systems developed in the United States in the late 19th century were transferred over to Europe, adaptations were made to the U.S. design in order to account for the different technical, economic, and social context that applied to the European context. Technology transfer also can refer to the relocation of research and development (R&D) projects and personnel to other companies and geographical locations for the purpose of creating new technology from the knowledge previously created in the home firm.

Reasons To Transfer Technology

The fundamental questions that surface when considering the technology transfer process are (1) What compels technology transfer in the first place, and what organizational instruments exist for effecting the transfer? (2) Can a given technology that thrives in one economic, technical, and social climate take root in another? (3) And if so, what forces determine the modifications to be made in successfully negotiating the transfer?

There are a number of reasons behind a company's decision to transfer technology to other companies and locations. These include the desire to share the costs and risks of innovation with a partner firm; the need to be close to critical raw materials, technical personnel, and specialized or hard-to-access markets; the opportunity to take advantage of subsidies and incentives offered by governments looking to entice foreign firms to settle in their countries; and strategic need to avoid high tariff barriers. Government restrictions and regulations can also slow technology transfer, or even stop it in its tracks; such is the case involving the recent trade dispute between the United States and the European Union (EU) over genetically modified seeds, or when the United States restricts the transfer of certain technologies overseas in the name of national security. Periods of geopolitical or civil instability, such as war, need not put an end to technology transfer (although it often does). It was during the French Revolution that important French chemical innovations found their way to England via dislocated refugees. Similarly, during World War II, European research in atomic energy traveled to the United States through scientist émigrés escaping Nazi persecution, eventually leading to the development of the Manhattan Project and the atomic bomb.

Facilitating Technology Transfer

A variety of mechanisms exist for facilitating technology transfer, both domestically and internationally.

The above examples demonstrate the importance of the movement of pivotal personnel from one country to another, either because of troubled times or simply changing jobs. At the firm level, strategic managers generally consider such conduits as licensing, joint ventures, and partnerships as well as "greenfield" operations by which a firm builds a new plant from the ground up in the host country. Technology transfer can also occur through mergers with, or acquisitions of, other companies.

An increasing trend has been the merger or acquisition of a smaller, innovative start-up by a larger, established company for the latter to secure the central patents or licensing rights. The type of technology transfer mechanism to be employed generally depends on risk factors involved. For example, a U.S. company might think twice about licensing its new process to a company operating in a country that either has few piracy laws or is known not to uphold the piracy laws on the books. Or fear of culture clash with the management of a company in another country might steer a U.S. firm from a merger/acquisition strategy and toward a greenfield approach that allows it more control over the new facility in its daily management practices and decisions.

The issue of whether a technology, once transferred, can flourish on foreign soil depends on whether the new environment can supply the requisite resources for technological success, notably raw materials, scientific and technical personnel, complementary industries and companies within the region, transportation and power infrastructure, and appropriate and sufficiently large markets.

Government policy can play a major role in both intra- and international technology transfer. Within the United States, state and local governments typically provide tax breaks and other incentives to induce outside high-technology firms to relocate into their areas to create jobs and spur economic growth.

Cultural Factors

Whether the transplanted plant or product can thrive—even with government subsidies—is another question, and depends, in large measure, on economic, technical, and cultural factors. Knowledge-based clusters, such as Silicon Valley, play an important role in attracting technology transfers through firm relocation and, moreover, provide a favorable climate for such transplants. Such clusters offer important location-specific advantages for such firms in the form of agglomeration economies, especially in the creation and diffusion of specialized knowledge and skills within and between companies.

Turning to those forces that determine why and how a foreign technology requires modification is quite complex and still not well understood. Differences in scale and structure of markets can play an important role: what works for one type of demand curve may not be suitable for one rooted in different historical, cultural, and social forces. This was the case (at least in part) with the transfer of electrification technology to Europe in the early 20th century. It also applied to the transfer of mechanical design from England to the United States, where the larger, more homogeneous U.S. market was a key factor in the modification of less efficient European methods of manufacture to what came to be known as America's mass production system.

Differences in standards, such as technical or environmental, can also play a role as imported technology must be modified to those standards. This factor plays an important role in attempts to transfer information and communications technology from the United States to Europe and Asia. However, the supply side must also be addressed. A transferred technology may have to be adapted to the particular natural resource endowments of a region.

This was the case when, in the first part of the 20th century, the United States adapted German chemical processes, dependent on coal, to more efficient petroleum-based designs. Economic historians often discuss relative, rather than absolute, resource supplies as the critical issue: a society re-creates an imported technology that allows the substitution of more abundant (i.e., cheap) for scarcer (i.e., expensive) factors of production. In this view, for instance, U.S. leadership in mechanization in the 19th century derived from the greater need of U.S. manufacturing to replace more expensive labor with cheaper capital, which induced a need for labor-saving machines.

Studying Technology Transfer

Recent research by management and international business scholars interested in the movement and adaptation of new products and processes within and between multinational firms has examined technical, intellectual, and social factors that can catalyze or derail the technology transfer process. One line of research reveals the importance of "absorptive capacity" of the host (or recipient) party, or the degree of technical capability possessed by the recipient firm or subsidiary that sharpens the ability to recognize the value of new information, assimilate and adapt it, and apply it in commercial ways. The role of "stickiness" of information—the difficulty of transferring knowledge from its place of origin—is a closely related area of interest that impacts understanding of the technology transfer process.

A recent study of a pivotal 21st-century field—the advanced materials sector and its allied industries—shows the difficulty, even in the face of an increasingly globalized world, in successfully transferring the U.S. system of entrepreneurialism and multidimensional "innovativeness" into the European context. As a result, the United States maintains its position as the world leader in the development and application of cutting-edge technology and the economic benefits that accrue from there.

Another line of research sees knowledge and technology transfer as occurring within the social or community context, consisting of a network of relationships existing between and within multinational corporations. From these results, researchers conclude that the factors that aid technology transfer include not simply high absorption capability on the part of the recipient but also mobility of people (e.g., job changes) between firms, as well as strategic use of organizational and social incentive and control mechanisms. Factors, then, that can hinder or limit technology transfer internationally include geographical distance, culture clash, and low mobility of personnel between firms and countries.

See Also: Competition; Diffusion of Innovation; Outsourcing; Productivity; Research and Development; Technology.

Bibliography. W. M. Cohen and D. A. Levinthal, "Absorptive Capacity: A New Perspective on Learning and Innovation," *Administrative Science Quarterly* (v.31/1, 2000); Nancy Coppola, *Communication in Technology Transfer and Diffusion* (Lawrence Erlbaum Associates, 2006); James Cunningham and Brian Harney, *Strategic Management of Technology Transfer: The New Challenge on Campus* (Oak Tree Press, 2006); T. S. Frost and C. Zhou, "R&D Co-Practice and 'Reverse' Knowledge Integration in Multinational Firms," *Journal of International Business Studies* (v.36, 2005); M. Kotabe et al., "Determinants of Cross-National Knowledge Transfer and Its Effect on Firm Innovation," *Journal of International Business Studies* (v.38, 2007); Gary D. Libecap, *University Entrepreneurship and Technology Transfer: Process, Design, and Intellectual Property* (Elsevier JAI, 2005); Adam Liberman and Peter Chrocziel, *International Licensing and Technology Transfer: Practice and the Law* (Wolter Kluwer, Law & Business, 2008); Ali Shamsavari and Mehdi Majidpour, *Innovation in Technology Transfer: Host-Orientated Strategic R&D Alliance* (Kingston University, 2008); World Economic Forum (WEF), *Global Competitiveness Report* (WEF, 2007).

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Telecom Italia

The Telecom Italia Group is the largest telecom operator in Italy and one of the leading global providers of telecommunication services. Positioned among the top 10 international communication companies in terms of growth and profitability, its main global competitors are AT&T, BT, Deutsche Telekom, France Télécom, Telefónica, and Vodafone.

During fiscal year 2007, it recorded revenues of €31.290 million, an operating profit of €5.764 million, and employed 83,221 people. The core business is represented by fixed-line/mobile telecommunications and the Internet, where it operates through brand names Telecom Italia, TIM, Alice, and Virgilio. The office and systems solutions business operates under the Olivetti brand. Telecom Italia Lab is the brand name used for research and development (R&D). In the media industry, it operates through La7, MTV Italia, and APCOM. The television business unit manages satellite channels and pay-per-view services. The news business unit provides news and special reports.

Created in 1994 from the merger of Iritel, Telespazio, Italcable, and Sirm, after the merge with Stet and privatization in 1997, Telecom Italia has based its growth on new markets of expansion, and on the development of new business models, entrepreneurial ventures and technologies, monitoring its investment portfolio, and divesting noncore and low-return businesses. Its primary focus is organic growth, with selective mergers and acquisitions activity to support international development. National and international strategic partnership agreements have also been very important in accelerating its expansion.

While Italy is still its most important audience, with a market share of more than 94 percent of access line customers, 70 percent of broadband customers, and 40.3 percent in the mobile communications market, the group's internationalization has been very strong, particularly in Europe, the Mediterranean, and South America. The Telecom Italia Group offers fixed voice and mobile telecommunication in Italy and Brazil. Broadband is offered in Italy, Germany, France, the Netherlands, and Brazil. It also has stakes in Entel Bolivia, Telecom Argentina, and ETECSA in Cuba. Its international presence is the result of a selective strategy focused on high-growth markets where Telecom Italia has developed a strong competitive advantage mainly based on innovative business models.

In Europe, after a 2003 launch of its international broadband project, through its subsidiaries Telecom Italia France, HanseNet, and BBNed, the company has gradually rolled out Alice-branded broadband services to France, Germany, and the Netherlands, gaining a European portfolio of around 3.4 million customers.

In Germany, where Telecom Italia is one of the top four operators, with 2.3 million customers, the company has implemented an innovative business model based on the offer of a comprehensive and groundbreaking range of services: HanseNet is the only operator in the market proposing a full quadruple play offering, with ADSL, voice, mobile telephony, and IPTV, which will be integrated in the near future with mobile Internet, new channels, and new e-portals.

In the Mediterranean region, the Group has a leading role, handling over 50 percent of phone traffic between countries in this area through its extensive submarine cable ring.

TIM Brasil is one of South America's biggest suppliers of mobile lines. With a market share of about 26 percent and an offering of more than 31 million lines, mainly targeted to higher-value customers, it is the second operator in the country, continuously expanding into new markets and segments, such as the lower social segments and the broadband business.

Innovation is another distinctive factor of Telecom Italia: research and technology's investments create a relevant competitive advantage over other players in the market. The Telecom Italia Lab is not only an internal technology center, it also operates externally as a center of excellence for the telecommunications industry. Since 1995, the Group has had a significant involvement in defining the GSM and MP3 standards, and with optical transmission.

There are numerous projects currently supported by the company: fixed-line and mobile access network design and development, next-generation transmission networks, platform and service development, trials of next-generation handsets, and sensoristics. The relevance of innovation in Telecom Italia is consistent with its plan to expand its market share, not only in adjacent market sectors, such as IT, digital media, and advertising, but also in the advertising and digital content sector, where the company aims to grow in digital content distribution and Web 2.0 new media sectors.

See Also: Acquisitions, Takeovers, and Mergers; AT&T; BT; Deutsche Telekom; France Télécom; Technology; Telefónica; Vodafone.

Bibliography. Business Insights, *The Top Ten Telecom Service Providers: Positioning, Performance and SWOT Analyses* (Business Insights, 2008); Datamonitor, *Telecom Italia SpA*, www.datamonitor.com (cited March 2009); Hoovers, *Telecom Italia S.p.A*, www.hoovers.com (cited March 2009); Paolo Passeri, Carlo Cori, and Paolo Impiglia, "Broadband: Telecom Italia Experiences and Future Developments," *Journal of the Communications Network* (v.1/2, 2002); Telecom Italia, www.telecomitalia.com (cited March 2009).

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Telefónica

Telefónica is a global telecommunications company founded and headquartered in Spain. Established initially as a fixed-line telephone company, Telefónica currently operates in the telecommunications, information, and entertainment businesses in 23 countries and has over 228 million customers. The company is listed in the Bolsa de Madrid (TEF), NYSE Euronext (TFA), London Stock Exchange (TDE), Frankfurt Stock Exchange (TNE5), and the Tokyo Stock Exchange (9481).

Telefónica was incorporated in 1924 as Compañía Telefónica Nacional de España (CTNE), a private firm owned by Spanish and international investors. From its inception, the company was granted a monopoly of the telephone service in Spain. In 1945, the government of General Francisco Franco gained control of almost 80 percent of CTNE as part of a larger process of the nationalization of utility companies. Starting in the mid-1980s, successive governments privatized the company through a series of public offerings, and the company changed its name to Telefónica de España, SA. In 1996, the Spanish government deregulated the telecommunications market, and in 1997, the country sold its last stake in Telefónica. However, despite the privatization process, the Spanish government helped Telefónica maintain control of the Spanish telecommunications market until 2005.

International Growth

The resources amassed during more than 60 years of monopoly fueled Telefónica's international growth from the beginning of the privatization process. Telefónica started expanding its territory through acquisitions of telecommunications companies, initially in Latin America. In 2005, the company began its European expansion through the acquisition of Cesky Telecom in the Czech Republic and O2, a mobile operator in Germany and the United Kingdom. Telefónica also entered the Chinese market through the purchase of a 5 percent stake of China Netcom, which has grown to over 7 percent as of 2008.

The postprivatization growth not only extended Telefónica's geographical reach, but it also pushed the company into new industries. Telefónica owns television and radio stations, production companies, directory publishing services, Internet portals, and satellite and broadband transmission companies. As a result of these acquisitions and its increasing participation in other industries, Telefónica's customers, sales, assets, number of employees, and market capitalization doubled between 2004 and 2006.

Currently, operations are organized into three geographical regions: Telefónica España, Telefónica Latinoamérica, and Telefónica O2 Europa, which serve the Spanish, Latin American and China, and European markets, respectively. The company also owns three firms that support the telecommunication business and leverage Telefónica's global network: Atento provides customer service and call center outsourcing in Spanish-speaking Latin America, Brazil, and Morocco; TGestiona offers consulting and outsourcing of business-support areas; and Telefónica I+D is in charge of Telefónica's research and development (R&D) activities. Telefónica also holds controlling interest in mobile companies 3Q Mobile AG (Switzerland) and Group 3G (Germany). In the United States, Telefónica USA, Inc., serves U.S.-based multinational companies with businesses in Latin America. Together, international operations accounted for more than 63 percent of Telefónica's income in 2007.

Telefónica's incumbent position after many years of monopoly of the telecommunications and data transmission markets in Spain has been both a source of competitive advantage and a target for criticism and judiciary action. Thanks to the monopoly, Telefónica accumulated the resources to grow through international acquisitions. It also allowed the firm to extend its network through areas of Spain where other operators find the costs of installation prohibitive. Customers and competitors have complained that Telefónica has abused its dominant position and engaged in unfair competition at the Spanish and European Union (EU) level.

Since 2000, the company has been fined over €80 million by the Spanish Tribunal de Defensa de la Competencia (Competition Defense Tribunal) for several violations of antitrust provisions. Additionally, the European Commission (EC) considered that Telefónica's practices affected the EU as a whole and constituted a "serious abuse of its dominant position," because of the duration and severity of the uncompetitive practices. The EC imposed a fine of €151,875 million, the largest fine in the EC's history.

Telefónica maintains a high level of investment in R&D through its I+D division, and also a network of strategic alliances with leading telecommunications companies. This has allowed the company to create specific components and services for the markets it enters. Although Telefónica's incumbent advantages cannot be denied, it is important to recognize that the company's success also comes from its technological prowess and productivity.

See Also: Acquisitions, Takeovers, and Mergers; European Union; Globalization; Latin America; Spain.

Bibliography. G. Bel and F. Trillas, "Privatization, Corporate Control and Regulatory Reform: The Case of Telefónica," *Telecommunications Policy* (2005); Garcia Benau, Maria Antonia, and Lee H. Radebaugh, *The Impact of a New York Exchange Listing on the Capital Structure and Financial Reporting of Telefónica De España* (University of Utah, 1998); S. López, "The Role of Telefónica: The Internationalization of Telecommunications in Spain, 1970–2000," *Business and Economic History* (2003).

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Tequila Effect

The Tequila Effect, also referred to as the 1994 Mexican Peso Crisis, is the informal name given to the effects of the 1994 currency crisis that originated in Mexico. It occurred as a result of political turmoil and social unrest in Mexico in 1994 and delays in making the necessary adjustments to Mexico's monetary policy during that time period. The crisis also affected other emerging economies that were similar to Mexico, in particular South American economies.

Since November 1991, Mexico operated a pegged exchange rate system in which the peso, the currency of Mexico, was initially linked to the U.S. dollar at a fixed exchange rate, and was allowed to trade within a set range. In 1994, the peso was devalued by 10 percent, but that devaluation was seen as insufficient, leaving the peso to remain overvalued. To keep the peso within its band, Mexico's central bank had to simultaneously manage the peso-dollar exchange rate and the money supply. Given the economic and political conditions at that time, the simultaneous management of the foreign exchange rate and the money supply proved to be a difficult balancing act.

Following the 1994 assassinations of Luis Donaldo Colosio and José Francisco Ruiz Massieu, two key political figures of the Party of Institutional Revolution (PRI), which dominated Mexican politics for decades, investors sensed choppy waters. The same year also saw a time of transition at the helm of Mexico, and the outgoing president was reluctant to devalue the peso during his term of office. It was feared that allowing the peso to devalue would cause generalized discontent among the population, as it did in the election years of 1976 and 1982. The issue of allowing interest rates to rise was controversial as well. First, it would further strengthen an already-overvalued peso. Second, it would raise the cost of capital to the private sector. Third, it could lead to a bank run, as nonperforming loans weaken banks' assets and rising costs of deposits heap more pressure on banks' liabilities. To ease the pressure on interest rates, the Central Bank of Mexico expanded credit by loaning more funds to commercial banks and by purchasing government securities held by corporations and the public.

The government's resistance to further increase interest rates and to devalue the peso meant that reserves had to be run down. With an overvalued peso, it was cheaper for Mexicans to import foreign-made

The Tequila Effect, or the Mexican peso crisis, refers to the sudden devaluation of the Mexican peso in 1994.

goods and more expensive for foreigners to buy goods made in Mexico. The overvalued peso led to increased imports and decreased exports, and a widening current account deficit.

A current account deficit can be financed by private capital in-flows and/or changes in foreign exchange reserves. The political turmoil and social unrest of 1994 caused private capital in-flows to dry out. Hence, foreign exchange reserves were used mainly to finance the deficit, causing Mexico to eventually run out of reserves. As a result, the Central Bank of Mexico soon ran out of reserves to guarantee deposits in the event of a bank run. The fact that a sizable chunk of total deposits were in dollar-denominations made matters even worse for foreign investors. In December 1994, an auction of government securities (to buy time for the Mexican government, hoping the shock would be transitory) failed, and that kick-started a wave of panic among investors.

Financial Panic

Given Mexico's political chaos, weak capital market, and low protection of investor rights, rumors of an imminent devaluation of the peso led to a capital flight out of Mexico, and the peso overflowed currency markets. The combination of political instability, an overvalued currency that may be subject to speculative attacks, huge current account deficits, and dwindling foreign exchange reserves (overtaking any benefit of Mexico joining the North American Free Trade Agreement [NAFTA] in 1994) contributed to its economic collapse. The Mexican government finally perceived the costs of defending the exchange rate to be too high and had to let the peso devalue. The devaluation led to extreme financial panic. Given that in 1982 the Mexican government froze dollar-denominated deposits and paid them back at an exchange rate well below market rate, investors feared that a repeat of that event could occur. Moreover, fearing a contagion effect, investors pulled out funds from other markets with characteristics similar to Mexico.

To contain the effects of the Mexican crisis and possibly to quell criticisms that Mexico's membership in NAFTA was hasty, the U.S. government and the International Monetary Fund (IMF) responded with a $52 billion aid package. The size of this international line of credit helped in appeasing investors' panic and bolstering confidence back in the Mexican economy.

See Also: Asian Financial Crisis; Devaluation; Exchange Rate; Mexico; North American Free Trade Agreement.

Bibliography. Mark Aguiar, "Investment, Devaluation, and Foreign Currency Exposure: The Case of Mexico," *Journal of Development Economics* (v.78/1, 2005); Ann Brocklehurst, "For Latin America, Peso Crisis Made 1995 a Good Year to Forget: A Region That Can Only Go Up," www.iht.com (cited March 2009); Moritz Cruz, Edmund Amann, and Bernard Walters, "Expectations, the Business Cycle and the Mexican Peso Crisis," *Cambridge Journal of Economics* (v.30/5, 2006); Antonio Jorge et al, eds., *Capital Markets, Growth, and Economic Policy in Latin America* (Greenwood, 2000); "Tequila Effect," www.investopedia.com (cited March 2009); Sidney Weintraub, *Financial Decision-Making in Mexico: To Bet a Nation* (University of Pittsburgh Press, 2000).

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Terms of Trade

A country's terms of trade is the ratio of its export price index to its import price index. Changes in terms of trade are sometimes used to indicate the direction of change in a country's gains from trade. Sudden changes in a country's terms of trade can affect its overall macroeconomic position. Significant improvements in a country's terms of trade may lead to Dutch disease, where the economy faces the possibility of a recession despite the boom in its export sector.

Terms of Trade and Comparative Advantage

David Ricardo's theory of comparative advantage is the standard for determining the pattern of trade between countries. It does not, however, pin down the terms of trade. Instead, it provides upper and lower bounds on the terms of trade that will allow mutually beneficial trade to occur. In the typical 2-good, 2-country model, the upper and the lower limits of the terms of trade are the opportunity cost for producing the good in each market. This is because if a good is more expensive in international trade than in autarky, countries would be better off producing the good themselves and not engaging in international trade. Mutually beneficial trade can therefore only occur at a price ratio that is bounded by the domestic opportunity cost in each market.

The extent to which each country gains from international trade is determined by the world price. The closer this world price is to a country's opportunity cost, the lower is its share of the gains from trade; the farther this world price is from a country's opportunity cost, the greater is its share of the gains from trade.

To illustrate this, consider a 2-country, 2-good model where the home country has a comparative advantage in production of commodities and the foreign country has comparative advantage in the production of the manufactured good. The home country opportunity cost is four commodities for one manufactured product. The opportunity cost for its potential trading partner, the foreign country, is one commodity for one manufactured product.

The terms of trade for home country is the price of commodities, its export good, divided by the price of manufactured products, its import good. This pattern of trade is consistent with that predicted from the pattern of comparative advantage. Assuming that the price of commodities is $1, then the price of manufacturing good is $4. These prices are consistent with the opportunity cost in the home country. This gives a ratio of export price to import price of 1/4. This ratio places a lower limit on the price at which the domestic economy is willing to engage in international trade. Further, at a terms of trade of 1/4, the home country does not gain from trade. This means that all the gains from international trade are captured by the second country.

The upper limit on the terms of trade is set by the foreign country's willingness to trade. As was the case with the domestic economy, this reflects the opportunity cost in the foreign country. In this instance, the upper limit on the terms of trade is 1, because the foreign country is not willing to trade at higher prices. At terms of trade of 1, where the terms of trade is measured relative to the home country's export good, the foreign country does not gain from trade. This means that all the gains from international trade are captured by the home country.

The terms of trade for the home country must lie between 1/4 and 1. The observed terms of trade is determined by demand for both goods in each country. If consumers have a strong preference for a country's export good, then this will tend to drive up the price of their exports.

Assume that the initial terms of trade for the home country is 1/2. There is an exogenous shock that causes an increase in the price of commodities, while the price of manufacturing goods remains unchanged. This is reflected in the home country's terms of trade, which increases from 1/2 to 3/4. With this improvement in the terms of trade, the home country captures more of the gains of trade. If instead, the exogenous shock caused a decrease in the price of commodities while the price of manufacturing goods remained constant, then the home country's terms of trade would have deteriorated. This is reflected in the movement in the home country's terms of trade from 1/2 to 1/3. With this deterioration in the home country's terms of trade, the international division of the gains from trade moves in favor of the foreign country and the domestic economy captures less of the gains from trade.

Generalizing the lessons from the 2 x 2 model, it can be concluded that countries experiencing an improvement in their terms of trade can purchase more imports with the same amount of exports. This occurs whenever the price of a country's exports rises by more than the price of its imports. Countries experiencing deterioration in their terms of trade can purchase less imports with the same amount of exports. This occurs whenever the price of a country's exports rises by less than the price of its imports.

Based on the foregoing, the direction of changes in a country's terms of trade over time is often used as a proxy for changes in its gain from trade. This is, however, only one source of potential gains from international trade, and caution should be exercised when trying to interpret the terms of trade in this manner.

Terms of Trade Adjustments

The degree of control that countries have over their terms of trade is dependent on the nature of their export goods. Countries that produce differentiated products have more control over the world price of their exports than do countries that produce commodity products. This is consistent with economic theory, where differentiated product firms have market power and firms with undifferentiated products do not. Developing countries, because their exports are often dominated by undifferentiated commodity products, have little control over their terms of trade.

This is particularly true for sub-Saharan countries where exports are dominated by primary products. As a consequence, changes in world demand or in supply conditions elsewhere, which cause fluctuations in world commodity prices, will impact their terms of trade.

Another factor that affects the ability of countries to control their terms of trade is the size of country. In particular, large countries can use tariffs, that is, import taxes, to affect their terms of trade. A country is considered large if it accounts for a significant share of world demand, as reflected in its ability to change world prices through its trade policy actions. To influence its terms of trade, a large country would impose a tariff on imports, and this would result in a fall in the world price of the large country's import goods. Because the price of the exports remains unchanged, the large country would have improved its terms of trade through the imposition of tariffs. However, very few countries are sufficiently large enough to use trade policy to influence their terms of trade. For those countries that are large enough to improve their terms of trade through trade policy, this choice is often not available because of the network of international agreements, principally the World Trade Organization (WTO) agreement, which limits these countries' ability to increase tariffs.

For most countries, terms of trade shocks, that is, unanticipated changes in relative price of a country's exports, are outside their control. If these terms of trade shocks are large, then it is possible for these effects to spill over into the broader economy and affect the country's income levels.

Consider what happens if the terms of trade shocks are negative, such that the price of exports falls while the price of imports remain unchanged. Such a shock would cause the country's export earnings to fall. Falling export earnings may reduce the income of agents in the export sector, which may be transmitted throughout the broader economy, resulting in a reduction in gross domestic product (GDP). If, instead, the price of exports increases, while the price of imports remain unchanged, then the terms of trade shock will be positive. Such a shock will cause the country's export earnings to rise. Higher export earnings may increase the income of agents in the export sector, which may be transmitted throughout the broader economy, resulting in an increase in GDP.

For commodity-intensive exporters, changes in world demand or in supply conditions that cause fluctuations in world commodity prices will impact their terms of trade. This raises the potential for significant variability in these countries' GDPs in response to the variability in world commodity prices.

Terms of Trade Adjustment and Exchange Rates

The ability of countries to adjust in the face of terms of trade shocks is influenced by various factors. One important factor is the country's exchange rate regime. There are two principal exchange rate regimes: flexible exchange rates and fixed exchange rates. With flexible exchange rates, demand and supply of foreign currency determines the price of foreign currency, that is, the exchange rate. With fixed exchange rates, the value of the country's currency is pegged to a foreign currency or basket of currencies. To maintain this fixed price, the monetary authorities stand ready to purchase or sell foreign currency as needed to remove excess supply or augment market supply as may be needed.

Countries with flexible exchange rates are better able to adjust to terms of trade shocks than are countries with fixed exchange rates. This occurs because the flexible exchange rate regime provides a secondary adjustment mechanism that dampens the impact of the change in export earnings. In contrast, when the exchange rate is fixed, there is no secondary adjustment mechanism available to absorb some of the impact on the economy. Consider a country that is an exporter of primary products and that imports a range of essential products. Suppose that this country experiences a terms of trade deterioration as a result of a reduction in its export price.

This will decrease export earnings and, as a result, the amount of foreign exchange that is available also decreases. If the exchange rate is fixed, then the monetary authorities will absorb the shortfall in foreign exchange earnings, and the price of tradables will remain unchanged. If the exchange rate is flexible, then the shortfall in foreign exchange earnings will be reflected in its price and the country's exchange rate will depreciate. This depreciation causes the price of tradables to increase. It is the adjustment in the price of tradables that leads to different adjustment patterns under fixed and flexible exchange rates.

With flexible exchange rates, tradable goods become more expensive. This makes exporting more attractive because the domestic currency equivalent that is received by exporters increases. This also makes importing less attractive because the domestic currency equivalent increases. This results in an increase in imports and potential substitution as formerly imported goods are replaced by domestic production. These changes serve to compensate for some of the income lost because of the fall in the country's export price.

With fixed exchange rates, there is no subsequent change in the price of tradables. This means that there is no further change in the incentives to export and no incentives to substitute domestic production for imports. In short, there are no compensating expansions to offset the contraction resulting from the fall in export earnings. In summary, the extent of the adjustment in GDP in response to deterioration in a country's terms of trade will differ under flexible and fixed exchange rates. With flexible exchange rates, the GDP response will be less significant than when exchange rates are fixed.

Suppose that instead the country experiences a terms of trade improvement. This will increase export earnings, and as a result, the amount of foreign exchange that is available increases. If the exchange rate is fixed, then the monetary authorities will accommodate the excess supply of foreign exchange earnings, and the price of tradables will remain unchanged. If the exchange rate is flexible, then the boom in foreign exchange earnings will be reflected in its price and the country's exchange rate will appreciate. This causes the domestic currency price of tradables to decrease because each unit of domestic currency buys more foreign currency than previously.

With flexible exchange rates, tradable goods become less expensive. This makes exporting less attractive because the domestic currency equivalent that is received by exporters decreases. This also makes importing more attractive because the domestic currency equivalent increases. This results in a decrease in imports and potential substitution as formerly domestically produced goods are replaced by imports. These changes serve to dampen the GDP expansion effect sparked by the increase in export earnings. With fixed exchange rates, there is no change in the price of tradables. This means that there is no further change in the incentives to export and no incentives to substitute imports for domestic production. In short, there are no built-in stabilizers to constrain the economic expansion resulting from the rise in export earnings. In summary, the extent of the adjustment in GDP in response to improvements in a country's terms of trade will differ under flexible and fixed exchange rates. With flexible exchange rates, the GDP response will be less significant than when exchange rates are fixed.

As explained above, the GDP response to terms of trade changes is larger under fixed exchange rates than under flexible exchange rates, independently of the direction of change in a country's terms of trade. This means that primary exporters who adopt fixed exchange rates will have significantly more variability in their GDP than primary exporters who adopt flexible exchange rates.

Improvements in the Terms of Trade and Dutch Disease

As previously noted, improvements in a country's terms of trade will often translate into economic growth, as the boost in export earnings is transmitted through the remainder of the economy. However, large increases in the price of a country's natural resource exports may have an adverse economic effect. This effect is known as Dutch disease, named after the observed negative economic effect experienced by the Netherlands following the discovery of natural gas in the 1960s. In the case of the Netherlands, the discovery of natural gas reduced the competitiveness of the Netherlands' traditional export sectors, causing them to contract.

A better understanding of Dutch disease can be gained through the use of a simplified version of the model originally developed by W. M. Corden and J. Peter Neary in the 1980s to explain this disease. In this model, the production side of the economy is comprised of three sectors: two of them produce exports, and one of them produces a nontraded good. The export goods produced are a traditional export good and a natural resource. Suppose that the world price of the natural resource good increases by a significant percentage, while the world price of the traditional export remains unchanged. Consistent with the earlier analysis, the higher world price for the country's export good will result in increased export earnings.

The higher world price for the natural resource good encourages expansion of this sector. This expansion is achieved by pulling resources away from the other sectors in the economy.

The increased earnings resulting from the export boom will be spent either on imports or on nontraded goods. If the demand for nontraded goods rises in response to the export boom, then the price of nontraded goods will increase. This increases the attractiveness of this sector, which expands to serve the now-higher demand. This expansion is achieved by pulling resources away from other sectors in the economy.

When two of three sectors, namely, the natural resource sector and the nontraded good sector, demand more resources, these resources must be released from the third sector, that is, the traditional export sector. As a result, the output of the traditional export sector contracts.

An exchange rate effect is also at play here. When exchange rates are flexible, the traditional export sector is further hurt by the appreciation of the domestic currency. Such appreciation further decreases the attractiveness of traditional exports and causes a further contraction of this sector. When exchange rates are fixed, there are no secondary price effects in the traditional export sector, and as a result, its contraction is less severe than with flexible exchange rates.

The Dutch disease phenomenon has been observed in various circumstances, including the discovery of North Sea oil for the United Kingdom, the first oil price shock of the 1970s, and the substantial increase in coffee prices in the 1970s, following the failure of the Brazilian coffee harvest. More recently, the increases in copper prices and in the prices of crude oil in the 2000s have raised concerns as to whether Dutch disease is at play in economies that are major exporters of copper and oil.

See Also: Comparative Advantage; Exchange Rate; Export; Import; Netherlands; World Trade Organization.

Bibliography. Marianne Baxter and Michael A. Kouparitsas, *What Causes Fluctuations in the Terms of Trade?* (National Bureau of Economic Research, 2000); Christian Broda and Cedric Tille, "Coping with Terms-of-Trade Shocks in Developing Countries," *Current Issues in Economics and Finance* (v.9/11, 2003); Paul Cashin and Catherine Pattillo, "The Duration of Terms of Trade Shocks in Sub-Saharan Africa," *Finance and Development* (2000); Christine Ebrahim-Zabeh, "Back to Basics—Dutch Disease: Too Much Wealth Managed Unwisely," *Finance and Development* (v.40/1, 2003); Ippei Fujiwara and Naohisa Hirakata, *Dynamic Aspects of Productivity Spillovers, Terms of Trade and the "Home Market Effects"* (Institute for Monetary and Economic Studies, Bank of Japan, 2007); Norbert Funke et al., *Terms of Trade Shocks and Economic Recovery*, IMF Working Paper WP/08/36 (International Monetary Fund, 2008); Jaime Guajardo, *Business Cycles in Small Developed Economies: The Role of Terms of Trade and Foreign Interest Rate Shocks* (International Monetary Fund, 2008); Bill Wan-Sing Hung and Chung-Yin Tam, *The Adjustment Speed and Improvement of the Terms of Trade in Asian Economies after the Financial Crisis* (Hong Kong Baptist University, 2002); Timothy Jerome Kehoe and Kim J. Ruhl, *Are Shocks to the Terms of Trade Shocks to Productivity?* (National Bureau of Economic Research, 2007).

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Terrorism

Since the attacks on the World Trade Center and the Pentagon on September 11, 2001, and the subsequent ongoing war on terror, people have become very aware of the problem of terrorism. Terrorism is not new; it is an age-old phenomenon. However, since the 1980s and the rise of new religious fundamentalist groups, there have been profound changes in the nature of terrorism. There have been fundamental changes in the structure of terrorist organizations, their mode of operation, motives, and the mind-set of terrorists themselves. The new terrorist groups operating in the 21st century pose a far greater threat than traditional groups did because they have a wider global span and operate with far greater lethality.

What Constitutes Terrorism?

An accepted definition of what constitutes terrorism is needed for the scope of law, international treaties, and cooperation, both nationally and internationally, in the fight against terrorism. However, there is no single universally accepted definition of terrorism. This, in part, arises because one person's terrorist is another person's freedom fighter, depending on if one sees the underlying cause as justified. Nelson Mandela was seen by many as a "freedom fighter," while to others he was a terrorist. Some viewed Osama bin Laden as a freedom fighter when he fought against the Soviet Union's invasion of Afghanistan, but he is now regarded as a terrorist by the West.

Another reason for the lack of a concrete definition is the wide array of the types of terrorism and the evolving nature of their organizations and activities. Since 2005, the National Counterterrorism Center in the United States has used the following definition when reporting incidents of terrorism: "premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents."

Even this widely used definition is challenged. For example, it is debatable whether cyberterrorism and the use of weapons of mass destruction (nuclear, biological, and chemical) constitute violent acts. The inclusion in the definition of noncombatant excludes military personnel killed or injured in a war zone, such as members of the armed services in Iraq and Afghanistan. The criterion of being politically motivated excludes criminals, so a serial killer or rapist causing terror in a neighborhood does not constitute terrorism. Additionally, the state may terrorize its people when it imposes a reign of terror, such as the events that occurred in the Soviet Union under Joseph Stalin and in Chile under Augusto Pinochet. This type of state terrorism is excluded from the definition.

Terrorists can be classified into domestic and international groups. Domestic secular terrorism involves indigenous groups operating on home territory, such as animal rights activists in the United Kingdom, and antiabortionists in the United States. The Oklahoma

An aerial view of the scene where the World Trade Center collapsed taken by a U.S. Navy photographer following the Sept. 11 terrorist attack. The attacks on the World Trade Center and the Pentagon were the largest and most devastating in U.S. history.

City bombing in 1995 is an example of domestic terrorism, as are Irish Republican Army (IRA) operations in the United Kingdom. Although domestic groups are responsible for the majority of acts globally, attention is now being focused on international religious terrorist groups that operate within a different paradigm and across continents.

There are hundreds of terrorist organizations; for example, Hamas, Hezbollah, Real IRA, Shining Path, and the most famous of all, Al Qaeda. Most countries have domestic terrorist groups, for instance, the Soviet Union has problems with Chechen terrorists. Some terrorist leaders are well known, such as Osama bin Laden and Che Guevara.

Terrorist Acts

What constitutes a terrorist incident is somewhat open to interpretation, as the perpetrators do not always claim responsibility, unlike traditional groups such as the IRA in the United Kingdom. Counting the number of incidents is complex, especially now with the trend toward a number of related events occurring in swarms. According to the *Country Report on Terrorism,* published annually by the U.S. Department of State, in 2006 there were 14,338 incidents of terrorism worldwide, and 74,543 individuals were killed, injured, or kidnapped as a result of incidents of terrorism. The largest number of incidents occurred in the Near East and south Asia, with many taking place in Iraq.

Looking at the trend in terms of number of events is not very meaningful. An event now is not comparable to past events, as modern terrorists aim for a spectacular event with maximum lethality and damage. The worst terrorist act in history were the attacks on the World Trade Center and the Pentagon on September 11, 2001. There had been a previous attack on the World Trade Center in 1993 when a car bomb exploded. Other major terrorist incidents include train bombings in 2004, the Lockerbie plane bombing in 1988, the suicide attack on the USS *Cole* in Yemen in 2000, and the Bali bombings in 2002.

The purpose of acts of terrorism is not merely to cause physical damage and to kill or injure people, but also to terrorize the population at large and disrupt normal societal activities. The psychological impact of causing fear matters, as well as causing death and destruction. In addition, media coverage of an event draws attention to the group's particular cause and improves recruitment. The acts themselves are simply a means to achieve an end objective, such as a change in government policies or, with the religious fundamentalist groups, to bring about fundamental change in an economic system and the existing world order.

Why Terrorism?

Terrorism as a strategy is dictated by circumstances. Terrorist acts are not spontaneous, but well planned and premeditated, taken as part of an overall strategy of systematic and deliberate actions sustained over a long period of time. Violence is used because legal and political methods are thought to be ineffective. This violence takes the form of terrorist acts because asymmetrical military strength means the terrorists would stand no chance of winning an outright war. All terrorist groups, regardless of their wealth, possess relatively few resources compared to governments. Terrorist tactics put those few resources into effective use by targeting a few, yet impacting many. Therefore, terrorism is a rational strategy, as it is the easiest and most efficient form of insurgency, given the circumstances.

The increasing trend in suicide terrorism is because it is a very effective and cost-efficient method. It can be used for precision targeting and to inflict mass casualties and cause extensive damage. It is a very effective way of spreading terror because it is extremely difficult to prevent and, therefore, is usually successful. The Tamil Tigers in Sri Lanka killed two heads of state in the early 1990s using suicide terrorists.

The chance of any terrorist group achieving their ultimate objective is very low. Terrorist organizations may achieve interim goals, such as the withdrawal of military personnel from a specific area, the release of political prisoners, and so forth, but few achieve their end goals. The African National Congress (ANC) and, to an extent, the IRA were successful, but groups seeking fundamental change, such as the downfall of capitalism or the demise of Christianity, are thought to be unlikely to succeed.

Structure of Terrorist Organizations

The structure of terrorist organizations has changed. Domestic terrorist organizations formed an identifiable group, with a hierarchical structure and clear leadership. The new terrorist organizations now have a much bigger, more dispersed lateral network that spans the globe. Al Qaeda literally means "the base." It is an umbrella organization where different groups may come for help with funds, training, and logistical support. There can be thousands of terrorists in a group, operating in many cells, all pursuing the same cause. Groups are split into small cells of approximately six to seven members for flexibility, mobility, and security reasons. Larger organizations have specialist personnel, such as financiers dedicated to dealing with the management of funds.

The old terrorist groups were motivated by ideology or liberation with clearly defined objectives, usually taking credit for their actions, whereas the new religious groups are motivated by religion, and their objectives are more diffuse and seek fundamental changes. They do not usually claim credit for their actions, justifying their actions as pursuing God's will.

Combating Terrorism

There are two main approaches to combating terrorism. One is a defensive approach, when measures are introduced to preempt attacks and limit risk. The second is a proactive approach, when measures are taken to make it more difficult for terrorists to operate by reducing and hindering their capabilities to mount attacks. A further possible solution is to address the underlying causes, although this may be difficult or even impossible in practice, especially with the new groups.

Changes in the nature and type of terrorism are hampering the ability of authorities to act both defensively and proactively. The defensive approach now requires global surveillance and intelligence gathering, and, while developments in technology have helped, it has been hindered by the difficulty of infiltrating the international religious terrorist groups to conduct covert intelligence operations. Key targets are more heavily secured, the most obvious being screening at airports and the erection of concrete barriers around some buildings to prevent car bomb attacks. The new terrorist groups, however, are less discriminating about their targets and merely move to less-secure areas.

One policy, aiming to make it harder for terrorists to operate, is to confront state sponsorship. Economic and other sanctions are imposed on countries harboring and assisting terrorists to pressure them to stop giving terrorists protection and resources. Sudan has long been a haven for terrorist groups, but in 1996, under pressure from the United States, Osama bin Laden was ordered to leave the country. However, sanctions have a very limited impact, as terrorists are now less dependent on state sponsors. International terrorist groups have access to both private finance and income from criminal activities, particularly the trafficking of narcotic drugs. The remaining state sponsors of terrorism listed in the *Country Report on Terrorism* (2007) are Iran, Syria, North Korea, Sudan, and Cuba.

Counterterrorist policies appropriate for the new type of terrorism require a comprehensive approach, using a combination of economic, military, intelligence gathering, and diplomatic tools. They also require cooperation and coordination of these policies at a national and international level. In 2004, the United States created the National Counterterrorism Center as the primary organization for compiling and coordinating all intelligence pertaining to terrorism.

Democratically elected governments are constrained in their choice of counterterrorist policies, not only by the availability of financial and physical resources, but also by having to comply with civil liberty requirements, human rights laws, and their inability to restrict freedom of the press.

How Great Is the Threat of Terrorism?

To date, the favored weapons of terrorists have been bombs and guns, but authorities engaged in the abatement of terrorism are concerned that terrorists may turn to using weapons of mass destruction and cyberterrorism. With the growth in religious terrorist groups operating in a war paradigm and intent on mass destruction of their enemies, the possibility of terrorists using weapons of mass destruction in the future is thought to be much higher than before. Even if only one such act is not deterred, it could have catastrophic consequences. There have been only a few examples to date, such as the release of sarin gas in the Tokyo subway in 1995 and the anthrax postal attacks in the United States after 9/11.

The most well-known terrorist group, Al Qaeda, is proving to be highly adaptable and flexible, quickly evolving new methods in response to countermeasures. As counterterrorist policies become successful and restrict the movement of terrorists, they are changing their strategy in response. For example, groups used to train terrorists in one country and then insert cells into the target country to prepare for an attack. They have responded by recruiting nationals of the target country through propaganda (especially via the Internet) and expatriate immigrant populations. The 2005 attacks on London public transport and the thwarted 2006 attacks on planes from UK airports all involved British-born Muslim terrorists. The hotel and train terrorist attacks in Mumbai proved that developing nations are terrorist targets as well.

See Also: Black Market; Blocked Funds; Money Laundering; Risk; Trade Sanctions; United Kingdom.

Bibliography. Dean C. Alexander, *Business Confronts Terrorism: Risks and Responses* (University of Wisconsin Press/ Terrace Books, 2004); Dean C. Alexander and Yonah Alexander, *Terrorism and Business: The Impact of September 11, 2001* (Transnational Publishers, 2002); Tilman Brück, *The Economic Analysis of Terrorism* (Routledge, 2007); Cindy C. Combs, *Terrorism in the Twenty First Century* (Prentice Hall, 2003); Thomas A. Cook, *Managing Global Supply Chains: Compliance, Security, and Dealing with Terrorism* (Auerbach Publications, 2008); Bruno S. Frey, *Terrorism and Business* (Institute for Empirical Research in Economics, 2007); Bruce Hoffman, *Inside Terrorism* (Columbia University Press, 2006); Walter Laqueur, *New Terrorism* (Phoenix Press, 2002); National Counterterrorism Center, www.nctc.gov (cited March 2009); Ronald W. Perry and Lawrence D. Mankin, "Preparing for the Unthinkable: Managers, Terrorism and the HRM Function," *Public Personnel Management* (v.34/2, 2005); U.S. Department of State, *Country Reports on Terrorism*, www.state.gov (cited March 2009).

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Thailand

One of the most vibrant economies of the world, Thailand ("Land of the Free") has witnessed rapid transformation from an agrarian-based economy to a globalized industrial one. The economic growth of Thailand since the mid-1980s has been remarkable. With a growth rate of 10 percent per year, Thailand became one of the Asian Tigers by 1991, along with Singapore, Taiwan, South Korea, and Hong Kong. A member of the "newly industrializing countries," Thailand has marched ahead with the new mantra of liberalization. The capital, Bangkok, has transformed a great deal. Social mobility became common, and the employment boom in the decade starting from 1985 resulted in much of the population flocking from rural to urban areas, bringing with them a growth of urbanization. Foreign direct investment (FDI) increased in Thailand. Thai currency, the baht, was attached to the America dollar, and it became cheaper for Japanese corporations to invest, as the value of the dollar went down against the yen.

The Rise and Fall of the Thai Economy

Thailand's trade with Japan grew phenomenally. In the beginning of 1994, the Stock Exchange of Thailand (SET) reached a high of 1,753.73. Foreign funds began to surge into Thai financial institutions and banks. Private capital inflows flooded the financial market of Thailand. There was an influx of offshore banks from Japan and the West. The Thai official policy had encouraged FDI. The government also gave all-out support for joint venture investment initiatives. The Thai financial environment for investment had become ripe, with a modernized capital city, excellent communication and transportation facilities, comparatively reasonable real estate rates, and availabile labor force.

Very soon, the bubble began to burst, and cracks appeared beginning in late 1996. Thailand, a model for economic development, was hit by the crisis leading to currency depreciation, unemployment, inflation, and foreign debts. The Asian economic crisis commenced on July 2, 1997, with Thailand becoming the epicenter of the crisis. The floating of the baht by the Bank of Thailand started a chain reaction. The repercussions were swift across the money market of southeast Asia. The situation in the financial sector became so critical that 56 finance companies had been shut down by the end of 1997.

With an index of 481.92, the SET reached its nadir in 1999. The economic growth rate of Thailand was 5.9, minus 1.7, minus 10.2, and 4.2 for 1996, 1997, 1998, and 1999, respectively. The exchange rate of the baht to the American dollar fluctuated from 24.3 (June 1977) to a low of 52.5 (January 1998). The credit rating of Thailand had gone down, and consequently investment plummeted, with a capital outflow from the private sector amounting to a staggering sum of 645,096 billion baht. The International Monetary Fund (IMF) secured $17.2 billion in loans for Thailand. There was a huge scaling down of expenditures in the government and private sectors. About 2 million people lost their jobs, leading to lowering of the standard of living.

The Thai economic crisis also witnessed a major change in the ownership of companies and financial institutions. Foreign firms and local businesses began joint ventures. There was a considerable increase of shares of foreign companies in Thai banks. Thailand endured the 1997 financial crisis, and recovery began after the government initiated a series of economic reforms pertaining to lending practices, incentives, and corporate governance. The economic recovery was gradual. The Thai government launched an ambitious program of reforms, by which domestic demand was stimulated. Support was accorded to domestic firms, but simultaneously, open markets and foreign investment were promoted. By 2001, Thailand had recovered from the crisis, and its gross domestic product (GDP) was 5.2 percent the following year.

Thailand's trade and investment abroad gradually improved. Japan, the North American Free Trade Agreement (NAFTA), and the Association of Southeast Asian Nations (ASEAN) countries are the three major zones for Thailand's import in commodities, such as capital goods, intermediate products, raw material, consumable items, fuels, and lubricants. Thailand began to expand its export with items such as garments, rice, and automobiles, along with auto accessories, canned shrimp, automatic data processing machines, electronic equipment, and so on. Apart from ASEAN, the European Union (EU) and NAFTA are also major exporting areas for Thailand.

Thai exports performed well in 2007, with continued emphasis on high-tech items. It explored new markets in Australia, Russia, and south and west Asia. The Thai outward FDI had reached a peak prior to the Asian economic crisis. The outward investment slowed down, but there was gradual recovery after 2002. The government, the Board of Investment (BOI), Thailand Board of Trade, EXIM Bank of Thailand, and the Federation of Thai Industries gave a helping hand to Thai companies investing abroad. Compared to countries such as Malaysia, China, India, and Brazil, it is not

This traffic jam attests to the fact that Thailand has rapidly transformed from an agrarian society to an industrial one.

a major outward investor, with a rank of 26 among emerging economy investors. Thai companies such as Amata, Baiyoke, Charoen Pokphand Group, Bangkok Bank, Thai President Foods, Banpu, Loxley, Jasmine, and Saha Union invest abroad mainly in manufacturing industry and services sectors. The major destinations for investment include ASEAN, south Asia, China, ex-Soviet bloc countries, and Africa.

In human development, Thailand has shown tremendous progress. The Human Development Index rate is 73. With a Human Poverty Index rate of 28, the population below the poverty line is only 10 percent, although poverty is still significant in poorer regions and villages. It is hoped that Thailand, a middle-income country, will achieve most of the goals projected by the United Nations' Millennium Development Goals. It has also made improvement in the business sector, and its rank, according to the *Doing Business* report, was 15 in 2007. The Thai economy seems strong enough to weather any storm, and its future looks bright.

See Also: Asian Development Bank; Asian Financial Crisis; Asian Tigers; Association of Southeast Asian Nations; International Monetary Fund; North American Free Trade Agreement.

Bibliography. Asian Development Bank, *Asian Recovery Report 2000* (Asia Recovery Information Center, 2000); Chris Baker and Pasuk Phongpaichit, *A History of Thailand* (Cambridge University Press, 2005); Bank of Thailand, *Economic Review* (Bank of Thailand, 1997); Kirida Bhaopichitr, *Thailand Economic Monitor–April 2008*, www.worldbank.or.th (cited March 2009); Timothy D. Hoare, *Thailand* (ABC-CLIO, 2004); Pasuk Phongpaichit and Chris Baker, *Thailand: Economy and Politics*, 2nd ed. (Oxford University Press, 2002); Eric D. Ramstetter and Fredrik Sjöholm, *Multinational Corporations in Indonesia and Thailand: Wages, Productivity and Exports* (Palgrave Macmillan, 2006); Pansak Vinyaratn, *Facing the Challenge: Economic Policy & Strategy* (CLSA Books, 2004); Philip Wylie, *How to Establish a Successful Business in Thailand* (Paiboon, 2007).

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Third Country National

A third country national (TCN) is an individual who is a citizen of neither the contracting government nor the host country or area of operations. A TCN is hired by the host government to perform a significant role in multinational corporations. This person is differentiated from the parent country national (PCN) and the host country national (HCN) or locals.

For example, a multinational company based in the United States may send a U.S. citizen (PCN) to Vietnam to establish operations there. Normally, if the PCN temporarily resides in the new country, the PCN will also be referred to as an expatriate. Once the multinational corporation establishes operations in the new country, the corporation must decide how the corporation will be managed and led. The multinational company can then use the PCN (the U.S. citizen) to run operations, the locals (HCN) to run operations, or someone who is neither a U.S. citizen (PCN) or Vietnamese citizen (HCN) to run the operations (hence the term *third country national*).

Usually, a TCN brings language skills that the PCN does not have. Additionally, TCNs can have a more adept understanding of the local culture than a PCN would have. TCNs can have a greater interest in the success of the operation, since they would have to seek other employment, while the PCN would simply return into the multinational corporation's fold should operations in the country fail. A TCN's value as a manager is highest when they come from a culture similar to the PCN, understand the language of the PCN, and understand the language and culture of the host nation as well. For instance, using a seasoned British or Irish TCN in Russia to manage local operations may be more advantageous for an U.S. multinational company seeking to expand operations in Russia over using a U.S. citizen (PCN) who must be trained in both language and customs. TCNs normally stay with the foreign national operations longer than a PCN, who may see this as a temporary assignment on his/her way up the corporate ladder. However, TCNs should not be seen as a cheaper alternative in providing management for foreign operations. If the multinational firm needs close coordination of efforts between the foreign operation and its headquarters, a PCN would serve the corporation better.

TCN Challenges

Particularly difficult issues in using TCNs in a multinational environment are compensation, promotion, and retirement. PCNs normally receive salary and benefits from the multinational corporation that allow them to live as well as or better than they would in the parent country. TCNs are normally equipped with similar skill sets and better language skills than a PCN (or an expatriate). However, multinational companies will often pay TCNs on the same scale as the host country nationals, or similar to the PCNs but without benefits, such as free housing, cost of living allowances, and medical and dental care.

Additionally, multinationals have to consider where the TCN will retire, in order to adequately help the TCN in his or her retirement. For a TCN living in a third world country (for example, Vietnam), the TCN will probably return to his or her home country for retirement. Therefore, the multinational may pay into the TCN's home country's retirement system, or may simply consider the TCN's salary as full payment for all services including retirement benefits.

As an example, the author of this entry worked in a U.S. embassy in the Middle East as an administrative officer. Only one HCN actually worked at the embassy. Other workers including people from east Africa (Somalia, Eritrea, Ethiopia), the Levant (Syria), Pakistan, and India, working in skilled (accounts, analysts, and translators), and unskilled (driver, laborer) positions. The embassy provided annual allowances for TCNs to return to their home country, and paid monies into a retirement fund for the TCN after they finished his or her service at the embassy. Establishing the retirement fund this way allowed the TCN to use the fund for retirement at a place of their choosing.

When hiring a TCN, the multinational corporation must specify all promotion opportunities to the TCN. Some TCNs may seek to find additional foreign postings with the multinational company, while the multinational company may see the TCN as little more than an HCN with additional skill sets. Clearly, discussing promotion opportunities upon hiring the TCN will provide a basis for future opportunities with the multinational corporation. Of particular concern in using TCNs in foreign operations is the TCN's ability to remain in the country and issues of morale. In many countries, the TCN must have a sponsor to remain in the country. The company may or may not be able to perform this sponsorship function. For both first and third world countries, the TCN may lose residency status if the country has sufficient HCNs with the same skills as the TCN. Recent research has shown that TCNs can suffer more issues with morale than either a PCN or an HCN. Morale problems will normally arise from lack of promotion opportunities and/or adequate compensation.

See Also: Host Country; Local/National; Multicultural Work Groups and Teams; Parent Country National.

Bibliography. M. Harvey, C. Speier, and M. M. Novecevic, "A Theory-based Framework for Strategic Global Human Resource Staffing Policies and Practices," *The International Journal of Human Resource Management* (September 2001); C. Reynolds, "Strategic Employment of Third Country Nationals: Keys to Sustaining the Transformation of HR Functions," *Human Resource Planning* (v.20, 1997); J. Selmer, ed., *Expatriate Management: New Ideas for International Business* (Quorum Books, 1995).

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ThyssenKrupp

ThyssenKrupp AG, a German industrial conglomerate, was created by the merger of Thyssen AG and Friedrich Krupp AG Hoesch-Krupp in 1999. Today, the steel and engineering company remains a dominant steelmaker, with its service and engineering business recently earning almost a third of the company's sales. Employing a business concept mainly focused on technological innovation and expertise and diversification, ThyssenKrupp AG continues to follow its historical roots, making it Germany's 10th largest company (2006) and one of the key players in the European and world steel market.

More Than a Steelmaker

ThyssenKrupp ranks among the top 30 listed companies in Europe, and remains one of the top 12 (2006) largest steel-producing companies in the world (by steel volume), in the top five (2006) by sales, and number one in Germany. The expected sales figure for fiscal year 2008 is €53 billion. By splitting into five business segments, ThyssenKrupp gained for itself a much more precise market position in the world's highly competitive industrial markets. The company's major activities include its steel and stainless steel business (production of flat steel products and stainless steel flat-rolled products), and capital goods (divided into two units: elevators and technologies), and services (materials and industrial services).

The steel giant, with its 193,000 employees (2007) is increasingly expanding overseas. Already, more than two-thirds of its over 2,400 production sites, offices, and service centers are functioning outside Germany. Although approximately 70 percent of company sales (2007) are generated in Europe (inclusive of 36 percent in Germany), Thyssen's focus is firmly on North America, another key region and part of its long-term strategy of increasing market activities outside Europe.

Milestones in the Company's History

The origins of the company can be dated back to 1871, when August Thyssen first built up his steel and engineering business. In the early years, Thyssen focused on increasing his iron and steel production, and on the expansion of both the raw material base and his manufacturing operations in Germany and overseas. Thyssen's aim was to diversify and to integrate acquired companies, products, and businesses into one group, the Vereinigte Stahlwerke AG (1926).

In 1914, the internationalization of the group was disrupted by the outbreak of World War I. After the first abrupt downturn, production soon increased again in support of Germany's war effort. While the war resulted in the loss of foreign business opportunities, Thyssen remained nearly completely intact in Germany. Following a restructuring process and being renamed Thyssen-Hütte, the company played a significant role as a supplier of preliminary steel products for the World War II economy.

After the war, the company went into liquidation: Thyssen-Hütte was dismantled as part of Germany's war reparations. With the halt of the destruction of Thyssen-Hütte in 1949 and the split of Vereinigte Stahlwerke AG into separate companies, August Thyssen-Hütte AG returned to its original form and business. Once again, the focus of August Thyssen-Hütte AG's business strategy was on diversification through horizontal and vertical acquisitions, and restructuring. The company has become Europe's biggest steel producer and service provider, with technological expertise resulting in a diversified conglomerate.

Friedrich Krupp AG Hoesch-Krupp, another German steel giant, emerged in 1992, following a hostile takeover of Hoesch AG by Friedrich Krupp AG, marking the first hostile takeover in German business history. In 1997, the newly formed Friedrich Krupp AG Hoesch-Krupp attempted to take over the much larger Thyssen AG. However, massive resistance from Thyssen's employees culminated in both companies entering negotiations vis-à-vis a merger. April 1, 1997, saw the consolidation of the steel business of both companies, followed shortly afterward by the announcement of an intention to fully merge their entire companies. In March 1999, ThyssenKrupp AG came into existence.

The origins of Friedrich Krupp AG Hoesch-Krupp can be traced back to 1811, when Friedrich Krupp GmbH was established. Initially, the company produced high-quality cast steel and later focused on more finished products, such as high-precision rolls and forged and rolled seamless railway tires. Recognizing the importance of innovation, Krupp worked on the improvement of steelmaking processes simultaneously with the expansion of the company into a horizontally and vertically integrated concern. As in the case of Thyssen AG, Krupp's involvement in the war economy has been critically evaluated.

See Also: Acquisitions, Takeovers, and Mergers; Germany; Hostile Takeovers; Mittal Steel.

Bibliography. Alfred D. Chandler et al., eds., *Big Business and the Wealth of Nations* (Cambridge University Press, 2000); Jeffrey Fear, *Organizing Control: August Thyssen and the Construction of German Corporate Management* (Harvard University Press, 2005); International Iron and Steel Institute, www.worldsteel.org (cited March 2009).

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Time Orientation

Time orientation is principally the tendency to emphasize or prefer a certain time horizon in one's domain of attitudes, actions, and perspectives, that is, a dominance of the past, present, or future. Time orientations can influence individuals' behaviors and intertemporal decisions in diverse situations as a result of individuals' unique "time personalities," which ultimately guide perceptions, choices, and allocations of activities over time. Understanding the time orientation concept can therefore be beneficial in helping to classify people on a number of aspects related to perception and behavior; examples include motivation, risk taking, planning, and consumption of different products.

In general, individuals' backgrounds are rooted in societies dominated by one of the three time orientations, where each is portrayed by varying characteristics. For example, past-oriented cultures, such as Tibet, tend to believe that all the great decisions were made in the past, and present society is a deteriorated adaptation of a past golden age. They have a poor view of innovation, and prefer to conserve what already exists. Present-oriented individuals, such as the Navajo Indians of northern Arizona, consider only what is at hand, without valuing how their behavior relates back to tradition, or how it will affect their future state. They are likely to be impulsive and seek immediate gratification, as greater but future rewards are worthless for them. Future-oriented cultures, such as Western societies, believe in setting goals and planning how to reach them, and value innovation highly.

The Concept of Time Orientation

The concept of time orientation is multidisciplinary, given that it is intrinsic to human behavior. It has its roots in sociology, anthropology, educational studies, and experimental psychology and influences consumer behavior and global business management. It has been extensively associated with cultural phenomena, where it is pertinent to individual differences across cultures. Along these lines, cultural anthropology is a major contributor to the study of time orientation.

Anthropologists regard time orientations as cultural artifacts, because for them, it is not viable to assume that human beings are born with any type of innate "temporal sense"; in this viewpoint, people's concept of time is always culture-based. Experimental psychology approaches a study of time orientation through psychometric scales used for measuring individual adaptation to cultural time patterns. Time orientation is also one of the cultural value dimensions proposed by Geert Hofstede and Michael Bond, where it was first referred to as Confucian dynamism and then renamed time orientation. In addition, Edward T. Hall highlights temporality as one of the main elements of the communication process in a cultural system.

It is, however, recurrent to find the terms *time/temporal orientation*, *time attitude*, and *time perspective* often used interchangeably. Yet, each has slightly different meanings. Time or temporal orientation is the preferential direction in an individual's thought in being primarily oriented to actions and objects in the past, present, or future. Time perspective is exemplified by its degree of structure, extension, concentration, and level of practicality. Time attitude describes an individual's relatively positive or negative view of the past, present, and future.

Time Perceptions

Yet another important aspect of time orientation is the construction of time in the form of time perceptions. In consumer research, time orientation reflects how different people exhibit varying perceptions of time in various contexts, for example, for different purchases. Generally, research suggests there are three time perceptions: linear-separable, circular-traditional, and procedural-traditional. Based on cultural background and a number of factors including education, the socialization process, time attitude, and social class, people in societies living within each time perception have different characteristics, expectations, and attitudes. The linear-separable time perception characterizes Western cultures, such as the Anglo-Americans, whereas the other two time perceptions characterize Eastern cultures and Oriental societies.

With the linear-separable time perception, time is perceived as stretching along a straight line starting from the past through the present and progressing into the future; time is separated into discrete slices allocated to specific activities, and it has a heavy future orientation attached to it, where the past is gone and cannot be recovered. In societies endorsing a circular-traditional time perception, such as Native Americans, time operates in a circular system, where events repeat according to some cyclical pattern. In contrast, the procedural-traditional time perception, characterizing individuals in Latin America, is driven by rituals and procedures, where actions are undertaken when the "time is right." People who share traditional time perceptions rely heavily on the present, given that for them there is no new future, but only a recurrence of the past. Even within the same society, however, individuals are often not limited to one time perception, but rather may keep switching among them, depending on the performed task in terms of time and situation. Time orientation is thus one of the characterizations of different time perceptions.

Influences

Research also proposes that the role of parents in children's education may impinge on their ensuing time orientation along with their personal past, in addition to the influence of age, gender, education level, and social class. For example, some research holds that lower-class, less-educated, and older individuals are likely to be more past- and present-oriented than others with opposing characteristics. Furthermore, research suggests that future orientation is more often than not associated with Western societies, and connected with factors such as higher socioeconomic status and advanced academic achievement.

In sum, an individual's particular time orientation can exercise a dynamic influence on important judgments, decisions, and actions. In multinational business dealings, businesspeople must avoid the common mistake of assuming a single universal perception of time, most commonly the linear-separable—that which is associated with a future orientation—and hence jeopardize important business relationships with people from other cultures and backgrounds.

See Also: Attitudes and Attitude Change; Confucian Work Dynamism; Cross-Cultural Research.

Bibliography. Robert J. Graham, "The Role of Perception of Time in Consumer Research," *Journal of Consumer Research* (1981); Edward T. Hall, *The Silent Language* (Anchor Press, 1973); Geert Hofstede and Michael H. Bond, "Confucius and Economic Growth: New Insights Into Culture's Consequences," *Organizational Dynamics* (v.16/4, 1988); Alfons Trompenaars and Charles Hampden-Turner, *Riding the Waves of Culture: Understanding Diversity in Global Business* (McGraw-Hill Professional, 1997).

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Time Warner

Time Warner is the world's second-largest media and entertainment conglomerate, whose business includes interactive services, cable systems, filmed entertainment, television networks, and publishing. The company is headquartered in New York City, and among its major subsidiaries are America Online (AOL), Time Inc., Time Warner Cable, Home Box Office (HBO), Turner Broadcasting System (TBS), Cable News Network (CNN), and Warner Bros. Entertainment. The company positions itself as a leader in media and entertainment, thanks to continuous innovations in technology, products, and services, as well as creativity, talent, and commitment by the company's employees.

Company Beginnings

The business was founded in 1972 under the name Warner Communications as a spin-off from Kinney National Company. Warner had been able to make significant profits in the early years of its existence, especially from the acquisition of Atari, which at its peak accounted for a third of Warner's annual profits. Although the purchase price Warner paid for Atari was rather high at the time (estimated at $28–$32 million), the investment paid off because of the incredibly fast growth of Atari's computer and game console sales in the United States. Also in the 1970s, Warner founded a joint venture with American Express—Warner-Amex Satellite Entertainment—which together owned popular cable channels, including MTV and Nickelodeon.

A situation of relative stability was changed somewhat toward the mid-1980s. First, there was an unsuccessful expansion into the world of professional sports—the company lost a significant amount of money acquiring and then selling a professional baseball team. Later, Warner was forced to sell Atari to a business rival. After that, Warner had to buy American Express out of their joint venture and sell the entire unit to its biggest competitor, Viacom. Finally, experiencing certain difficulties in coping with market pressures, Warner decided to merge with Time Inc., which actually turned out to be a sound business decision.

In the 1990s, the company continued to restructure and acquire various related businesses to ensure maximum synergy. Among its largest purchases was the acquisition of TBS from Ted Turner. During the same decade, the company combined all of its businesses under one name, Time Warner.

Mergers and Acquisitions

The new millennium brought about various changes to Time Warner, the biggest of which was undoubtedly the 2000 acquisition of the company by the much smaller America Online for $164 billion. The deal rather quickly passed the scrutiny of both U.S. and European regulators, effectively creating the largest media and entertainment company in the world, AOL Time Warner. The merger, however, has not resulted in any major improvements in either the company's balance sheet or income statement. Instead, by 2002, the profitability and the market value of the company's internet service provider division (AOL) tumbled drastically, which forced a significant write-off, which in turn forced AOL Time Warner to post the largest loss ever recorded in the world of business, an estimated $99 billion. The same year, the company dropped AOL from its official name, and the next year, the chairman of a unified company stepped down, causing considerable changes in Time Warner's leadership. At the end of 2007, the new chairman of the company, Jeff Bewkes, announced possible plans for the near future, which included, among other things, a sell-off of Time Inc.

The Future of Time Warner

Despite past financial troubles, Time Warner remains a profitable organization. Its 2007 gross revenues were in excess of $46 billion with a net income of nearly $4.5 billion. The company also owns a significant amount of assets worldwide, including major real estate properties in New York City—several buildings in Rockefeller Center, as well as some adjacent buildings, which house its headquarters and new CNN studios.

As with many of its direct competitors—Viacom, News Corporation, Walt Disney Company, and so forth—Time Warner has to deal with the recent trends brought about by rapid changes in the external business environment. For instance, the company needs to keep pace with the advancements in information technology, combat piracy that reduces its revenues around the world, and deal with the declining growth of the DVD market. Time Warner, in its own words, is ready to handle these challenges, mainly thanks to its unrivaled reputation for creativity and excellence, as well as its hunch for opportunities for constructive collaboration with various players in the worldwide market of media and entertainment.

See Also: Acquisitions, Takeovers, and Mergers; Company Profiles: North America; Media; United States; Walt Disney.

Bibliography. "America Online and Time Warner Will Merge to Create World's First Internet-Age Media and Communications Company," www.timewarner.com (cited March 2009); Bloomberg.com, "Time Warner May End Reign as Largest Media Company," www.bloomberg.com (cited March 2009); Alec Klein, *Stealing Time: Steve Case, Jerry Levin, and the Collapse of AOL Time Warner* (Simon & Schuster International, 2004); Richard Siklos and Stephanie N. Mehta, "Time for Change at Time Warner," *Fortune* (v.156/7, 2007); Kara Swisher, *There Must Be a Pony in Here Somewhere: The AOL Time Warner Debacle and the Quest for a Digital Future* (Crown Business, 2003).

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Tokyo Electric Power

The Tokyo Electric Power Company (TEPCO) was established in 1951 with JPY 1.460 million in capital. With total assets of JPY 13.594 billion as of March 2006, TEPCO ranked first in Japan, and fourth among electricity companies worldwide. Japan is the third-largest energy consumer in the world.

Originally founded in 1886 as Tokyo Electric Lighting, the company began life as Japan's first electricity company, serving the general public since 1887. By 1920, more than 700 electricity firms were merged into five nationwide electricity suppliers. During World War II, the government took complete control of the industry via Nihon Hassoden K.K., distributing electricity through nine regional companies, namely Hokkaido, Tohoku, Tokyo, Chubu, Hokuriku, Kansai, Chugoku, Shikoku, and Kyushu. The Tokyo regional distributor formed the basis for TEPCO after the war. It serves the Kanto area (i.e., Tokyo, Kanagawa, Chiba, Saitama, Tochigi, Gunma, Ibaraki, Yamanashi, and parts of Shizuoka) of about 43.9 million people, or 34.4 percent of Japan's total electricity population.

The Niigata earthquake in July 2007 affected the operation of the Kashiwazaki-Kariwa nuclear power station, which is the world's largest nuclear power plant in terms of output capacity. The plant was forced to suspend operations, causing TEPCO's earnings to fall into the red for the first time in 28 years. TEPCO's president, Masataka Shimizu, is working to boost alternative sources of energy output and may, as a last resort, raise electricity charges for the first time since 1980.

Products and Services

TEPCO has an integrated power generation, transmission, and distribution system. Via its electricity utilization technology, it provides products such as heat-pump water heaters and air conditioners.

From its power quality-related technologies, it offers computer-related power system engineering services. It also offers products of various sensors and monitoring systems, visual machineries, software, as well as machinery products that support recycling and environmental technologies.

TEPCO takes the position that Japan should have a diversity of power generation sources to avoid excessive reliance on any one type of fuel. The main sources of TEPCO's energy supply are nuclear power, thermal power generation based on liquid natural gas (LNG), petroleum and coal, and hydroelectric power. Alternative or new energy sources to reduce carbon dioxide emissions include solar, wind, geothermal, fuel cell, biomass, and waste power generation. TEPCO pioneered the use of wind power in Japan with its 500 kW wind power plant on the island of Hachijojima. TEPCO established the Green Power Fund in 2000 with contributions from the company and its customers to support the use of natural energy by corporations and customers. In addition, TEPCO is active in research on new energy sources and promotes the spread of new energy through purchases of excessive power produced by facilities installed by its customers.

Corporate Structure and Global Presence

TEPCO supplies electricity through six affiliated companies. The company is diversified, offering information communication services through 14 affiliated companies in the areas of telecommunications, cable television broadcasting, information technology (IT) software and services, and construction and maintenance of information communication equipment. An additional 53 affiliates supply energy and environmental services, energy facility construction and maintenance, transportation of fuel, and materials and equipment. Twenty-six affiliated companies offer living environment and lifestyle-related services and real estate, and 14 affiliates are engaged in overseas business.

TEPCO has extensive electricity services overseas via investment projects in Indonesia, the Philippines, Taiwan, Australia, Timor-Leste, Vietnam, California, and London. TEPCO aims at international networking with the State Grid Corporation of China, the Korea Electric Power Corporation, Tenaga Nasional Berhad of Malaysia, Electricité de France, Réseau de Transport d'Electricité (RTE) of France, and PJM Interconnection (United States) via exchanges of top management and experts. The projects aim to improve technical exchanges and raise the standard of reliable and efficient power grid management.

See Also: Company Profiles: East Asia; Japan; Nationalization; Technology.

Bibliography. Federation of Electric Power Companies of Japan, "History of Electricity in Japan," www.japannuclear.com (cited March 2009); *Financial Results, April 1, 2007–March 31, 2008, Presentation Materials, Masataka Shimizu, Executive Vice President, TEPCO, April 30, 2008,* www.ir-on-the-web.jp (cited March 2009); Icon Group Ltd., *The Tokyo Electric Power Co., Inc.: Labor Productivity Benchmarks and International Gap Analysis* (Icon Group International, 2000); Tokyo Electric Power Company, Inc., www.tepco.co.jp (cited March 2009).

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Too Big to Fail

The term *too big to fail* refers to a corporation, an organization, or an industry sector that is considered by the United States government to be too important to the overall health of the economy to be allowed to fail. Beginning in the 1980s, the term was applied to the banking industry during the Continental Illinois Bank and Trust Company crisis. When Continental Illinois approached insolvency because of bad speculative investments, the Federal Reserve guaranteed Continental's liquidity needs. Eventually, the federal government spent $4.5 million to bail out Continental. When quizzed by the Senate Banking Committee why the Federal Reserve and the Federal Deposit Insurance Corporation did what they did, the regulators responded that they were concerned about the size of the bank (the seventh largest nationally), the number of smaller banks with significant portions of their capital invested in Continental Illinois, the specter of depositor panic and bank distress, and the potential disruption of national payment and settlement systems.

More recently, the government engaged in its biggest financial bailout in history. Bad mortgage investments essentially froze the credit market by September 2008. The first move by the government was to force Bear Stearns to be taken over by Morgan Stanley. Not wanting to engage in renewing the precedent of government bailouts, the government let Lehman Brothers enter bankruptcy. The demise of Lehman Brothers shook the investment markets, and the domestic and global stock markets plunged. The government then reversed itself and invested an initial $50 billion in AIG, eventually raising that investment to over $100 billion. Finally, the U.S. government approved over $700 billion to rescue the financial markets, taking equity positions in a number of banks in doing so. The rationale for the expenditure of nearly $850 billion was that the banking system was "too big to fail."

Ironically, while our largest banks may be deemed too big to fail, the smaller so-called community banks may be too small to fail. The FDIC reports the failure rate among banks with assets of $1 billion or more is seven times greater than among banks with less than $1 billion in assets. These community banks are outperforming large banks on most key measures, such as return on assets, charge-offs for bad loans, and net profit margin.

This is remarkable when one considers that just three institutions—Citigroup, Bank of America, and JPMorgan—hold more than 30 percent of the nation's deposits and 40 percent of bank loans to corporations. Unfortunately, while there were 14,000 such community banks in 1985, today there are less than 8,000. In addition, a number of large banks who received the government bailout have announced that they may be using the money to acquire these more successful community banks.

Other Industries

The intervention by the government to rescue the financial community has raised the question of whether other industries are "too big to fail." For example, until recently, the three companies that controlled the U.S. auto industry, despite competition from foreign automakers, still controlled significant global market share. In addition, the U.S. auto industry invested in manufacturing technologies that lowered the cost of production domestically, and steadily outsourced production to control labor costs. Relatively cheap fuel prices in the United States also helped the auto industry.

In recent years, however, the auto industry has run into an almost "perfect storm" of problems. First, foreign automakers made increasing inroads in market share, particularly in the smaller-car market. Second, the auto industry had to deal with increasing "legacy" costs—as more union workers retired, more industry resources were diverted to pension and medical costs. Third, a weakening economy and rising fuel prices changed consumer preferences from large sport utility vehicles to smaller cars. Finally, a severely tightened credit market helped crater vehicle sales. By the end of 2008, two of the three car makers—GM and Chrysler—were facing bankruptcy. Citing the notion that the auto industry was "too big to fail," the government approved some $18 billion in loan guarantees.

How many more industries will be deemed "too big to fail" is hard to determine as of this writing. What is clear is that this heretofore rather obscure term has taken on new meaning in the global economy.

See Also: Acquisitions, Takeovers, and Mergers; American International Group; Bankruptcy; Business Cycles; International Monetary Fund; Mortgage Credit Crisis of 2008; Subprime Loans.

Bibliography. T. A. Frank, "Too Small to Fail," *Washington Monthly* (November/December 2000); P. Goodman, "Too Big to Fail?" *New York Times* (July 20, 2008); D. Millbank, "The Nomination That's Too Big to Fail," *Washington Post* (January 15, 2009); G. Stern and R. Feldman, *Too Big to Fail: The Hazards of Bank Bailouts* (Brookings Institution Press, 2004).

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Toshiba

Toshiba Corporation is a Japanese multinational enterprise and the seventh-largest manufacturer of electrical and electronic products in the world. Founded in 1875, Toshiba today consists of 10 in-house companies covering a wide range of products, including bullet trains and power stations as well as electronic consumer goods such as rice cookers, washing machines, and television sets. The company can draw on innovative ideas from more than 30 separate research and development (R&D) laboratories and 352 subsidiaries and affiliates globally. Unusual among large Japanese corporations, Toshiba has faced up to the challenge of globalization and has restructured and streamlined its organization, as well as having developed a shareholder value-oriented business philosophy.

Toshiba was founded in 1939 by the merger of Shibaura Seisaku-sho, which was a producer of electronic goods and which was founded in 1875, and Tokyo Denki, which was a consumer goods producer. Both companies were leaders in their respective fields. The new company was called Tokyo Shibaura Denki (Tokyo Shibaura Electric Co., Ltd.) and the name was not officially changed to Toshiba until 1978.

Since World War II, Toshiba has been part of the Mitsui *keiretsu*, which represents the typical Japanese conglomerate of affiliated companies. The company grew quickly during the postwar period. This growth was fueled by success in the domestic market as well as through the acquisition of heavy industries firms in Japan. The company's business fields are broad. Toshiba has developed in various directions, such as into the semiconductor industry, medical systems, power systems, and later into mobile communications and the digital media industry. The brand name Toshiba, however, is most strongly related to the company's electrical consumer products. The company's breakthrough as a manufacturer of consumer goods came in 1955, when it launched the first electronic rice cooker on the Japanese market. Within seven years, half of Japanese households owned one of them, a success which laid the foundation of Toshiba's ongoing role as an innovator and leader in consumer products.

Like many other Japanese multinational corporations, Toshiba's postwar success was guided and supported by the Japanese government, typical Japanese management practices, and a highly motivated workforce. In contrast to other Japanese manufacturers, Toshiba seemed reluctant to develop overseas

Toshiba has grown to be the seventh-largest manufacturer of electrical and electronic products in the world. Toshiba's corporate headquarters (building in center) are located in Hamamatsucho, Tokyo.

production. For many years, the company not only highly concentrated on the Japanese market but also strongly promoted a Japanese relationship-oriented management style inside the corporation.

This focus, however, did not prove to be very successful for the company, and in the 1990s Toshiba was not only confronted with the Japanese recession but also with increasing global competition. The strong appreciation of the Japanese yen put the company, with its many domestic manufacturing sites, under further stress.

In 1996, Taizo Nishimuro became president of Toshiba. He was an unusual choice. Nishimuro was not only the first president who did not have an engineering background, but he had also spent 10 years abroad and spoke fluent English. His appointment symbolized a new era and an increasing readiness to meet the new challenges the company faced. Nishimuro introduced numerous reforms, such as liquidating Toshiba's unprofitable businesses and cutting the main business groups from 15 to eight. He also introduced profit-oriented evaluation systems and set ambitious goals for the company's return-on-equity and shareholder value.

In the 21st century, Toshiba continues to restructure itself. Atsutoshi Nishida, who became president in 2005, introduced an even stricter concentration and selection policy focusing on businesses and industries that can sustain a long-term competitive advantage. The company concentrates on core competencies and on business in emerging markets. Toshiba has become an outstanding example for Japanese multinational corporations that are in the process of reorganizing in how to stay competitive in the global market. Thus, in contrast to other Japanese multinational corporations, Toshiba has followed a unique path over the past 15 years. It may be considered a role model for the development of Japanese corporations, many of which still need to overcome similar problems to the ones Toshiba faced in the early 1990s.

See Also: Acquisitions, Takeovers, and Mergers; Japan; *Kaizen*; *Keiretsu*; Multinational Corporation; Tokyo Electric Power.

Bibliography. Robert L. Cutts, *Toshiba: Defining a New Tomorrow* (Penguin, 2002); W. Mark Fruin, *The Japanese Enterprise System: Competitive Strategies and Cooperative Structures* (Oxford University Press, USA, 1994); W. Mark Fruin, *Knowledge Works: Managing Intellectual Capital at Toshiba* (Oxford University Press, 1997); Wataru Nakayama et al., *The Japanese Electronics Industry* (CRC, 1999).

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Total

The Total Oil Company, with its headquarters in France, is one of the six "supermajor" oil companies in the world, with its core business being oil and gas—including both exploration and production—and trading, shipping, refining, and marketing of gasoline, liquid petroleum gas (LPG), aviation fuels, lubricants, chemicals, petrochemicals, fertilizers, and other products. It has also diversified and is involved in coal mining and power generation. Some products are sold through retail outlets such as gasoline stations and through other companies.

As an entity, it was founded in 1924—six years after the end of World War I—to ensure that France did not have to rely on companies from other countries. It was formed at the behest of the then French prime minister, Raymond Poincaré. After World War I, Poincaré did not want France to have to be reliant on Royal Dutch Shell, as the Netherlands were neutral in the war. In some ways, the initial structure was modeled on British Petroleum (BP). As a result, the Compagnie Française des Pétroles (French Petrol Company; CFP) was established on March 28, 1924, with Ernest Mercier as its founder. Born in Algeria to a Protestant Republican family, he was a graduate of the prestigious École Polytechnique and had worked in the electricity sector. With government help, he managed to obtain the support of about 90 banks. It was not until 1929 that the company was listed on the Paris Bourse (stock exchange). During the 1930s, Mercier became heavily involved in politics.

Establishing the Company

The first major move made by CFP was to establish its source of oil. This came from the 23.75 percent share of the Turkish Petroleum Company, which had been held by Deutsche Bank and was awarded to France as World War I compensation after the San Remo Conference of April 1920. The French government assisted with building refineries for the oil from Iraq, but CFP never had the range of production that the Anglo-American companies did, leading to business rivalries and resentment. The Turkish Petroleum Company was renamed the Iraq Petroleum Company, and it discovered large oil fields in 1927, continuing production until the end of operations there in 1961.

The major flare-up between CFP and the Anglo-American oil companies was in 1946. The French held out for a larger share of the Saudi Arabian oil fields, recognizing that these were much more important than those in Iraq. CFP, however, did not get access to Saudi Arabia and started to turn its focus on Iran. In a deal negotiated with the Iranian prime minister, Mohammed Mossadeq, CFP agreed to take a 6 percent share in the new Iranian Consortium being established in Iran, and was soon also holding a third of the shares in Abu Dhabi Marine, as well as their share in Iraq, unchanged since World War I. Regular problems occurred, with CFP anxious to increase its permitted production level and angry at the restrictions placed on the company.

In 1956, CFP discovered a large oil field in Algeria and started working heavily with the Algerian government (northern Algeria was then a part of France, and the Sahara desert, where the oil was found, was a French colony). This discovery encouraged French governments to want to retain Algeria, in spite of their starting to lose the Algerian war for independence. During peace negotiations, the French had hoped to retain control of the oil fields, but the Algerian nationalist leader Ahmed Ben Bella recognized the wealth from oil and insisted on their becoming Algerian, and after independence, the Algerian government nationalized the oil fields in their country, and they were put under the control of the state oil and gas company, Sonatrach.

Global Expansion

During the 1960s, CFP, using the brand name Total, was spreading through Africa, establishing petrol stations in much of French Africa. In 1966, the French company Entreprise de Recherches et d'Activités Pétrolières (ERAP) was formed through the merger of two state-owned entities, and it started establishing gasoline stations under the name ELF, later Elf Aquitaine. CFP continued to grow, and in 1985 it was renamed Total CFP, and six years later, it became known simply as Total.

In 1999, following the takeover of Petrofina, it was renamed Total Fina, and in 2000, it merged with Elf Aquitaine to become TotalFinaElf. However, in 2003, the company reverted to its former name, and is again called Total. Altogether, it employs 96,400 people directly, and another 15,000 indirectly, in some 130 companies. This makes it, together with its subsidiary companies and affiliates, the fourth-largest publicly traded and integrated international oil and gas company in the world. It is now the second-largest petroleum company in France, with most of its oil sourced in, and most of its refining still taking place using oil from the Middle East.

See Also: BP; Company Profiles: Western Europe; ConocoPhillips; France; Marathon Oil; Petrobras; Petronas; Sunoco.

Bibliography. M. A. Adelman, *The Genie out of the Bottle: World Oil Since 1970* (MIT Press, 1995); William N. Greene, *Strategies of the Major Oil Companies* (UMI Research Press, 1985); Adrian Hamilton, ed., *Oil: The Price of Power* (Michael Joseph/Channel Four Television Co., 1986); Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Made* (Hodder & Stoughton, 1975); Total corporate, www.total.com (cited March 2009).

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Toyota Motor Corporation

Toyota Motor Corporation is one of the largest Asian multinational enterprises, in terms of sales, assets, and profitability. Its corporate headquarters is in Japan. It is the core corporation of the Toyota Group and a partner of the Mitsui Group. Toyota Motor Corporation's origins can be traced back in 1933, when Kiichiro Toyoda established an automobile department within Toyota Automatic Loom Works. The establishment of Toyota Motor Company as a distinct corporate entity took place on August 28, 1937.

During the first years of the post–World War II era, Japan's production capacity had largely diminished and the economy had slowed down to a large extent. Side effects of this were also manifested in Toyota's production capacity, which faced severe financial and operating problems. However, the Bank of Japan, which was virtually a consortium of several banks dominated by Mitsui Bank, provided necessary capital, which helped the firm rejuvenate its activities. The bank's decision for funding investments included the agreement that the sales department should form a distinct enterprise, production volumes should be rationalized to a lower level, and excessive labor force would be let go. This reengineering of activities reinforced the bonds of Toyota with leading banks in the country, which then became Toyota's largest shareholders. The original Toyoda family now possesses a small percentage of shares and has a small representation in the governing bodies of the firm, such as the board of directors.

Exporting Toyota Automobiles

The year 1957 was a milestone in the history of the firm because it commenced its exporting activity. Toyota Motor Sales USA Inc. was established, and the first export of the Japanese passenger car (the Crown) to the United States became a reality. International activity continued to flourish, and in the following years, the firm gradually established itself in other countries, such as Brazil (1958) and Thailand (1962). As a result of this internationalizing process, cumulative exports reached 1 million units in 1969. In the mid-1980s, Toyota possessed production facilities in a number of countries, such as Peru, Portugal, Indonesia, Australia, New Zealand, and Thailand. Moreover, in 1992, it established a production plant in the United Kingdom, to accelerate penetration in the important European passenger car market.

Currently, Toyota Motor Corporation is operating with more than 500 subsidiaries around the world. In the fiscal year between April 2007 and March 2008, the business performance figures, including consolidated subsidiaries, showcased the dominance of the firm as one of the world's largest corporations. The number of employees exceeded 316,000 and net revenues were JPY 26.289 billion, with a net income of JPY 1.717 billion.

An explanation for the generation of these impressive figures can be attributed to a main feature of Toyota's business activity: the establishment of strategic alliances with key players in a number of related fields. Such alliances help the firm to be at the edge of technological advances and create commensurate value for its customers. For example, in 1998, it formed an alliance with firms such as Fujitsu and Matsuhita to develop a database for an in-vehicle navigation system.

In 1996, it formed a strategic alliance with Panasonic to develop a system of rechargeable batteries that would be later used in its hybrid Prius model. Moreover, its pioneering position in the development and implementation of the Just-in-Time supplying scheme allows the firm to minimize costs stemming from procurement and obsolete materials. Another factor of success is its knowledge base, which has been achieved through continuous investments in research and development (R&D).

On the other hand, the firm faces severe competition from German automobile makers (especially in the premium segments of the market with its Lexus brand) and it has not managed to achieve similar results (as in Japan or the United States) in the major but highly competitive market of Europe. Moreover, the firm seems to have a "we can do it on our own" philosophy, which rejects extended acquisitions or mergers with other automobile groups. This avoidance goes against the flow of megamergers that have recently taken place in the automobile sector. The future will show to what extent this will be proven a strength or a weakness for the firm in the challenging landscape of automobile manufacturing.

See Also: DaimlerChrysler; General Motors; Japan; Mitsui; Multinational Corporation; Productivity.

Bibliography. K. Dennis Chambers, *Toyota* (Greenwood, 2008); Jeffrey Liker, *The Toyota Way: Fourteen Management Principles From the World's Greatest Manufacturer* (McGraw-Hill, 2004); Jeffrey Liker and David Meier, *Toyota Talent* (McGraw-Hill, 2007); Matthew E. May and Kevin Roberts, *The Elegant Solution: Toyota's Formula for Mastering Innovation* (Free Press, 2006); Darius Mehri, "The Darker Side of Lean: An Insider's Perspective on the Realities of the Toyota Production System," *Academy of Management Perspectives* (v.20/2, 2006); Toyota, www.toyota

.co.jp (cited March 2009); Kazuo Wada, "The Fable of the Birth of the Japanese Automobile Industry: A Reconsideration of the Toyoda-Platt Agreement of 1929," *Business History* (v.48/1, 2006).

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Trade Balance

The balance on the goods trade in a nation's current account is known as the balance of trade, or trade balance. The current account includes all international economic transactions with income or payment within the year; the goods trade records all transactions involving merchandise or goods. The exports of goods by a country are merchandise credits; its import of foreign goods are merchandise debits. When exports (or credits) exceed imports (or debits), the goods trade shows a surplus. When imports exceed exports, the account shows a deficit.

The export and import of goods is known as merchandise trade. It is the oldest and most traditional form of international economic activity. Although many countries depend on imports of many goods (as they should, according to the theory of comparative advantage), they also normally work to preserve either a balance of goods trade or a surplus. Because the current account is typically dominated by the export and import of merchandise, the balance of trade, or trade balance, which is so widely quoted in the business press in most countries, refers specifically to the balance of exports and imports of goods trade only. For a larger industrialized country, the trade balance is somewhat misleading because service trade is not included. It may be opposite in sign on net (in surplus, for example, when goods are in deficit) and it may actually be fairly large as well. For example, the U.S. goods trade balance has consistently been negative, but has been partially offset by the continuing surplus in the services trade.

What does it mean if a country's trade balance runs a persistent deficit? It means that country is borrowing from the rest of the world so that it can spend in excess of its own consumption. Underdeveloped countries limited to a single export experience trade deficits, but developed countries that have lost their manufacturing base experience them as well.

Merchandise trade, the original core of international trade, has three components: manufactured goods, agriculture, and fuels. The manufacturing of goods was the basis of the Industrial Revolution. The decline in manufacturing by industrialized countries has caused massive economic and social disruptions. Weaker domestic currency, rapid economic growth in Asia and Latin America, and a substantial increase in agricultural exports raise the overall export of goods.

Merchandise Import and Export

Understanding merchandise import and export performance is much like understanding the market for any single product. The demand factors that drive both imports and exports are income, the economic growth rate of the buyer, and price (the price of the product in the eyes of the consumer after passing through an exchange rate). As income rises, so does the demand for imports. Exports follow the same principle but in reverse. When buyer economies are growing, demand for supplier economies' products will also rise.

While managers understand that expanding into international markets can have a positive impact on their firms' bottom line, and use foreign direct investment (FDI) to participate in the emerging global marketplace, they may not understand the impact of their FDI on the trade balance of the host country. Edward Graham and Paul Krugman have shown that affiliates of foreign firms in the United States show an apparent tendency to export somewhat less and to import significantly more—2.25 times as much as U.S. firms.

Raw material–seeking investment and low-cost production–seeking investment are two common types of factor-seeking FDI that have an impact on host and home country trade balance. Raw material–seeking investment increases exports from the host nation to the home country and other countries; low-cost production–seeking investment takes advantage of low-cost factors as part of a global sourcing strategy, leading to an ability to export products from emerging nations. Here, the host country is able to increase exports and improve its trade balance; the home country, on the other hand, raises the level of its service imports.

Negative and Positive Trade Balances

What does a negative trade balance mean for the foreign investor and its relationship with the host government? What does a negative trade balance mean for the host government and public policy? Lance Brouthers et al. found that higher levels of FDI inflows appear to confer positive trade balances to developing countries, at least in the short run, because investing firms tend to use FDI to gain factor-seeking advantages that can be exploited in export markets, leading to exports, and hence trade surpluses. However, for advanced nations, higher levels of FDI inflows appear, at least in the short term, to help generate trade deficits, because FDI here tends to be market seeking.

J. Orr and others have argued that FDI can contribute to positive trade balances in the long term if foreign-owned firms use only local suppliers of parts and components in producing their goods; replace imports with these goods; and/or export their products. In the absence of all three conditions being met, Orr suggests that trade deficits are the likely result. As K. Kojima suggested, by using FDI, the global firm can ignore or oppose the pattern of comparative advantages inherent in international trade and by doing so undermine what the economists call global welfare. Further theoretical development in this area may be of great value to countries in helping them determine their FDI policies, as well as to firms contemplating the use of FDI as part of a "socially responsible and economically rational" global business strategy.

Trade Balance and Economic Health

Government policies that directly target the trade deficit can easily develop into protectionism. "Export or die," a popular campaign poster in post–World War II Britain, became a sentiment embraced seriously by the Japanese. Island nations, both Britain and Japan perceived their ability to sell abroad as vital to maintaining their standard of living. While the British believed in free trade and the Japanese were strongly protectionist, each country considered exports vital, as did the Koreans and Taiwanese, taking Japan as a model. Continental European nations, in direct proximity to each other, often saw exports as a natural extension of domestic economic activity. Although China's history includes a long, disastrous period of isolation, the Chinese have learned from their mistakes and their neighbors' successes and have turned exporting into a national obsession.

The effect of the trade balance on national economic health depends on three factors: (1) the price of one country's products relative to the world price; (2) the value of exchange of the national currency relative to other foreign currencies; and (3) the relative incomes of the national and other foreign economies. The first two factors can be called the price effect or competitiveness; they, along with the relative income level, determine the trade balance of the nation. If the nation's (export) price level rises faster than that of foreign nations, the trade balance will deteriorate and competitiveness will worsen.

If the nation's (export) price level declines faster than that of foreign nations, the trade balance will improve as will competitiveness. The exchange rate reinforces the price effect: if the nation's currency revalues (upward), the trade balance will decline. If the nation's currency devalues, the trade balance will improve. If the income of our focus nation goes up, absorption does the same and the trade balance worsens. However, if the world expands more rapidly than the focus economy, the trade balance will improve and the foreign income level will relate positively to the trade balance.

While many economists predict dire consequences for a persistent trade imbalance, a contrarian viewpoint has emerged. According to Miranda Zafa who surveyed these viewpoints, some economists, including Ben Bernanke, chairman of the U.S. Federal Reserve, explain the increase in Asian savings as a consequence of the export-led growth strategy pursued by Asian governments. The result is persistent current account surpluses and reserve accumulation by Asian central banks, thus generating a global savings glut and keeping interest rates low. This strategy has permitted emerging markets that are net lenders to grow rapidly by ensuring efficient intermediation of their savings. Another contrarian view that Zafa calls the "portfolio balance view" attributes global imbalances to portfolio optimization. In effect, the United States, Asia, and much of the Middle East are part of the dollar zone, and therefore, the imbalances between them are as irrelevant as those between Germany and Greece or Spain.

See Also: Asia; China; Comparative Advantage; Dependency Theory; Export; Import; Japan; United Kingdom.

Bibliography. Augustine C. Arize et al., *Balance of Payments Adjustment: Macro Facets of International Finance Revisited* (Greenwood, 2000); Ben Bernanke, "The Global Saving Glut and the U.S. Current Account Deficit," The Sandridge Lecture, Virginia Association of Economics, Richmond, VA (March 10, 2005); Lance Elliot Brouthers et al., "The Aggregate Impact of Firms' FDI Strategies on the Trade Balances of Host Countries," *Journal of International Business Studies* (v.27, 1996); M. Dooley, *An Essay on the Revived Bretton Woods System*, NBER Working Paper No. 9971 (National Bureau of Economic Research, 2003); John H. Dunning, *Governments, Globalization and International Business* (Oxford University Press, 1999); Jose Maria Fanelli and Rohinton Medhora, *Finance and Competitiveness in Developing Countries* (Routledge, 2002); Pavlos V. Karadeloglou, *Enlarging the EU: The Trade Balance Effects* (Palgrave Macmillan, 2002); Enzio Pfeil, *Trade Myths: Globalization and the Trade Balance Fallacy* (Inkstone Books, 2008); Yi Wu and Li Zeng, *The Impact of Trade Liberalization on the Trade Balance in Developing Countries* (International Monetary Fund, 2008); Miranda Zafa, "Global Imbalances: Do They Matter?" *Cato Journal* (v.27, 2007).

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Trade Barriers

Trade barriers can be described as government laws, regulations, policies, or practices that either protect domestic products from foreign competition or artificially stimulate exports of particular domestic products. The intention of these instruments is to raise the price of the traded products by imposing a kind of cost in trade. For Paul Krugman and Maurice Obstfeld, the most common foreign trade barriers are government-imposed measures and policies that restrict, control, and limit the international trade between countries by using restrictive instruments. These instruments can be in the form of tariffs, import quotas, export restraints, import licenses, subsidies, and nontariff barriers to trade.

In particular, if the government policy is to protect domestic infant industries from outside competition, then a protective tariff is considered as a tax levied when a good is imported. This tariff can be used as a tool for a trade policy to protect inefficient domestic industries. It is calculated as either a percentage of the value of the imported goods or as a fixed monetary amount per imported unit. The most popular method of calculating an average tariff rate is to divide total tariff revenues by the total value of imports. Import quotas are the limitations on the quantity of imports, and they can also be used as an effective tool for the trade policy. On the other hand, export restraints are the limitations on the quantity of exports imposed by the exporting country at the importing country's request. Subsidies make domestic goods and services artificially competitive against imports.

Nontariff barriers are particularly difficult to measure. For Dominick Salvatore, some of the nontariff barriers, such as antidumping measures and countervailing duties, might be used under certain conditions, but they can have the same effect as a tariff and they can be used like a tariff. Therefore, even though the World Trade Organization (WTO) imposed very significant reduction in tariff use, the use of nontariff barriers increased. Furthermore, manufacturing or production requirements of goods, health and safety rules, sanitation, and environmental standards can be under the category of nontariff barriers, but these are necessary barriers to keep standards higher. Other barriers to trade include overly rigorous health inspections and difficult licensing requirements, investment barriers, lack of intellectual property protection, and service barriers that regulate international data flow and foreign data processing.

Protectionists and Free Trade Supporters

In international economic history, in the 1930s, there was a wave of protectionism because of economic depression and because of the devastating impacts of the two World Wars. After World War II, governments looked for ways to diminish the trade protectionism and settled on Bretton Woods institutions in 1944. Then, the idea of removal of trade barriers gradually institutionalized itself with the establishment of the General Agreement on Tariffs and Trade (GATT) in 1948. Assisting trade in moving freely, removing obstacles through negotiations, providing stability, and resolving disputes were among the responsibilities of GATT. The WTO came into being in 1995 through the multilateral trading system and replaced GATT. A key target for the member states is tariff reduction.

In the context of trade barriers, there are different extreme groups who are in favor of trade barriers and those who are against trade barriers. Protectionists, who are in favor of trade barriers, argue that trade barriers protect domestic industries and create job opportunities. In history, the infant-industries argument was the key argument for some protectionists, who claimed that new industries should be protected from competition by using trade barriers, and particularly tariffs and quotas, to protect domestic jobs from cheap foreign labor. In addition, the argument for keeping money at home claims that limiting imports will increase a country's resources and sustain the balance of payments.

Economists generally support the idea that all these barriers decrease overall efficiency and reduce the welfare of consumers. Free trade supporters, who are against protectionism, defend the idea that free trade will increase the welfare of both customers and producers in the nation and region; therefore, all trade barriers should be gradually abolished, and free trade should be maintained between countries. For this group, trade barriers like tariffs and quotas raise domestic prices, reduce the welfare of domestic consumers, increase the welfare of domestic producers, and cause deadweight losses.

For free trade supporters, as one of the effective tools of trade barriers, a tariff can be perceived as a tax on goods produced abroad and sold domestically. Therefore, a tariff raises the price of imported goods above the world price by the amount of the tariff. In addition, a tariff reduces the quantity of imports and moves the domestic market closer to its equilibrium without trade. Kevin Lawler and Hamid Seddighi claim that, on the other hand, a quota on imports is a limit on the quantity of a good that can be produced abroad and sold domestically. Because the quota raises the domestic price above the world price, domestic buyers of the good are worse off, and domestic sellers of the good are better off. The quota can potentially cause a large deadweight loss, if such a mechanism, for example, lobbying activities, allocates import licenses. Because of the welfare effects, free trade supporters defend the idea of removal of all trade barriers, except perhaps those considered necessary for health or national security, Nevertheless, in real life, even those countries promoting free trade heavily subsidize certain industries.

Removing Trade Barriers

The key benefits of removing trade barriers are achieving general equilibrium approach to measuring economic benefits; removing agricultural subsidies globally; reducing trade barriers and agricultural subsidies, following the WTO's Doha Round; removing intra-American trade barriers, following the Free Trade Area of the Americas (FTAA) negotiations; and removing developed country barriers to exports from least-developed countries.

On the other hand, the economic costs of removing trade barriers are dealing with high expenditure on negotiating and on supporting the policy; developing and disseminating a convincing case for reform; paying the private costs of adjustment for firms and workers as reform forces some industries to downsize or close to allow others to expand; and bearing the social costs of social safety schemes (such as unemployment payments plus training grants to build new skills so displaced workers can earn the same wage as before). Social and environmental benefits and costs of removing trade barriers can be reducing poverty through free trade, environmental damage due to excessive production as a result of free trade, causing climate change, and reducing conflicts and financial instability.

See Also: Free Trade; Free Trade Zone; General Agreement on Tariffs and Trade; North American Free Trade Agreement; Quota; Tariff; Terms of Trade; World Trade Organization.

Bibliography. A. V. Deardorff and R. M. Stern, *Measurement of Nontariff Barriers* (University of Michigan Press, 1998); J. F. Francois, "Assessing the Impact of Trade Policy on Labour Markets and Production," in *Methodological Tools for SIA*, CEPII Working Paper No. 2003-19 (Centre d'Etudes Prospectives et d'Informations Internationales, 2003); International Business Publications, *Global Foreign Trade Barriers to the U.S. Products and Services Exports Handbook* (International Business Publications USA, 2007); Paul Krugman and Maurice Obstfeld, *International Economic Theory* *and Policy* (Addison-Wesley, 2003); Kevin Lawler and Hamid Seddighi, "International Economics: Theories, Themes and Debates," *Financial Times* (January 2001); S. Matusz and D. Tarr, "Adjusting to Trade Policy Reform," in *Economic Policy Reform: The Second Stage,* A. O. Krueger, ed. (University of Chicago Press, 2000); Azim M. Sadikov, "Border and Behind-the-Border Trade Barriers and Country Exports," IMF Working Paper (International Monetary Fund, 2007); Dominick Salvatore, *International Economics* (Wiley, 2004). Lawrence J. White, *Reducing the Barriers to International Trade in Accounting Services* (AEI Press, 2001).

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Trade Bloc

Trade blocs refer to groups of countries that have established preferential trade arrangements aiming at increasing trade among each other. Trade blocs have been formed along geographical lines leading to the emergence of regional bloc trading. The terms *trade blocs* and *trade pacts* are often used as synonyms in literature. Here, trade blocs are understood as trading areas formed by one or several trade pacts.

In Europe, the European Union (EU) and the European Free Trade Association (EFTA) have established an even larger trade bloc, the European Economic Area (EEA). Via free trade areas (FTAs), preferential trading is planned to be extended to the Mediterranean area and southeastern Europe.

In the Americas, several regional trade blocs have emerged, mainly based on the Southern Common Market (Mercosur), the Andean Community (ANDEAN), the Caribbean Community (Caricom), the Central American Common Market (CACM), and the North American Free Trade Agreement (NAFTA). Mercosur and ANDEAN have concluded first steps toward the establishment of the Union of South American Nations. Intra-American trade integration is further fostered through bilateral trade agreements among individual American countries that are members of different trade blocs. Moreover, an all-American agreement, the Free Trade Area of the Americas (FTAA), is being negotiated, although negotiations have recently experienced setbacks.

In the Asia-Pacific, the Association of Southeast Asian Nations (ASEAN) Free Trade Agreement (AFTA), the ASEAN and China FTA, and the ongoing ASEAN plus three negotiations (with China, Korea, and Japan) have created or aim for plurilateral integration schemes fostering the emergence of an East Asian trade bloc. Furthermore, a network of bilateral trade pacts within the region has evolved. Also, the Pacific has seen several regional trade arrangements, while a multitude of trade pacts in central Asia aim to establish the economic links formerly existing within the Soviet Union.

In North Africa and the Middle East, integration attempts were launched with the Gulf Cooperation Council and the Greater Arab Free Trade Area. In Africa, high-level regional agreements have been concluded (e.g., the Southern African Customs Union and the West African Economic and Monetary Union). Nevertheless, Africa features a very low level of intraregional trade, trade pacts are overlapping, and the provisions of the agreements are rarely enforced.

Growth of Trade Blocs

Hence, although the number of intraregional trade blocs has grown, consolidation into continentwide trade blocs has recently stagnated. Furthermore, cross-regional trade pacts are increasingly concluded that link individual nations of different trade blocs with each other and trade blocs with individual nations of other trade blocs. Arrangements such as the Asia Pacific Economic Cooperation (APEC) that span several continents have evolved. This has led to the emergence of what Richard Baldwin calls "fuzzy leaky trade blocs."

With the proliferation of trade blocs, their welfare implications in the short run, and their role for further worldwide multilateral trade liberalization in the long run have been extensively debated in academia.

Jacob Viner was the first to highlight the effects of trade creation and trade diversion in 1950. Trade creation occurs when domestic products are replaced by cheaper products from trade bloc members. However, members of a grouping can also reorient their trade away from low-cost nonmember countries toward higher-cost member countries, leading to trade diversion. Which effect prevails depends on the trade patterns of a country or trade bloc and the levels of tariffs prevailing prior to liberalization. Moreover, when the terms of trade of trade bloc outsiders deteriorate as products from outside the bloc get more expensive, beggar-thy-neighbor effects occur. As the size of trade blocs increases, they obtain greater bargaining power and show more aggressive trading behavior, potentially leading to trade wars. Nevertheless, Paul Krugman and Laurence Summers have argued, although not without criticism, that trade blocs of countries that naturally trade with each other due to proximity or other economic motivations are welfare enhancing, as trade diversion is minor. A different set of welfare losses is anticipated as a result of the lack of transparency because of the "spaghetti bowl" nature of trade blocs. But also welfare gains are expected to occur in the long run, because of the increased market size and competition in trade blocs leading to economies of scale and higher productivity and innovation.

Opponents and Proponents

The question of whether trade blocs are building or stumbling blocks for further multilateral liberalization has been hotly debated since Jagdish Bhagwati coined these terms. Opponents of trade blocs argue that even a small increase in trade protectionism will lead to trade diversion. Once such measures are taken, interests are created that gain from the discriminating nature of the agreements and oppose further multilateral liberalization. Moreover, trade ministries have only limited resources and when concentrating on the formation of trade blocs, multilateral trade negotiations will suffer.

Proponents of the building-block nature of trade blocs claim that member countries of trade blocs might be inclined to agree to multilateral trade talks when they fear the emergence of another trade bloc stronger than their own one. Also, countries may go further in liberalization on a bilateral or plurilateral scale than on the multilateral one, demonstrating benefits to other countries and encouraging them to pursue further liberalization. Moreover, companies lobby governments to reduce tariffs to nontrade bloc members that produce intermediate goods for them to remain competitive. Academics also emphasize that developing countries can lock in overall trade reforms and multilateral trade liberalization by committing themselves to free trade within a trade bloc.

Hence, the impact of trade blocs on welfare and on further multilateral trade liberalization is ambiguous. Generating empirical evidence has proved to be difficult, as many of the agreements have existed for only a few years, have phased in liberalization schedules, and often coincide with a general period of economic growth. However, while computable equilibrium modeling frameworks in general have supported the trade creation argument, the recent ex post econometric studies are less clear cut.

See Also: Asia-Pacific Economic Cooperation; Association of Southeast Asian Nations; Bilateral Free Trade Agreement; Caribbean Community (Caricom); Central American Common Market; Common Market; Customs Union; Economic Integration; Economic Union; European Union; Free Trade; Free Trade Area of the Americas; Free Trade Zone; General Agreement on Tariffs and Trade; Mercosur/Mercosul; Monetary Union; North American Free Trade Agreement; Regional Integration; Tariff; Terms of Trade; Trade Barriers; Trade Liberalization; Trade Pact; Trade War; World Trade Organization.

Bibliography. Richard Baldwin, "Multilateralising Regionalism: Spaghetti Bowls as Building Blocs on the Path to Global Free Trade," *The World Economy* (v.29/11, 2006); Jagdish Bhagwati and Anne O. Krueger, eds., *The Dangerous Drift to Preferential Trade Agreements* (American Enterprise Institute for Public Policy Research, 1995); Roberto V. Fiorentino et al., *The Changing Landscape of Regional Trade Agreements—Update 2006*, WTO Discussion Paper No. 12 (World Trade Organization, 2007); Laura Gomez-Mera, "How 'New' Is the 'New Regionalism' in the Americas? The Case of MERCOSUR," *Journal of International Relations and Development* (v.11/3, 2008); Pravin Krishna, *Trade Blocs: Economics and Politics* (Cambridge University Press, 2005); Anne Krueger, "Are Preferential Trading Arrangements Trade-Liberalizing or Protectionist?" *Journal of Economic Perspectives* (v.13/4, 1999); Paul Krugman, "Is Bilateralism Bad?" in *International Trade and Trade Policy,* Elhanan Helpman and Assaf Razin, eds. (MIT Press, 1991); Scott Mcdonald, Sherman Robinson, and Karen Thierfelder, "Asian Growth and Trade Poles: India, China, and East and Southeast Asia," *World Development* (v.36/2, 2008); Jaime de Melo and Arvind Panagariya, eds., *New Dimensions in Regional Integration* (Cambridge University Press, 1994).

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Trade Liberalization

Trade liberalization refers to a significant reduction or removal of trade barriers that restrict a country's international trade. These trade barriers include tariffs, nontariff barriers (such as quotas and other government-imposed regulations), subsidies (such as those on production and exports), and other restrictive trade instruments.

In general, the liberalization of trade entails a greater integration with global markets. In the 1980s, many developing countries implemented trade liberalization as a part of a structural adjustment program offered by the International Monetary Fund (IMF) and the World Bank. Following the oil crisis of the 1970s, countries that had run high debt-to-gross domestic product (GDP) ratios and high current account deficits—such as Argentina, Brazil, Colombia, Mexico, and Turkey—were unable to continue their development strategies that relied heavily on foreign investments. Along with the fiscal restraints and currency devaluation, trade liberalization was an integral part of the structural adjustment programs. According to the IMF, developing countries now account for up to one-third of world trade, compared with a quarter in the early 1970s.

Trade liberalization is expected to increase a country's welfare through efficiency gains from specialization, exchange, higher competition, and access to a larger availability of intermediate and final goods. Moreover, Marc Melitz showed that once an industry is exposed to international trade, only the more productive firms will enter, while the least productive firms will be forced to exit. As a result, the overall productivity of the industry will increase. There is also a large literature on the impact of trade liberalization on GDP growth rates. In their seminal paper, Jeffrey Sachs and Andrew Warner examined the impact of postwar trade liberalization and showed that countries with open economies tend to grow faster than closed economies. On the other hand, Francisco Rodriguez and Dani Rodrik argued that liberal trade is no guarantee for faster growth rates, and emphasized the importance of other regulations, especially fiscal and monetary policies.

Protectionism

Almost every country has used protective trade barriers at some point in time. Following the Industrial Revolution of the late 1800s and early 1900s, today's developed nations, such as the United States, Canada, United Kingdom, and Germany, protected their manufacturing industries against global competition. Developing countries used protection as an industrialization strategy when their primary export markets slowed down because of the Great Depression in the 1930s. Argentina, Brazil, Mexico, and Chile have all used import restrictions to keep out competing imports for manufactured goods.

If trade liberalization is welfare improving, why do countries choose to implement protectionist policies? If a country has the potential advantages, such as lower labor costs and abundance of resources, to be competitive in the world market, but lacks experience or scale in production, then a temporary protection of that industry may improve the long-term welfare of the country. This oldest and most popular rationale of protectionism is also called the infant industry argument. The first-known reference to the argument was written by John Stuart Mill in 1848, who laid out two conditions under which it would be successful. First, the industry should have the potential to be able to eventually operate without protection. Second, the protection should be removed once the industry achieves competitiveness.

The first condition, as simple as it may sound, is quite difficult to accomplish. For example, the petrochemical industry of Colombia, the textile industry of Kenya, and the automobile industry of Malaysia were protected for a long time, without ever being competitive in the international arena. The difficulty in finding good candidates for protection rendered many economists skeptical about the infant industry argument. The second condition is also hard to implement. Once the protection is granted, a government may be unwilling to remove it. In many countries, the protected industries engage in heavy lobbying to ensure permanent protection from foreign competition. We see examples of this in the agricultural sectors of the developed nations, such as the United States and the European Union countries.

Trade Agreements

In the last two decades, instead of uniformly lowering trade barriers against all trading partners, countries increasingly applied differential treatment with certain trading partners. Preferential trade agreements (PTAs) are the most common way of economic integration, where members of the group lower the trade barriers on each other's products, but can maintain these barriers on nonmembers. These multilateral trade agreements fall under the complex multilateral rules and laws of the World Trade Organization (WTO), formerly known as the General Agreement on Tariffs and Trade (GATT). According to the WTO, there are 205 PTAs in force as of 2008, and about half of these PTAs came into existence after 1995. Some of the best-known PTAs are the European Free Trade Area (EFTA), the North American Free Trade Agreement (NAFTA), and the Southern Common Market (Mercosur).

In essence, the broad objective of the WTO is global trade liberalization. Will these regional agreements help or hinder further trade liberalization? In Jagdish Bhagwati's words, are these trade blocs "stumbling blocks" or "stepping blocks" for the global freeing of trade? Proponents of PTAs argue that integration allows member countries to specialize and trade according to their comparative advantage, increase their scale of production slowly, and give domestic industries a chance to adjust international competition. Others express doubt about the long-term benefits of PTAs. Countries that already benefit from trade blocs may be reluctant to lower trade barriers further if they do not expect significant returns. Also, these preference systems may distort production by diverting trade away from a potentially more efficient supplier outside the PTA and toward a less efficient supplier within the PTA.

Over the past two decades, the average growth of world trade was 6 percent a year, which is twice as much as the growth of world GDP. However, further liberalization of trade is needed in both industrialized and developing countries, especially in areas where developing countries have comparative advantage.

See Also: Bilateral Free Trade Agreement; General Agreement on Tariffs and Trade; International Monetary Fund; North American Free Trade Agreement; Subsidies; Tariff; Trade Barriers; Trade Bloc; World Bank, The; World Trade Organization.

Bibliography. Jen Baggs and James A. Brander, *Trade Liberalization, Profitability, and Financial Leverage* (Statistics Canada, Business and Labour Market Analysis Division, 2005); R. E. Baldwin and A. Venables, "Regional Economic Integration," *Handbook of International Economics* (1995); C. Bliss and M. Melitz, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica* (2003); Chantal Dupasquier and Patrick N. Osakwe, *Trade Regimes, Liberalization, and Macroeconomic Instability in Africa* (African Trade Policy Centre, Economic Commission for Africa, 2006); "Global Trade Liberalization and the Developing Countries," *IMF Issues Brief* (2001); Dawood Mamoon and S. Mansoob Murshed, "Unequal Skill Premiums and Trade Liberalization: Is Education the Missing Link?" *Economics Letters* (v.100/2, 2008); D. Ray, *Development Economics* (Princeton University Press, 1998); F. Rodriguez and D. Rodrik, *Trade Policy and Economic Growth: A Skeptic's Guide to Cross-National Evidence*, NBER Working Paper No. 7081 (National Bureau of Economic Research, 1999); J. Sachs and A. Warner, *Economic Reform and the Process of Global Integration*, Brookings Papers on Economic Activity (Brookings Institution, 1995); A. Subraminian, "WTO Promotes Trade, Strongly but Unevenly," *Journal of International Economics* (2007).

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Trademark Infringement

The basic function of a trademark is that it is a sign of origin: it indicates the source or the trade origin of the goods and services to which it is applied. In addition to this essential function, trademarks can also fulfill other roles. For example, a trademark can act as a guarantor of quality; it can also fulfill an advertising role. For example, trademarks can convey particular messages or have a prestige associated with them that influence consumers' perceptions of the products bearing these marks. However, these additional functions are secondary to the trademark's principal role, which is to indicate origin.

Trademark Infringement Laws

In many countries, laws governing the definition, protection, and rights attributable to trademark owners date back to the 19th century. For example, Britain's first trademark legislation was provided by the Trademarks (Registration) Act of 1875. Many countries

A Chinese Airport Customs House captured ink cartridges suspected of infringing on the trademark rights of EPSON.

that subsequently introduced their own trademark legislation adopted similar guidelines, particularly the requirement that the trademark should be "distinctive" to fulfill its essential function.

The Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which built upon the Paris Convention, defined a trademark as "Any sign, or combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark. Such signs, in particular words including personal names, letters, numerals, figurative elements and combinations of colors as well as any combination of such signs, shall be eligible for registration as trademarks. Where signs are not inherently capable of distinguishing the relevant goods or services, Members may make registrability depend on distinctiveness acquired through use. Members may require, as a condition of registration, that signs be visually perceptible."

Registration confers upon the owner exclusive rights to the trademark. Trademark infringement applies to registered trademarks and occurs when unauthorized use of another's mark is likely to cause confusion or to deceive as to the source or origin of the goods in question, although the precise emphasis differs between countries. For example, in the United States, the 1962 amendment to the Lanham Act of 1946 made more liberal the definition of infringement by removing the requirement that confusion, mistake, or deception of consumers as to the source or origin of the goods was required and stated that only the likelihood of confusion of an appreciable number of persons was necessary for infringement. It is often specified that for infringement to occur, the mark must be used in a commercial context, with a view to gaining economic advantage, and not as a private matter. The owner of a registered trademark is entitled to seek redress before the courts if there are grounds for believing that the mark has been infringed. The right to seek redress is provided for in the statutes governing the rights of registered trademark owners: for example, the Trademarks Act, 1994, in Britain.

Although the laws governing infringement stretch back to the 19th century, actions for infringement continue to be instigated by many of the world's most famous companies. For example, in the United States, Adidas versus Payless ShoeSource, which began in 2001 and ended in 2008; CISCO threatened to sue Apple for infringing its trademark iPhone in 2007. In Europe, actions for infringement have been launched involving Arsenal Football Club; Cadbury Schweppes; DaimlerChrysler AG; easyJet; Orange; and Waterford Wedgewood.

In many of these and similar cases, the action for infringement was brought by the plaintiff on the grounds that the goodwill associated with the trademark was being damaged. From a producers' perspective, trademarks can generate other advantages, all of which can be undermined by infringement. For example, reputation conveyed by a trademark can assist entry into new markets where high search costs would otherwise represent a significant barrier to entry; trademarks provide an endogenous mechanism for producers to maintain and uphold quality; trademarks help to reduce price and cross-price elasticity effects, thereby allowing their owners to achieve monopoly profits; finally, to the extent that they induce inertia in consumer preferences, trademarks facilitate the maintenance of monopoly power.

Global Trademark Agreements

It is common practice that marks are registered for a particular class, or classes, of goods. At the international level, the European Community, the United States, and over 50 other countries adhere to the Nice Agreement Concerning the International Classification of Goods and Services for the Purpose of the Registration of Marks. This agreement of 1957 has been through a number of revisions, most notably the eighth edition, which came into force in 2002. The Nice Agreement provides for the registration of marks in a number of classes of goods and services. In the former category, for example, there are classifications for bleaching preparations and other substances for laundry use; pharmaceutical and veterinary preparations; vehicles and apparatus for locomotion by land, air, or water. In the latter category, the eighth edition of the Nice Agreement has classifications for scientific and technological services, including design and development of computer hardware; services for providing food, drink, and temporary accommodation; and services for the protection of property and individuals.

The regulations governing trademark registration try to ensure that potential conflict between existing marks and marks put forward for registration are minimized. For example, the TRIPS Agreement stipulated that marks may be denied registration if they are simply reproductions or imitations of existing marks that are likely to cause confusion. Trademarks may also be refused registration if they are likely to deceive the public as to the quality or geographical origin of the goods. It is the normal practice that trademarks proposed for registration are published to allow owners of existing marks to raise objections. Trademark legislation in many countries permits the registration of the same or similar marks when there has been "honest concurrent use" of the two marks. Nonetheless, in deciding upon registration of concurrent marks, the courts will consider the following issues: the degree of likelihood of confusion from the use of the two marks; the duration of concurrent use; the evidence of confusion; and the honesty of the choice and subsequent use of the mark.

Classes of Infringement

Actions for infringement remain prevalent. Three broad classes of infringement exist. The first is the use of a mark that is identical to the registered trademark as applied to goods and services that are identical with those for which the mark is registered. A hypothetical example of this would be using an identical copy of the Coca-Cola trademark and applying it to a soft drink that was not manufactured by Coca-Cola. Second is the use of a mark that is similar to the registered trademark as applied to goods and services that are similar to those for which the mark is registered. A hypothetical example of this might occur when a mark that was identical in every respect to the Coca-Cola trademark—but colored blue instead of red—was applied to confectionary. Finally, use of a mark that is similar to the registered mark as applied to goods and services that may not be similar to those for which the mark is registered. A hypothetical example of this might occur when a mark that was similar to Coca-Cola's trademark was applied to jet engines.

Within these three broad classes of infringement, a number of issues arise that are specific to the precise nature of the infringement, for example, the extent to which use of a trademark by a third party is likely to cause confusion. For instance, suppose a trader uses another's trademark to sell merchandise. If the use of this mark by the trader is such that the impression is created that a material link exists in trade between the trader and the registered owner of the trademark, then the courts may decide that infringement has occurred. Much can depend on how the "average consumer" understands the way in which a particular trademark is used.

One illustration of this would be the case where a T-shirt had embossed on it a company's registered trademark. In such a case, the issue is whether the typical consumer believes there is a link between the trademark owner and the T-shirt, or whether use of the mark on the T-shirt is simply descriptive and therefore not designed to convey trade origin. Other examples of this type of infringement include use of a registered trademark by a third party on imported or exported goods, and/or use of such mark by a third party on advertising literature or trade material. Other infringement issues can arise from employment relationships. For example, unless prevented by contract, an employee may leave a reputable firm and set up a similar business of his/her own and advertise the former connection. However, this advertisement must not lead consumers to believe that the connection is still ongoing. Similar problems can arise when a business partnership folds and one of the partners claims the trademark of the partnership and its associated goodwill for an independent venture.

Seeking Redress for Infringement

Actions for infringement are not the only means by which the owner of a registered trademark can seek redress: an action for passing-off can also be instigated. Whereas an action for infringement has statutory provision by trademark legislation, actions for passing-off are based on common law to prevent unfair trading in its widest sense. The grounds for bringing a passing-off action are wider than trademark infringement itself, and give protection to all the means by which the goods of a particular trader are identified. However, passing-off actions are generally more complex and costly to enact than actions for infringement.

This is because registration provides prima facie evidence of the right to exclusive use of a mark, whereas in passing-off actions, there is a need to establish that false misrepresentation has occurred. Additional requirements for passing-off actions may also involve proof that goodwill has been damaged and that the characteristics of a particular product—for example, its labeling, wrapping, and the promotional activities associated with it—are understood by the public to be specifically distinctive of the plaintiff's goods or services; this last requirement may require witnesses to give evidence.

The key feature of trademarks that distinguishes them from other forms of intellectual property, such as copyright and patent, is that in theory, they have an eternal life. One consequence of this is that there will be an ongoing problem of trademark infringement for two reasons. First, as new products emerge, there will always be a risk that marks proposed for registration will "sail close to the wind," that is, they will be similar to registered marks. Second, as a matter of competition, traders have always been free to decide which marks they wish to use to distinguish their products from those of others. Nonetheless, it is for the courts, and the courts alone, to determine in each case whether infringement has occurred and the legal solutions to be adopted.

See Also: Agreement on Trade-Related Aspects of Intellectual Property Rights; Consumer Behavior; Intellectual Property Theft; Marketing.

Bibliography. Brian E. Banner, *Trademark Infringement Remedies* (The ABA Section of Intellectual Property Law, Bureau of National Affairs, 2006); Daniel J. Howard, Roger A. Kerin, and Charles Gengler, "The Effects of Brand Name Similarity on Brand Source Confusion: Implications for Trademark Infringement," *Journal of Public Policy & Marketing* (v.19/2, 2000); Madeline Johnson and Ursula Spilger, "Legal Considerations When Using Parodies in Advertising," *Journal of Advertising* (v.29/4, 2000); Siegrun D. Kane, *Kane on Trademark Law: A Practitioner's Guide* (Practising Law Institute, 2007); David Kitchin et al., eds., *Kerly's Law of Trademarks and Trade Names* (Thomson; Sweet & Maxwell, 2005); Leonard T. Nuara, *What Every Litigator Must Know About Intellectual Property* (Practising Law Institute, 2003); Daniel Jonathan Slottje, *Economic Damages in Intellectual Property: A Hands-on Guide to Litigation* (Wiley, 2006); Peter K. Yu, *Intellectual Property and Information Wealth: Issues and Practices in the Digital Age* (Praeger Publishers, 2007); Judith Lynne Zaichkowsky, *The Psychology behind Trademark Infringement and Counterfeiting* (Lawrence Erlbaum Associates, 2006).

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Trade Pact

A trade pact eliminates trade restrictions among its member countries while discriminating against third parties. Trade pacts can be constructed as preferential trade agreements (arrangements with a limited degree of tariff preferences) or as free trade areas (FTA) where tariffs on trade among member countries are removed, while tariffs for imports of nonmembers are not changed. Customs unions (CUs) additionally equalize the members' trade with nonmembers. Common markets (CMs), furthermore, allow for the free movement of factors. Countries in an economic union, moreover, harmonize their fiscal, monetary, and socioeconomic policies.

The World Trade Organization (WTO) permits trade pacts under General Agreement on Tariffs and Trade (GATT) article XXIV and General Agreement on Trade in Services (GATS) article V: Countries may conclude trade pacts if "substantially all the trade" in products between them is liberalized. Exceptions to article XXIV are possible for developing countries. The generalized system of preferences permits industrialized countries to grant developing countries one-way trade preferences, and the enabling clause allows developing countries to exchange any trade preference with each other to which they can agree.

History of Trade Pacts

Identifying the earliest trade pact is difficult: as long as nations have traded with each other, they have discriminated in favor of some neighbors. The Great Depression in 1929 led to a particularly strong disintegration of trade into regional clusters. Trade blocs were formed along the lines of colonial regimes and political affiliations. After the dismantling of existing trade regimes with World War II and the end of colonialism, states started to put effort into concluding trade agreements again at the end of the 1950s and in the 1960s. The most prominent example is the European Community established in 1957 under the Treaty of Rome. However, the number of trade pacts concluded during this period remained quite low and the scope of most of them was limited.

Often, they were aimed at extending import substitution regimes from the national to the regional level instead of focusing on market liberalization as, for instance, the Central American Common Market (CACM) or the Andean Group founded in 1960 and 1969, respectively. Since the 1980s and particularly in the 1990s, trade pacts have been rapidly proliferating. The WTO cites as many as 205 agreements (including enlargements of existing treaties) that were notified to it by May 2008. These trade pacts include both bilateral and plurilateral agreements as well as regional and cross-regional ones. Today, most countries and all WTO member countries belong to at least one trade pact.

The rise in number can be explained by several factors: The success of the European Union (EU) encouraged other country groupings to follow its example; the United States took a positive stance toward trade pacts when European countries started to show resistance toward U.S. proposals in multilateral forums. Moreover, developing countries changed their position toward trade, replacing their import substitution with market liberalization policies seeking agreements, not only with neighboring countries, but also their largest trading partners. The dissolution of the former Soviet Union led to new trade pacts among transition economies and between transition economies and other countries. Sluggish progress in multilateral trade negotiations during the Doha Round has accelerated growth of trade pacts.

Economic motivations for trade pacts differ: While some of them focus on intratrade flows as the EU or the North American Free Trade Agreement (NAFTA) do, other trade pacts aim at attracting third country trade and investment, for instance, the Southern Common Market (Mercosur/Mercosul). In Africa, obtaining external funds through development aid and private investment has played a major role for the conclusion of trade pacts. Further reasons lie in diplomatic reasoning and the desire of governments to obtain a stronger voice in multilateral negotiations. As the number of countries and hence interests involved in trade pacts is lower than in the case of trade negotiations on the global level, negotiations are less costly and more realistic targets can be achieved. Furthermore, it becomes easier to include other issues besides trade in the negotiations.

Thus, the late 1990s not only showed a shift in the number of the concluded agreements, but also in terms of contents. Formerly, measures governing trade played an important role in the design of trade pacts. Now, new issues such as investment, public procurement, competition, intellectual property, and so forth are increasingly covered.

Hence, trade pacts form part of the commercial policy of most countries, they become increasingly complex, they are increasingly concluded between developing and developed countries, and among developing countries, and they are also of cross-regional nature.

See Also: Association of Southeast Asian Nations; Bilateral Free Trade Agreement; Central American Common Market; Doha Round; European Union; Free Trade Area of the Americas; Free Trade Zone; General Agreement on Tariffs and Trade; Mercosur/Mercosul; North American Free Trade Agreement; Tariff; Trade Bloc; Trade Liberalization; Treaty of Rome; World Trade Organization.

Bibliography. Jo-Ann Crawford and Roberto V. Fiorentino, *The Changing Landscape of Regional Trade Agreements,* WTO Discussion Paper No.8 (World Trade Organization, 2005); Barry Eichengreen and Douglas Irwin, "Trade Blocs, Currency Blocs and the Reorientation of World Trade in the 1930s," *Journal of International Economics* (v.38/1, 1995); Roberto V. Fiorentino et al., *The Changing Landscape of Regional Trade Agreements—Update 2006,* WTO Discussion Paper No.12 (World Trade Organization, 2007); Jeffrey Frankel, *Regional Trading Blocs in the World Economic System* (Institute for International Economics, 1997); Arvind Panagariya, "Preferential Trade Liberalization: The Traditional Theory and New Developments," *Journal of Economic Literature* (v.38/2, 2000); World Trade Organization (WTO), *Regional Trade Agreements Notified to the GATT/WTO and in Force* (WTO, 2007).

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Trade Sanctions

The term *trade sanctions* refers to actions by which governments try to fulfill political or economic goals by using international trade as a policy instrument. Some other terms such as *trade embargoes, boycotts*, and *economic sanctions* are often used interchangeably and loosely to describe similar actions.

Sanctions are restrictions or policies directed very specifically at one country, or a group of countries, that attempt to restrict or even completely prevent trade or other economic interactions with that country. Restrictions may take the form of duties on imports from the sanctioned country that raise the cost of imports and may render that country uncompetitive, or they may take the form of complete ban on imports. Besides restrictions on imports, sanctions can be imposed on exports to the country and or on capital flows and investments between the two countries. In more extreme cases other forms of restrictions, for example, preventing a country from having economic interactions with third countries, can be used to achieve political goals. Sanctions may sometimes be imposed against a specific product such as arms or oil.

The purpose of imposing trade sanctions is to force the leaders of the sanctioned country to conform to the will of the sanction-imposing countries. Sanctions are seen as instruments that will impose economic costs on the targeted country and compel its ruling elite to bring about the desired changes. The most important sought-after change has been to bring about democratization of the regimes in the target countries. Trade sanctions are also imposed in response to a country's aggression against its neighbor(s). Other reasons for imposition of sanctions include nuclear proliferation, civil wars, violations of human rights, military coups, inability to control narcotics trade and distribution within the country, and support for international terrorism. It has also been argued that trade sanctions are sometimes imposed to serve the interests of particular interest groups within the sanctions-imposing countries that may wish to restrict imports into the country. International law permits use of sanctions to achieve certain goals because they do not involve the use of armed forces. Sanctions may be imposed by one country, or a number of countries may take the action together. Sanctions may be imposed under the aegis of an international body, such as the United Nations (UN), by an agreement between countries, or unilaterally by one country.

While economic warfare through sanctions is not a new idea, use of sanctions has increased during the past 50 years. According to one estimate, there were 62 acts of sanctions by the United States or the UN during the 1990s. Three examples of trade or economic sanctions during the past few decades help illustrate how trade sanctions work. The United States imposed trade and economic sanctions against Cuba starting in 1960 with the aim of bringing down the avidly anti-American regime led by Fidel Castro. Many countries joined together under the aegis of the UN to impose sanctions against the apartheid regime in South Africa in 1986. The UN was also used by some countries to impose trade sanctions against Iraq in 1990 in response to that country's invasion of Kuwait. These three examples highlight many aspects of trade sanctions as to their reasons, extent of the restrictions imposed, their effectiveness, and their consequences.

U.S. Sanctions Against Cuba

Treatment of Cuba by the U.S. government is a good example of the range of activities that encompass trade and economic sanctions. The U.S. government first imposed embargo on arms shipments to Cuba in 1958, due to political unrest in the country. These export restrictions were supplemented with restrictions on imports of Cuban sugar in 1960, after the 1959 revolution in which a U.S.-supported Cuban regime was overthrown by Marxist guerrillas. When Cuba aligned itself with the Soviet Union and confiscated U.S.-owned properties in Cuba, the scope of these sanctions was widened. Full economic sanctions were imposed after the Cuban Missile Crisis of October 1962. Under these sanctions, all goods made from or containing Cuban material (even if assembled in other countries) were embargoed, transportation of U.S. goods on ships owned by companies that did business with Cuba was banned, restrictions were imposed on U.S. citizens traveling to Cuba, and Cuban assets in the United States were frozen. At one point, the United States even suspended aid to countries that continued to trade with Cuba.

In 1996, the scope of the sanctions was expanded considerably when the Helms-Burton Act was passed. This Act placed restrictions on the U.S. operations of non-U.S. companies that were doing business with Cuba. Although the European Union (EU) initially challenged this law on the grounds of extraterritorial application of U.S. laws, it dropped its challenge as a result of a negotiated agreement with the U.S. government. Many of these sanctions have remained in place since their imposition, with some exceptions in years when the restrictions were not renewed by Congress. These sanctions have been imposed by the United States unilaterally, except for about a decade from 1964 when the Organization of American States (OAS) joined the United States in imposing sanctions on Cuba.

Cuban leader Fidel Castro (center) at the United Nations General Assembly in 1960, during the economic sanctions.

The declared objective of the trade and economic sanctions against Cuba had been to "bring democracy to Cuba" through the destabilization of the Castro regime. During the period just after the Missile Crisis, these sanctions were also justified on the grounds of national security. Any visitor to Cuba when Fidel Castro was still in power would have observed the effects of these sanctions. Cubans used American cars from the 1960s not out of their love for vintage cars, but because they were unable to acquire newer models.

While Cuba boasted the highest ratio of trained doctor to population of any developing country—even exporting its medical staff to other developing countries—the shortage of supplies was so severe that ordinary Cubans begged tourists to leave behind any medication they may have brought with them. The sanctions thus fulfilled their role as instruments for imposing economic costs on the target country. In its stated goal of replacing Castro, however, the sanctions were a complete failure. Castro remained in power until a ripe old age. Once the Soviets had withdrawn their missiles from Cuba, the national security argument for continuation of sanctions could not have been a serious one.

Sanctions Against South Africa

By 1980, most countries had begun to seriously oppose the minority-led South African government's policy of apartheid. In 1986, Canada on the behalf of Commonwealth countries, the European Economic Community, Japan, the United Kingdom, and the United States imposed trade sanctions against the South African regime. Each of these countries had its own list of sanctioned goods that could not be imported from or exported to South Africa. These lists included commodities, raw materials, textiles, weapons, oil, and computers. These trade sanctions were supplemented by restrictions on investments in and out of the country, as well as cultural, sports, and academic boycotts of the country.

The sanctions are credited with having contributed to changes that led to Nelson Mandela's election as the first black president of South Africa in 1994.

Sanctions Against Iraq

The UN imposed trade embargo against Iraq in 1990 after Iraq invaded the sovereign nation of Kuwait. This embargo was extended in 1991 to become what are now thought to be the most comprehensive sanctions in history. Trade in anything other than medicines and some food was prohibited by these sanctions. While some attempts were made to negotiate minor changes to the extent of sanctions, neither the Iraqi nor the U.S. (the driving force behind the sanctions, with some opposition from Russia and France) governments were willing to compromise. Saddam Hussein believed that the sanctions could not last, and the U.S. government was convinced that he would use any opportunity to rebuild his stock of weapons of mass destruction.

An "oil-for-food" (OFF) program was operationalized at the end of 1996, which allowed imports of food under stringent conditions. Before the implementation of this OFF program, Iraq's external trade had come almost to a complete halt. About $4.5 billion of Iraq's assets were frozen and the country had defaulted on all its foreign obligations. The country could not repair its damaged oil facilities and was unable to produce sufficient oil to reach its quotas permitted under the OFF program in some years.

The stated aim of the sanctions was to make life so uncomfortable for the Iraqi people that they would force the removal of Saddam Hussein from power, which would prevent him from developing weapons of mass destruction. Clearly, the sanctions failed in achieving the goal of change of leadership. They did succeed in achieving the second goal. The cost, however, has been the suffering of a civilian population that became pawns in the battle between Saddam Hussein and the Western powers.

Iraq had boasted one of highest human development index rankings in the Middle East before 1990. After the Gulf War of 1991, it ranked below most of the countries of the region. Sanctions were also blamed for higher death rates of infants in Iraq after the war. Although the number of deaths attributable to sanctions is widely disputed, both in terms of the number of deaths, and the attribution of those deaths to various reasons, high infant mortality rates became the cause célèbre for the battle between those in favor and those against the sanctions.

Do Sanctions Succeed?

The debate on whether trade sanctions are successful is unsettled. In most cases, sanctions manage to impose at least some economic costs on the sanctioned country. One study has found that the gross domestic product (GDP) in the sanctioned countries decreased by an average of about 3.3 percent in cases where the sanctions were successful. Sanctions, however, also impose costs on the sanctioning country. Cuban sanctions, by one estimate, have cost the United States lost exports of about $7 billion. These costs may alienate business interests within the sanctioning country or in the third country, and may weaken the force with which the sanctions are implemented. U.S. sanctions against the Soviet Union's construction of a gas pipeline were resisted by European governments who saw their own firms suffering from the embargoes.

Sanctions may lead other countries to come to the aid of a sanctioned country, when other parts of the world do not agree fully with the reasons for the sanctions. This has been especially true when sanctions are tied up in ideological battles. U.S. imposition of sanctions against Cuban sugar contributed to the strengthening of ties between Cuba and the Soviet Union.

Sometimes, sanctions do not work because they create their own antidote. Regimes in sanctioned countries often manipulate the impact of sanctions to their own interests. It has been argued that Fidel Castro remained in power for as long as he did precisely because he was able to unite the population behind his policies with a call to fight against the "oppressive measures of imperialists." When Britain and the UN had imposed sanctions against the white minority regime of Ian Smith in Rhodesia, the mostly white business community was manipulated by Smith to rally behind his government, even though that community had previously believed that a (black) majority rule was inevitable. Similarly, Saddam Hussein used the sanctions to his own ends by creating an external enemy. Through his control of the supply of whatever goods and food remained in the country, he managed to consolidate his power by limiting access to these supplies to faithful allies.

Autocratic regimes seem to be more resistant to compromises under sanctions than democratically elected government. In general, sanctions seem to work when forceful and quick actions are taken rather than when "screws are tightened slowly."

See Also: Barriers to Entry; Blocked Funds; Latin America; South Africa; Trade War; World Trade Organization.

Bibliography. Steve Chan and A. Cooper Drury, *Sanctions as Economic Statecraft: Theory and Practice* (St. Martin's, 2000); Harald Grossmann and Jochen Michaelis, "Trade Sanctions and the Incidence of Child Labor," *Review of Development Economics* (v.11/1, 2007); Gary C. Hufbauer et al., *Economic Sanctions RECONSIDERED* (Pearson Institute for International Economics, 2007); International Business Publications, *U.S. Foreign Trade Sanctions Handbook* (International Business Publications USA, 2007); Casey B. Mulligan and Kevin K. Tsui, *Political Entry, Public Policies, and the Economy* (National Bureau of Economic Research, 2008); Meghan L. O'Sullivan, *Shrewd Sanctions: Statecraft and State Sponsors of Terrorism* (Brookings Institution Press, 2003); James A. Paul and Senwan Akhtar, "Sanctions: An Analysis," *Global Policy Forum,* www.globalpolicy.org (cited March 2009); Slavi T. Slavov, "Innocent or Not-so-innocent Bystanders: Evidence From the Gravity Model of International Trade About the Effects of UN Sanctions on Neighbour Countries," *World Economy* (v.30/11, 2007); Michael C. Soussan, *Backstabbing for Beginners: A Crash Course in International Diplomacy* (Nation, 2008); United States Government Accountability Office, *Iran Sanctions: Impact Good or Bad?* (Nova Science Publishers, 2008).

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Trades Union Congress

The Trades Union Congress (TUC) is the coordinating organization of British trade unions. Founded in 1868, today the majority of independent British trade unions (59 in 2008) are affiliated with it and its authority largely stems from the fact that unlike in many other countries, it is the sole national interunion forum. Essentially, the TUC's main role is as a pressure group campaigning for a fair deal at work and exerting influence on the British government to pursue policies in line with the interests of workers generally, not just those of trade unions and their members.

The Role of the TUC

To this end, the TUC lobbies the government on draft employment legislation, meeting ministers privately, and responding publicly, orally and in writing, to government consultation documents. The TUC also seeks to exert pressure on the government indirectly through representation on government-funded bodies, such as the Health and Safety Commission, the Low Pay Commission, and the Advisory, Conciliation and Arbitration Service. In addition, it tries to influence members of Parliament—whatever their political persuasion—and members of the Welsh Assembly, and to build alliances with other voluntary pressure groups. The TUC also reaches out to the public through the Internet, telephone hotlines, and through the media. One example is its "Bad Bosses Hotline," which also generated media coverage.

At the same time as acting as a pressure group, the TUC has sought to act as a social partner with employers, in line with the European Union (EU) model. Accordingly, it has dealings with the Confederation of British Industry (CBI)—the employers' confederation—to try to agree on a common approach to employment matters—for instance, on age discrimination and consultation at the workplace.

The TUC's other roles include regulating and supporting trade unions and representing British trade unions abroad. In the case of the former, it carries out research on employment-related issues, helps unions avoid disputes with each other, and runs an extensive education and training program for union representatives. This program includes both general courses for union representatives and also specialist courses for union representatives with particular responsibilities, for instance, health and safety representatives, pension scheme trustees, and equality representatives. The TUC also runs what it calls an Organising Academy to provide training in union recruitment.

As to its role of representing British unions abroad, the TUC builds links with other trade union bodies worldwide and represents British workers on international bodies in the EU and at the United Nations (UN) employment body, the International Labour Organization (ILO).

The TUC has only modest authority over its member unions and thus develops and implements policy with their cooperation. Accordingly, it has a complex system of democratic control. The policy-making body of the TUC is the annual Congress or conference to which affiliated unions send delegates (the larger the union, the more delegates it can send), and at which motions (resolutions for debate) are discussed and form the basis for the work of the TUC during the following year. Between Congresses, however, responsibility lies with the 56-person General Council, which meets every two months, and on which the larger unions are automatically represented, with the smaller unions balloting for places. The General Council then elects a president for the year and a small (26-person) Executive Committee to implement policy, manage the TUC's financial affairs, and deal with any urgent business. The General Council also sets up industry forums and task groups to deal with special issues, such as learning and skills. In addition, there are permanent TUC committees, like the Women's Committee, the Young Members' Forum, and the Disability Committee.

The TUC has its own civil service— a cadre of officials employed by the TUC—at the apex of which is the general secretary, who often acts as the leader and spokesperson of TUC delegations. These officials include those in eight locations in England, Wales, and Scotland. In addition, Scotland has its own, completely separate, Scottish TUC, whose role is focused on purely Scottish employment matters. Furthermore, at a local level, there are Trade Union Councils. These are registered with the TUC and are comprised of representatives appointed by trade union branches that have members working or living in a locality.

In recent years, the TUC's actions have not been marked with success. Despite its Organising Academy, the TUC has not reversed the decline in trade union membership. Despite its campaigning, the TUC does not enjoy more political influence than employers. Moreover, there is tension in the TUC: tension between its affiliated unions, tension in its relationships with political parties, and tension between the TUC's various roles, such as its role as a social partner with employers and its campaigns against bad bosses. Nevertheless, its longevity suggests that it will continue to manage such tension, rather than being overwhelmed by them.

See Also: Employer–Employee Relationships; European Union; Labor Standards; Social Pact; United Kingdom.

Bibliography. Daniel F. Calhoun, *The United Front!: The TUC and the Russians, 1923–1928* (Cambridge University Press, 2008); Great Britain Department for Business, Enterprise and Regulatory Reform, *It's Time to Talk Training: How to Develop a Dialogue on Skills at the Workplace: Guidance on Good Practice from the CBI, TUC, BERR and DIUS* (Department for Business Enterprise & Regulatory Reform, 2008); E. Heery, "The Relaunch of the Trades Union Congress," *British Journal of Industrial Relations* (1998); J. McIlroy, "The New Politics of Pressure—the Trades Union Congress and New Labour in Government," *Industrial Relations Journal* (2000); Trades Union Congress, *Private Equity: The TUC Perspective* (Trades Union Congress, 2007); Trades Union Congress, *TUC Disputes, Principles and Procedures* (Trade Union Congress, 2007); Trades Union Congress, www.tuc.org.uk (cited March 2009); Janet Williamson, "A Trade Union Congress Perspective on the Company Law Review and Corporate Governance Reform," *British Journal of Industrial Relations* (v.41/3, 2003).

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Trade War

Most economists and international policy makers argue that free trade and open international markets are the keys to global economic growth and wellbeing. The mutual reduction of protection expands the division of labor and the volume of trade, which increases national income. Economists and policy makers favor letting countries trade freely with few trade barriers. But although free trade seems to bring net gains for both nations and the world, sometimes a trade war begins.

A trade war refers to two or more nations creating trade barriers, such as tariffs, state subsidies, or import quotas, on each other to restrict international trade. A trade war can also be defined as an international conflict, which begins when one country (or group of countries) wants to hurt another country (or countries) with the help of trade policy measures. A country seeking to improve its terms of trade may provoke retaliatory behavior from other trading partners, making all parties concerned worse off. So, at the heart of any trade war is the belief that changes in trade arrangements can have huge impacts on domestic economies, on labor markets, and on social well-being.

World Trade

Since the mid-1980s, there has been a dramatic increase in regional trade agreements (RTAs), some involving several parties and others purely bilateral in nature. Regional integration structures vary from "free trade areas," in which members remove internal trade barriers among themselves but permit members to retain independent external tariff policies with the outside world, to "customs unions," in which members again remove all barriers to trade among themselves and also adopt a common set of external barriers. These two types of economic blocs are simply trade blocs and an important move toward free trade.

The formation of the European Union's (EU's) customs union is the first major modern trade bloc. The North America Free Trade Agreement (NAFTA), Mercosur/Mercosul, and the Asia Pacific Economic Cooperation (APEC) forum set up by countries in the Far East are other good examples of economic trade liberalization. This trade bloc revolution has raised the importance of trade discrimination and international trade wars.

At the same time, during the last few years, world trade has been facing higher growth rates. Emerging east Asian countries have followed an export-led development strategy that has negatively affected the U.S. and EU trade deficit. The more immediate threat to trade from trade deficit is the ammunition it has provided for increasing trade protectionism, which leads to trade wars. When a country is facing a trade deficit, it can either choose a free trade policy or impose a tariff on imports, which raises its own real income. When a country imposes a tariff on imports, foreign producers need to fully pass it on to domestic consumers, increasing product prices and becoming less competitive. This predatory behavior by one of the trading partners induces retaliation by the other, and it can end up in a trade war. Cooperation, in the form of trade agreements, offers a good solution to this problem, mainly if trade agreements are effectively enforceable. This is what the World Trade Organization (WTO) tries to do.

Changes in government, laws, or practices that protect or promote domestic or regional commercial interests at the expense of foreign interests are at the heart of most international trade conflicts. After World War II, the world's community of trading nations negotiated trade rules, which are now entrusted to the WTO. The WTO's procedure for resolving trade quarrels under the Dispute Settlement Understanding is vital for enforcing the rules, and therefore ensures that trade flows smoothly. Broadly, a country with a complaint requests a consultation, and, if the dispute is not resolved, the complaining country may request the establishment of a panel.

After the panel issues its decision, both disputing parties have the right to appeal. After the conclusion of all such proceedings, the Dispute Settlement Body (representatives of all the WTO members) adopts the report, unless it decides by consensus to reject it. Confidence in the system is borne out by the number of cases brought to the WTO—more than 300 cases since 1995 compared to the 300 disputes dealt with during the entire life (1947–94) of General Agreement on Tariffs and Trade (GATT). Nontariff barriers are the most frequent targets of complaint, followed closely by a large number of cases dealing with unfair trade practices or the measures taken to offset them (state subsidies, antidumping/countervailing duties).

The European Union and the United States

Two of the major players in world trade are the EU and the United States. Both support free trade, but they often accuse each other of pursuing protectionist policies or giving unfair advantages to its own exporters through state subsidies or safeguard actions, as in the case of imposition of tariffs on steel imports by the U.S. government. In the case of steel, the U.S. government alleged that many EU companies benefitted from earlier state subsidies and engaged in dumping steel products. Another famous trade dispute was the bananas case, where the EU was found guilty of discrimination against banana imports by U.S. companies in Latin America in 1997. The United States unilaterally applied a set of sanctions on a variety of EU goods because of the preferential banana trade agreement. The United States claimed that it was protecting its domestic interests, while the EU claimed that the United States was manipulating WTO rules to implement sanctions against countries trading with regimes it did not like. The bananas case presents two different long-standing questions about trading: whether nations can impose their will whenever they wish, and how free is the free market. Other trade conflicts between the United States and the EU stem from domestic regulatory policies. Conflicts over hormone-treated beef, bioengineered food products, and protection of the audiovisual sector, for example, are rooted in different U.S.-EU regulatory approaches, as well as social preferences.

From a political economy point of view, governments care about the political consequences of their trade policy, protecting the firms that provide the funds for their election and the individuals who vote for them. Within this context, trade wars can be seen as a direct outcome of domestic interests. So, most major economists would conclude that the story behind trade wars is one of protectionism—pure and simple.

See Also: Asia Pacific Economic Cooperation; Free Trade; Mercosur/Mercosul; Nontariff Barrier; North America Free Trade Agreement; Tariff; Trade Barriers; Trade Liberalization; World Trade Organization.

Bibliography. K. Bagwell and R. W. Staiger, *The Economics of the World Trading System* (MIT Press, 2002); Frank Cain, *Economic Statecraft during the Cold War: European Responses to the US Trade Embargo* (Routledge, 2007); John A. C. Conybeare, *Trade Wars: The Theory and Practice of International Commercial Rivalry* (Columbia University Press, 1987); Ronald Findlay and Kevin H. O'Rourke, *Power and Plenty: Trade, War, and the World Economy in the Second Millennium* (Princeton University Press, 2007); John W. Head, *Losing the Global Development War: A Contemporary Critique of the IMF, the World Bank, and the WTO* (Martinus Nijhoff Publishers, 2008); Marie Thorsten, *Superhumanizing Japan: Imaginaries of the US-Japan Trade War* (Routledge, 2009); Ka Zeng, *Trade Threats, Trade Wars: Bargaining, Retaliation, & American Coercive Diplomacy* (University of Michigan Press, 2004); Daowei Zhang, *The Softwood Lumber War: Politics, Economics, and the Long U.S.-Canada Trade Dispute* (Resources for the Future, 2007).

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Trading Volume

Trading volume is the number of shares transacted in a security over a given period of time, usually a day. It is essentially the quantity of the security traded in the market and can be calculated for stocks, futures, options, bonds, foreign exchange, and commodities. As there is a seller for every buyer, one way to think of trading volume, at least for stock, is as half the number of shares transacted: if person A sells 100 shares to person B, the volume is 100 shares. However, some markets measure volume differently. For example, the NASDAQ counts each side of the trade and so the volume would be 200 shares. We can also sum the volume of individual securities in a market and obtain a measure of overall market volume. The latter provides a useful measure of quantity analogous to a market price index.

An Important Indicator

Along with the price of a security, volume represents one of the most basic and important indicators of activity, for the security itself and the market as a whole. The trading volume gives investors a sense of the amount of activity in the security or the market during the day, and may provide signals to their future course. For example, increasing volume can be an indication that prices in the market will increase in the future. Simultaneous increases in prices and volume are an even more bullish (positive or buy) signal. On the other hand, decreasing volume is an indication that prices may fall in the future. A combination of falling prices and volume is then a bearish (negative or sell) signal for future prices.

Volume in financial markets tends to grow as the number of market participants (buyers and sellers) increases with the size of the market (for stocks, measured in terms of capitalization). For example, the New York Stock Exchange (NYSE) had a daily share volume of 1 million in 1886 and this had grown to 10 million in 1929, 500 million in 1987, and 5 billion in 2007: the highest volume day was 5,799,792,281 shares on August 16, 2007. Large trading volumes also tend to coincide with daily market record highs and lows. This need not be the case for an individual security: if the liquidity of a security is low, very large changes in price require only small volumes. Volume is also used to measure the share of trades conducted in different markets. For example, NYSE-listed securities are traded on the NYSE and in other markets (like NASDAQ), and their respective shares of trading volume can be used to identify which of these markets are relatively more important.

Technical Analysis of Volume

One area where volume is enthusiastically used is in the area of technical analysis. This is a financial markets technique that claims the ability to forecast the future direction of security prices through the study of past market data, including price and volume. Technical analysis considers only the actual price behavior of the market or security, on the assumption that the price reflects all relevant factors before an investor becomes aware of these through other channels. This contradicts the weak form of the efficient market hypothesis that states that current market prices incorporate all historical market information.

Technical analysts employ a variety of models and trading rules based on volume and these include on-balance volume, price and volume trend, and money flow. On-balance (or cumulative) volume relates the price and volume in the stock market. Volume on an up day (where the closing price is higher than the previous close) is added and volume on a down day is subtracted. This can be applied to individual stocks based upon their daily up or down close, or the market as a whole using breadth of market data. Generally, on-balance volume is used to confirm price moves. The idea is that volume is higher on days where the price move is in the dominant direction, for example, in a strong uptrend there is more volume on up days than down days. Accordingly, when prices increase, on-balance volume should also increase.

Price and Volume Trend

Price and volume trend is another indicator used to relate price and volume in the stock market. It is based on a running total volume, with volume added according to the percentage change in closing price over the previous close. Price and volume trend is interpreted such that volume is higher on days with a price move in the dominant direction, for example, in a strong uptrend there is more volume on up days than on down days. So when prices increase, price and volume trend should also increase, otherwise a weak market movement is indicated.

Money flow in technical analysis is the typical price (high price plus low price plus closing price divided by three) multiplied by volume: this provides an approximation of the dollar value of the day's trading. These are divided into positive (negative) money flows where the typical price is higher (lower) than the previous day's price and then totaled over a given period: unchanged prices are discarded. Dividing positive money flow (enthusiastic buyers) by negative money flow (enthusiastic sellers) forms a money ratio, while adding one to the money ratio, dividing it into 100 and subtracting it from 100 forms the money flow index. Generally, high (low) values of the money flow index indicate a stock is overbought (oversold).

More recently, volume has been used in statistical models that attempt to explain the level and volatility of price movements. Here, volume serves as a measure of information flow that affects the price of the security. The findings generally indicate that volume is a good proxy of information flow in the market.

See Also: Foreign Exchange Market; Liquidity (or Market Liquidity); Markets; Stock Exchanges.

Bibliography. Mary Buffett and David Clark, *Warren Buffet and the Interpretation of Financial Statements: The Search for the Company with a Durable Competitive Edge* (Simon & Schuster, 2008); John L. Knight and S. Satchell, *Forecasting Volatility in the Financial Markets* (Butterworth-Heinemann, 2007); Owen Lamont and Andrea Frazzini, *The Earnings Announcement Premium and Trading Volume* (National Bureau of Economic Research, 2007); Alexander von Nandelstadh, *Analysts' Accuracy of Estimation and the Relative Trading Volume* (Swedish School of Economics and Business Administration, 2002); Willain Pascal, *Value in Time: Better Trading through Effective Volume* (Wiley, 2008); Mei Qiu and John Pinfold, *Price and Trading Volume Reactions to Index Constitution Changes: The Australian Evidence* (Massey University, 2005); Ronald D. Ripple and Imad A. Moosa, *The Effect of Maturity, Trading Volume, and Open Interest on Crude Oil Futures Price Ranged-Based Volatility* (Department of Economics, Macquarie University, 2007); Priit Sander, *Tax Heterogeneity and Trading Volume around the Ex-Dividend Day: Estonian Evidence* (Tartu University Press, 2007).

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Training

Training provides the skills, knowledge, and proficiency required to perform a task or excel in a position. Quite often, especially in positions expected to lead to a career, the business world requires training of its employees that goes beyond what was provided in school or college, or that updates the knowledge gained there. Sometimes this is required in order to keep up with developments in the field, or developments in the software applications, relevant legal codes, industry conditions, or other external changes that have transpired since the end of the employee's degree program.

On or Off the Job Training

Training can be on the job or off the job. On the job training is conducted in the workplace, usually in a "live" situation—this is the modern descendant of old systems of apprenticeship, in other words, and is used in modern systems of same. Someone moving to a new position may be designated a trainee for a certain period of time, shadowed by or shadowing an employee who has already been through the training, in order to perform the necessary tasks and have immediate feedback and the opportunity to ask questions. When possible and practical, this is often the most effective form of training. On a wide scale, it is also resource-intensive, consuming company time and extra labor, and it isn't appropriate for all skills. Learning a new computer programming language, for instance—or a new spoken language, for that matter—is difficult to accomplish this way, as are more abstract skills like management philosophy, supply chain management, information systems, or a legal professional learning a new branch of law.

Off the job training is conducted off-site, with the trainee's efforts not contributing to the business's production during his training period. This is necessary for some forms of training, practical for others; in some cases the business may simply lack the resources to provide the training, while in others there may be some reason in the larger hierarchy of reasoning why off-site training is preferable. McDonald's managers, for instance, all receive training off-site from the same training facility, not because it would be too difficult to conduct on the job training, but because it is a way of ensuring consistency of performance across all franchises' locations.

Physical training is less common in the business world, but could encompass the calisthenics performed by employees at some factory jobs in Asia and Europe, or the stress reduction courses prescribed by companies from time to time.

Taylorism and Human Resources

Training is essentially the purview of the Human Resources (HR) departments. HR departments developed in Western businesses at the end of the Industrial Revolution, when Frederick Winslow Taylor updated the managerial and psychological aspects of conducting a business to reflect the technological upgrades that had occurred over the previous century. His *Principles of Scientific Management* (1911) was so influential—providing a foundation for discussions of the division of labor that assembly lines had made attractive—that approaches to management that depended on the analysis of business processes with an eye toward improving labor's productivity became known as Taylorism, even if they referenced nothing specific from his books. There have been a number of stages and fads in the study of management and business philosophy, but Taylor's ideas continue to resurface, shined up to reflect modern conceptions. On top of that, similar ideas were adopted in Japan and the Soviet Union; even the Soviet Union's central planning owes a significant debt to Taylorism.

Out of Taylorism came the human relations movement from the 1920s on, which refined scientific management by incorporating into it the aspects of psychology (then a young discipline) that had become part of social scientific consensus, and the recognition that workers were not interchangeable parts, but rather had to be considered in terms of psychological compatibility and the possibility of having a natural knack for one role more than another. Out of this same school of thought came the development of public school guidance counselors who help students find the future career that is "right for them," an idea that in Taylor's view would have been novel, or perhaps entirely foreign, and which in the 100 years since Taylor's writings has become inseparable from discussions of long-term career planning and the lives of employees.

The primary purpose of HR departments is to put human capital—workers—to its best use, with the understanding that this means not exploiting them, but rather finessing a situation so that their needs and the company's needs are best met, without being put into opposition. To that end, HR is key in the development of corporate culture, and emphasizes training in part because it helps employees stay invested in the good of the company, while finding the ideal position to put their skills and potential to use. Larger HR departments often include trainers and training facilitators, instead of or in addition to an apprentice-like approach. HR trainers may also focus on specific kinds of training, like leadership, diversity management, IT, standards compliance, sensitivity, and change management.

Change management focuses on managing people and institutions in transition, which can be positive (as a result of mergers, expansions, new business ventures, promotions) or negative (in the aftermath of downsizing or other negative restructuring). Many change management techniques borrow from the work of psychologist Elizabeth Kubler-Ross, whose landmark book *On Death and Dying* provided a framework for the stages of grief, which are arguably applicable not just to the death of a loved one but to any negative change in one's life, personal or professional. Change management trainers can act as much as counselors as skills trainers.

Continuation of Training

Continued training is sometimes required by a particular profession. For instance, accountants, lawyers, doctors and nurses, and teachers are all required to take particular development and training courses periodically over the course of their careers, in order to stay current; no one wants a pediatrician who is not aware of the rubella vaccine, or an accountant who isn't current with tax code. While market forces alone should be sufficient to prevent either of those things from happening, these industries have been self-regulating long enough to put such requirements in place, for the sake of the reputation of the accreditation their governing bodies provide.

Such requirements are often a matter of state law, but were originally sponsored and supported by professional associations such as the National Education Association (NEA) and the American Medical Association (AMA). Specific training requirements vary from state to state, both in frequency and in content; some states have specific courses for teachers of various grade levels to attend during the summer or spring breaks, while others require a certain number of credits from a particular course list. Other industries may have mandatory periodic training required by licensing agencies or professional associations in order to retain membership—although such membership may not be necessary to legally operate in the field.

Professional development courses may include semester-long courses at accredited universities, or may take the form of a weekend workshop, with a good deal of variety in between. Some are purely technical in focus, covering new developments in software, procedure, and other objective, empirical material. Others may be discussion-oriented, focused on the underlying philosophies of the profession, such as managerial philosophies or medical ethics. Recent developments in the industry may be the subject of discussion, or the possible ramifications of events on the horizon.

See Also: Diversity; International Training; Leadership; Management Education; Motivation; Recruitment.

Bibliography. Fred E. Fielder, *A Theory of Leadership Effectiveness* (McGraw-Hill, 1967); Ronald Heifetz, *Leadership Without Easy Answers* (Harvard University Press, 1994); John K. Hemphill, *Situational Factors in Leadership* (Ohio State University, 1949); Paul Hersey and Ken Blanchard, *Management of Organizational Behavior: Leading Human Resources* (Pearson Education, 2008); Elwood F. Holton II and James W. Trott, Jr., "Trends Toward a Closer Integration of Vocational Education and Human Resources Development," *Journal of Vocational and Technical Education* (v.12/2, 1996); J. B. Miner, *Organization Behavior: Behavior 1: Essential Theories of Motivation and Leadership* (M. E. Sharpe, 2005); Scott Page, *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies* (Princeton University Press, 2007).

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Trans-European Networks

The Trans-European Networks (TENs) are large infrastructure networks for transport, energy, and telecommunications connecting the 27 member states within the European Union (EU). These networks contribute to the further development of the internal market by enabling the free movement of goods and persons, integrating the EU economically and socially, and supporting less favored areas within member states. Improving the interconnection and interoperability of the EU's infrastructure is a major element in enhancing the EU's competiveness, thereby creating economic growth, while simultaneously ensuring development within the Union is balanced and sustainable.

TENs' origins are found in the 1992 Maastricht Treaty, which brought forth the agreement that the Union's integration would require the development of trans-European networks. In 1994, the European Council identified 14 priority projects for network development, which were approved in 1996 by the European Parliament and Council of the European Union. In 2004, additional projects were added to the list based on the European Action for Growth initiative.

The funding of TENs projects is specific to each project and may be based on European Structural and Cohesion Funds, loans from the European Investment Bank, loan guarantees from the European Investment Fund, or other financing options.

Transport

The EU considers Trans-European Transport Networks (TEN-T) to be essential in ensuring the free movement of passengers and goods among member states. The network consists of the Union's motorways, railways, waterways, ports, and airports that need to be linked within the 27 member states and other European countries. The goal of European policy is to develop an integrated Europe-wide transportation infrastructure that is both efficient and sustainable. In the absence of TEN-T, the increase in the Union's transportation demands would be challenging to manage and would have a negative impact on economic growth. Through more effective use of rail and sea transport, the networks will also enable a reduction in vehicle emissions and congestion on roads, thereby enabling the Union to balance growth and the environment simultaneously.

Construction until 2020 on the network will involve not only complementing existing transportation networks by building the last missing motorways or railways to create a cross-border network, but will also significantly upgrade existing motorways, railways, and waterways. One of the TEN-T projects includes a high-speed railway for passenger travel between Paris, Brussels, Cologne, Amsterdam, and London, which connects five member states. Another TEN-T project entails creating a network of sea motorways that will enable a more effective use of sea routes, better connect peripheral and island regions to member states, and reduce road congestion. Various sea motorway projects have been identified to achieve this goal, such as the Baltic Sea motorway linking the member states in this region with member states in central and western Europe.

Energy

The EU's energy policy considers the Trans-European Energy Networks (TEN-E) to be an important priority in developing an internal energy market and creating a diversified and secure energy supply for member states. Furthermore, the Union's policy objectives include improving competitiveness in gas and electricity industries, and balancing the energy needs of the Union with protecting the environment. As a part of protecting the environment and securing supply, the Union's energy strategy is to pursue renewable energy sources and focus on issues with energy efficiency. Additionally, this strategy entails improving the energy network between member states and other European partner countries.

The EU has developed TEN-E priorities for both electricity and gas. The priorities for electricity are focused around improving connections with isolated networks, between member states, within member states, and with third countries. The priorities for natural gas are focused around introducing natural gas into member states, or regions within member states, that are not currently supplied, establishing connections with gas networks that are isolated, and increasing capacities for transport, receipt, and storage.

Telecom

The Trans-European Telecom Network (eTEN) is focused on implementing innovative e-services of social or economic interest to member states. Such services are a priority for the EU for various reasons. First, the Union wants to provide all citizens with the opportunity to participate in the information society so as to reduce the risk of leaving a portion of society behind. Next, the Union wants to promote economic growth, employment, and social cohesion. The eTEN program is based on developing public services that provide all member state citizens with the opportunity to benefit from the information society. There are seven initiatives in support of this program. In the area of government, the objective is to provide online services that are inclusive and allow citizens, businesses, and government sectors within member states to interact with each other.

In the area of healthcare, the objective is to focus on quality, cost, and access to healthcare, and the development of information networks to support these objectives. In the area of social participation, the objective is to develop services that overcome socioeconomic, geographical, or cultural barriers that may disadvantage citizens. In the area of education, the objective is to improve knowledge transfer and quality of learning for all member states. In the area of small and medium-sized enterprises, the objective is to increase their competitiveness by providing access to e-services. Finally, in the area of trust and security, the objective is to facilitate involvement of citizens, businesses, and other organizations in the information society by ensuring network infrastructures and services are secure.

See Also: Common Market; European Union; Infrastructure; Maastricht Treaty; Single Market.

Bibliography. Commission of the European Communities, "Decision No. 1336/97/EC of the European Parliament and of the Council of 17 June 1997 on a Series of Guidelines for Trans-European Telecommunications Networks," *Official Journal of the European Communities* (1997); Commission of the European Communities, "Decision No. 1376/2002/EC of the European Parliament and of the Council of 12 July 2002," *Official Journal of the European Communities* (2002); Commission of the European Communities, *Trans-European Networks* (Commission of the European Communities, 2008); Commission of the European Communities, *Trans-European Transport Network TEN-T Priority Axes and Projects 2005* (Commission of the European Communities, 2005); European Investment Bank, *EIB Financing of the Trans-European Networks* (European Investment Bank, 2006); Christian Studnicka, "Implementing the New Trans-European Network," *Alcatel Telecommunications Review* (v.2, 2004); Colin Turner, *Trans-European Networks: The Infrastructure for the Internal Market* (University of North London Press for London European Research Centre, 1994); Hein-Anton Van Der Heijden, "Multi-Level Environmentalism and the European Union: The Case of Trans-European Transport Networks," *International Journal of Urban and Regional Research* (v.30/1, 2006).

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Transfer Pricing

Transfer pricing is the price charged for goods or services that are exchanged among different organizational units of the same company. Transfer prices are used to allocate profit to company divisions. The price charged by the selling division becomes a cost to the buying division. Thus, a higher transfer price will result in more profit to the seller and less profit to the buyer. Transfer pricing might allow multinational corporations (MNCs) to reduce income tax worldwide, thereby increasing profit.

Companies set transfer prices so that divisions in low-tax countries report large profits, while those in high-tax countries report low profits. For example, assume a U.S.-based MNC has a division in France selling goods to a division in Ireland. Ireland then sells the goods to buyers outside the MNC. The tax rate in France is 35 percent, but the tax rate in Ireland is only 12 percent. The corporate goal is to set a low transfer price so that the France division reports close to zero taxable profit, thus paying little or no tax. As a result, Ireland division reports more profit and pays more tax. Nonetheless, the corporate entity generates savings on the difference in tax rates (35 percent minus 12 percent) for each dollar of profit shifted from the France division to the Ireland division.

Regulations and Standards

As world trade increases, more countries are implementing regulations to ensure they receive a fair share of taxable corporate profits. The universally acceptable approach for setting transfer prices is the "arms-length standard." This is a price that would have been reached by two independent parties trading in a free market. However, problems arise in applying this concept across country borders. Regulations and legal interpretations differ from country to country. A price acceptable to authorities on one side of a transaction may not be considered acceptable to those on the other side. Failure to comply with transfer pricing laws can result in significant penalties and fines. Even worse, a country may disallow a transfer price, thus forcing a change in a division's taxable profit. If the division on the other side of the transaction is not allowed to revise its price in unison, the same corporate profit can be taxed twice.

Transfer pricing regulations were established by the Internal Revenue Service (IRS) in the United States and the Organisation for Economic Co-operation and Development (OECD) for Europe. Most of the world has adopted some form of OECD regulations. The two sets of rules are essentially the same: both agree that transfer prices can be calculated by a number of acceptable alternative methods. All methods look at some element of comparability in the marketplace to determine an arm's-length transfer price. For example, one of these methods is called comparable uncontrollable price. It estimates transfer price by looking at prices charged by independent sellers of similar products. Another method, called cost plus, derives transfer price by using gross profit earned by independent sellers of similar products. It is up to the corporate entity to choose a method. The main criterion is that the method used should result in the most reliable means to estimate a price that would have been charged in a free-standing market.

After an MNC has selected a method and estimated an arms-length price, it must then determine whether its circumstances differ from those of the independent firm used for comparison. If differences do exist, then the transfer price will have to be adjusted accordingly. Factors to consider include product functionality, contract terms, risks, economic conditions, and differences in products. For example, an MNC division might be a new entrant to an existing market. An arm's-length price is estimated by looking at comparable prices from independent suppliers. However, outside suppliers normally require that purchase orders consist of larger quantities and longer contractual terms. Because the intracompany transaction provides more lenient terms, the arm's-length transfer price would be adjusted to allow for these differences.

The shared use of intellectual property between company divisions presents particularly difficult transfer pricing problems. Included are such intangible assets as patents, formulas, trademarks, and brand names, among others. It is difficult to determine a market value for intellectual property because such items tend to be unique in nature. It may also be difficult to separate the benefits of one type of intangible asset from others related to products being sold. For example, a division buys a brand name pharmaceutical drug from another division. It introduces the drug in a new geographic market and undertakes an intensive marketing effort. To determine a transfer price for the brand, the corporate entity would have to separate value of brand name from that of marketing. Despite difficulties in estimating value, this type of transaction is receiving increased attention worldwide by tax authorities.

An MNC has two primary ways to alleviate tax conflicts over its transfer prices. The first is to document all aspects of transfer pricing calculations to verify adherence to the arm's-length standard. The second is to enter into advance pricing agreements with tax authorities. Under this approach, an MNC creates a contract giving it assurance of compliance if it follows agreed-upon procedures for calculating transfer prices.

See Also: Corporate Income Tax; Intra-Firm Transfer; Multinational Corporation; Organisation for Economic Co-operation and Development; Subsidiary.

Bibliography. Andrew B. Bernard, J. Bradford Jensen, and Peter K. Schott, *Transfer Pricing by U.S. Based Multinational Firms* (National Bureau of Economic Research, 2006); Thomas A. Gresik and Petter Osmundesen, "Transfer Pricing in Vertically Integrated Industries," *International Tax and Public Finance* (v.15/3, 2008); Ashok Kumar, *Transfer Pricing, Multinationals, and Taxation: Concepts, Mechanisms, and Regulations* (New Century Publications, 2006); Marc M. Levey et al., *Transfer Pricing Rules and Compliance Handbook* (CCH, 2006); Victor H. Miesel et al., "International Transfer Pricing: Practical Solutions for Intercompany Pricing," *The International Tax Journal* (v.28/4, 2002); Toshio Miyatake and Robert H. Green, *Transfer Pricing and Intangibles* (Sdu Fiscale & Financiële Uitgevers, 2007); Joey W. Styron, "Transfer Pricing and Tax Planning," *The CPA Journal* (v.77/11, 2007); Thomas Tucha, *Fuzzy Transfer Pricing World on the Analysis of Transfer Pricing with Fuzzy Logic Techniques* (Indian Institute of Management, 2005); F. Villegas and J. Ouenniche, "A General Unconstrained Model for Transfer Pricing in Multinational Supply Chains," *European Journal of Operational Research* (v.187/3, 2008).

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Transition Economies

Transition economies are countries with economies in transition that abandoned state socialism and central planning and have been attempting a move to capitalism. The central process of economic transformation typically involves three fundamental, revolutionary, systemic changes, including liberalization, macroeconomic stabilization, and structural adjustment through commodification, marketization, privatization, and the reduction of the role of the state. Broader mechanisms of economic transition involve the incorporation of transition countries into the world economy as well as the establishment of cultural attitudes, political, legal, and societal institutions supportive of and conducive to the continuous accumulation of capital through profit and investment. The successful creation of a thoroughly new, capitalist mode of social and economic organization should herald the formal end of transition economies as a meaningful descriptor.

In general, 34 countries and areas have been identified as economies in transition. They spread from Germany to China, Estonia to Uzbekistan, across central and eastern Europe, Russia, Transcaucasia, and central, east, and southeast Asia. Somewhat similar to the emergence of markets in the developing world, the declared rationale behind the transition economies' drive to capitalism lies in the ultimate goal to achieve developmental catch-up with the industrialized nations of the West.

Transition: From Plan to Market

Prior to the start of gradual market-oriented reforms in China in 1978 and before the radical anticommunist revolutions in Eastern Europe of 1989–91, state socialism was the primary doctrine of economic development and modernization across Eurasia. The main features of state socialism as a society included a state-owned, centrally planned economy, administered and controlled by a dominant communist party. On the basis of the ideology of Marxism-Leninism and through the capacity of the state, the Communist Party sought to mobilize the population to build an industrial and classless society. Despite considerable achievements of state socialism in terms of industrialization, economic development, low income differentials, full employment, good education, and healthcare, by the 1980s, it had become clear that capitalism was proving to be more successful as a system of production and consumption on a global scale. State socialist countries had failed to catch up with the core of the capitalist world economy. In response, most of these economies rejected central planning and embarked on a transition to capitalism.

To build capitalism, the transition economies were provided with policy advice, reform guidance, and some monetary assistance by the Western donors and international financial institutions such as the International Monetary Fund (IMF), the World Bank, and the European Bank of Reconstruction and Development (EBRD). The structural adjustment program, which had previously been implemented in Latin America, was consequently redesigned in 1989 in a more comprehensive fashion to fit the task of building capitalism from scratch. Dubbed the "Washington consensus" because of the location of the IMF and the World Bank in the U.S. capital city, the radical all-out transition approach called for rapid price and trade liberalization, accompanied by strict macroeconomic stabilization; the privatization of state-owned enterprises; the liberalization of labor and capital markets; tough monetarist fiscal consolidation through ending subsidies and cutting public services; rapid deregulation; and creation and the immediate opening of markets to entry by newly-created private businesses and foreign transnational corporations.

Simultaneously, a wide range of other structural and institutional changes, such as destatization, the market-oriented reform of the social protection sector, the tax system, the legal system, accounting standards, and so forth, had to be initiated as well. These "shock therapy" measures became a general prescriptive mechanism to ensure the transition of postcommunist countries toward the economic model of the so-called free enterprise economy epitomized in the Anglo-American system of competitive capitalism and limited government involvement. The widely held belief at the time was that a rapid expansion in total output and a progression from a lower to a higher level of development, understood broadly as raising the living standards of individuals in those countries, would follow almost immediately after the government restrictions on people's commercial activities were removed.

The 1990s

Contrary to such popular expectations, however, the 1990s turned out to be a lost decade for most transition economies. The ensuing transitional recession was to last for six years on average across central and eastern Europe and the former Soviet Union, ranging from two years in Poland to 10 years in Moldova and Ukraine. In terms of its scale, the deepest slump in output was suffered by Bosnia and Herzegovina (with a decline of 88 percent), Georgia (minus 75 percent), Armenia (minus 69 percent), and Moldova (minus 68 percent). Only four countries (the Czech Republic, Uzbekistan, Poland, and Slovenia) managed somewhat milder recessions, losing 15–20 percent of gross domestic product (GDP), whereas the scale of depression in the other remaining economies in the region ranged between 30 and 60 percent.

It has been argued that because of the often substandard quality of Soviet bloc production, the real welfare-reducing impact of the transitional depression was lower than the official GDP figures seemed to indicate. Yet the collapse of production also meant the end of employment, and the resultant job losses were massive. Large proportions of the redundant labor force had to withdraw from economic activity altogether, either migrating abroad or relying on informal survival strategies at home. Unemployment levels reached double digits in most transition economies, peaking around 20 percent in relatively successful Poland and Slovakia, and rising above 40 percent in the areas affected by civil strife and political instability. All the evidence based upon the broader human development indicators, including life expectancy, infant mortality, demographic growth, income distribution, headcount poverty, and educational attainment, suggest a very significant social cost to transition across the region.

Varieties of Emerging Capitalism

The spatial impact of economic transition was very uneven. The transition to capitalism produced a great divergence in outcomes between the different geographical blocs of transition states, between different individual countries, and between urban and rural areas within those countries. Most of the initial variation in the output performance of central and eastern Europe, compared with the former Soviet Union in the 1990s, is explained by the inherited structural liabilities and exogenous "transition shocks" caused by the collapse of centralized planning and the communist trade system, the disintegration of the Soviet Union, and the associated detrimental effects of disorganization and trade implosion on the respective transition economies. It is notable in this regard that the sharpest decline in output occurred amid chaos in war-ravaged countries like Bosnia and Herzegovina, Georgia, Armenia, Moldova, and Tajikistan. By contrast, the gradually reforming transition economies of east and southeast Asia, as well as the three former Soviet republics (Belarus, Turkmenistan, and Uzbekistan) that did not follow the "shock therapy" approach, generated a very different growth trajectory, either postponing the potentially severe economic dislocation or, perhaps, avoiding it altogether.

Despite substantial differences that exist among the transition economies, since 1999, all of these countries have been on a steady path of growth, with the majority enjoying a rapid economic recovery and further expansion. In terms of prospects for catch-up development, the average income disparity between the richest and the poorest transition economy grew during the transitional depression, peaking in 1999; yet it slowly decreased since, dropping from the ratio of 21:1 to 14:1 by the end of the 2000s. With respect to approaching Western standards of living, the transitional depression of the 1990s proved to be a major setback, as these economies' average per capita income on the purchasing power parity basis dropped to just 15 percent of the U.S. level. Within the following decade, the original income differential was restored and projected to reach up to 30 percent of the U.S. level by 2013.

Beyond Transition

On a more disaggregate level, four different post-transitional regime types can be identified as a succinct way to summarize the major outcome of transformation across postcommunist Europe and Eurasia. The first regime type includes politically unstable, war-damaged countries that have had to rely on substantial foreign assistance and workers' remittances to sustain a model of chaotic uncoordinated capitalism. In the second group of gradual or "lagging" reformers, state-led or statist capitalism has emerged in combination with firm authoritarian rule. These transition economies all appear in the low- and lower-middle-income groups within the World Bank's development classification scale. Most of them have remained on the medium level of human development as well. However, in sharp contrast to the uncoordinated capitalist economies, state-led capitalism has been characterized by high growth rates propelled mainly by strong manufacturing exports.

Another distinct type of the newly emerged market economies covers the whole of central Europe, the Baltic States, and the outlying parts of the Balkan region. These countries have already reached or have closely approached both the average Western standards of income and consumption, as well as of human development. In contrast to all the other post-transitional regimes, countries in this third group are usually described as consolidated democracies, with well-established pluralist and civil society tendencies. Capitalism in these states has acquired a certain affinity with the continental European model of coordinated market economy. The notable exceptions are the deregulated liberal market economies of the Baltic region. In general, the third group of transition countries has firmly allied itself with the European and Euro-Atlantic economic, political, and military structures.

Finally, there is a very diverse intermediate fourth group of the transition economies, covering primarily the former Soviet republics. These countries are broadly positioned in the middle of the global developmental ladder. Politically, they are not formally allied with the West, although these economies' dependence on the Westbound export-driven growth has been by far the most considerable among all other transition states. Despite some spectacular exceptions, these countries generally have not continued with the adoption of a Western-style polyarchy. Institution-wise, these economies are characterized by open trade and fluid product, labor, and capital markets. However, the level of political involvement in the economy is more evident in this post-Soviet group than in central Europe and the Baltics. An additional feature of their intermediate grouping is that its richest economies have benefited greatly from exporting primary commodities and raw materials, including oil, gas, ores, and minerals.

The future developmental prospects and potential of transition economies depend ultimately upon the progress achieved to date, favorable global market conditions, and the overall sustainability of their social formations, types of emergent capitalism coupled with particular modes of political regulation. Nonetheless, because economic development is a cumulative, combined, and unequal phenomenon, a lot of the economies in transition will hardly ever be able to catch up with the rest. Hence, for them transition is to become a permanent condition.

See Also: Capitalism; Chicago School/Chicago Boys; Core; Dependency Theory; European Bank for Reconstruction and Development; Periphery; Socialism; World Bank, The.

Bibliography. Christian Chelariu et al., "Entrepreneurial Propensity in a Transition Economy: Exploring Micro-level and Meso-Level Cultural Antecedents," *Journal of Business and Industrial Marketing* (v.23/6, 2008); Oleh Havrylyshyn, *Divergent Paths in Post-Communist Transformation: Capitalism for All or Capitalism for the Few?* (Palgrave Macmillan, 2006); Alex E. Fernández Jilberto and Barbara Hogenboom, *Big Business and Economic Development: Conglomerates and Economic Groups in Developing Countries and Transition Economies Under Globalization* (Routledge, 2007); Annette Miae Kim, *Learning to Be Capitalists: Entrepreneurs in Vietnam's Transition Economy* (Oxford University Press, 2008); David Lane, ed., *The Transformation of State Socialism: System Change, Capitalism, or Something Else?* (Palgrave Macmillan, 2007); David Lane and Martin Myant, eds., *Varieties of Capitalism in Post-Communist Countries* (Palgrave Macmillan, 2007); Celine Nauges and Caroline van Den Berg, "Economies of Density, Scale and Scope in the Water Supply and Sewerage Sector: A Study of Four Developing and Transition Economies," *Journal of Regulatory Economics* (v.34/2, 2008); Jiangang Peng, *Financial-System Reform and Economic Growth in a Transition Economy: The Case of China, 1978–2004* (University of Western Australia, Department of Economics, 2008); Max Spoor, *The Political Economy of Rural Livelihoods in Transition Economies: Land, Peasants and Rural Poverty in Transition* (Routledge, 2009).

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Transportation

Transportation is the movement of freight or passengers, by land (rail or road), air, or water. Though important to trade throughout history, since the Industrial Revolution, transportation concerns have become crucial to the operation of any business, whether the company ships its own goods or simply depends on transportation to receive its raw materials and inventory. Transport strikes and fluctuations in fuel prices have had a serious impact on local and national economies at various times in the last century and a half.

In the 21st century, human-powered and animal-powered transport have become essentially irrelevant from a business standpoint, though in some parts of the world they remain in use for special circumstances. The majority of the time, they both constitute recreational transport, such as the picturesque horse-drawn carriage tours offered in many touristed cities.

The modes of commercial transportation, then, are aviation, rail and road overland transport, and ship transport.

Air Transport

For purposes of transport, aviation relies primarily on fixed-wing aircraft, though because of their vertical takeoffs and landings, rotorcraft (helicopters) are sometimes used for private passenger transport to destinations that can't accommodate an airplane landing strip; the primary examples are military transport, and private helicopters used by businesses for rooftop landings.

The benefit of air transport is the speed, which is unequaled by anything else available to the general public. On the other hand, aircraft and aircraft fuel are expensive, and they depart from fixed locations; transport is still required to and from the airstrip, and costs are high. Passenger transport costs are kept down by sharing vehicles—booking many passengers on the same flight between two airports, often with stops in between, a system that is in a sense inefficient for any flight that isn't to or from a "hub" (an airport where most of the airline's flights originate). This spreads the cost of the flight out among so many parties that the additional cost of such inefficiency and the inconvenience of lengthy layovers or odd departure and arrival times is outweighed by the overall savings. For passenger transport, commercial aviation is at its most efficient and cost-effective when the distance is at its greatest. A flight between neighboring cities will often save little time and less money relative to ground transport, because of delays and check-in time, especially with the security concerns of the 21st century.

In Europe, the 1990s deregulation of European Union airspace has had a significant impact on commercial airlines. More and more national airlines, like British Airways and Ireland's Aer Lingus, have privatized, while suffering in competition with deregulation-era budget airlines that focus on short flights at low prices. In the United States, deregulation came much earlier, in 1978; the United States has led the world in air travel in number of flights ever since, despite a series of challenges to the industry, including bankruptcy (of the pre-1978 airlines still in operation, only American Airlines has never declared bankruptcy), "air rage" and other passenger problems, the hijackings of the late 1970s and early 1980s, post-9/11 fear of flying, customer dissatisfaction over more stringent security precautions, and unstable fuel prices.

In addition to using measures such as overbooking and reducing the size of seats in order to fit more passengers on a flight, one solution to the financial travails of travel has been the rise of low-cost airlines. In that niche, Southwest Airlines has prospered, but Skybus and AirTran Airways have ceased operations, while the nonunion discount airline JetBlue—one of the few airlines to increase its profits after 9/11—has faced a series of scandals, lawsuits, and unfavorable headlines.

The air travel industry depends heavily on government assistance. In fact, once government subsidies are factored in, the entire industry has been operating at a loss over the whole of its history, despite steady growth. Business polymath Warren Buffett has called the airline industry one of the hardest to make money in—despite the vast amount of money accumulated, little of it is profit. Government funds are used to build airports to foster economic development, and to subsidize the development of aircraft for both military and commercial purposes. Government grant money is often used in the research and development of aircraft design. This level of government involvement is sometimes less obvious in the United States, where there is a long history of privately owned airlines, than in Europe, where until recently most airlines were nationalized.

Magnetic levitation (maglev) trains can travel at speeds of over 300 miles per hour and are inexpensive to operate.

Rail and Road Transportation

Rail transport relies on railroads, and, along with steam-powered water transport, was the hallmark of the Industrial Revolution. The use of rails (which minimize friction, compared to driving surfaces, and distribute weight more efficiently than other overland travel) and engine-driven trains allowed for much faster overland transport than before, and in particular allowed for a great deal more freight to be carried, rather than loading up covered wagons pulled by horses and other draft animals. Train travel is slower than air travel and suffers from the same indirectness with regard to target destinations; travel to and from the train station is required, and it is less popular than it once was for passenger transport. But freight trains continue to operate day and night around the world, and passenger transport remains popular in Asia, Europe, and to some degree in the northeastern United States, where distances between cities are relatively short. The diesel-electric locomotive succeeded the steam engine in the 1930s and 1940s and remains in use throughout most of the world.

Passenger rail travel is frequently brought up when the issue of public transportation reform is on the table. Often the discussion includes monorails and magnetic levitation (maglev) trains, the second of which can potentially move extremely fast because of the lack of friction, and which are cheap to operate once built, but which require expensive new infrastructure.

Road transportation is the most popular form of transportation, with hundreds of millions of automobiles worldwide and a well-established trucking industry in most industrialized nations. The building of roads has a long history, and along with aqueducts constituted the principal infrastructure built by civilizations like Rome. Because of the vast numbers of roads and the presumption that nearly every domicile and business is accessible by road, road travel offers the greatest flexibility—door-to-door travel. Nearly all freight transport involves transport by road on at least one leg of the journey.

Sea Transport

Sea transport is the slowest form, but because of the extraordinary tonnage that can be transported over the seas, it remains an efficient mode of freight transport for nonperishable goods, especially those which are delivered at regular intervals and for which thus the length of travel is essentially irrelevant. Water transport is generally cheaper than air transport over comparable distances, though air transport has the obvious advantage of being able to depart from landlocked locations.

Intermodal Transport

Intermodal transport is simply a transport route involving multiple modes. Most passenger travel is either exclusively road travel or intermodal, for the simple reason that road travel is necessary to reach the airport, train station, or harbor. This may be provided by shuttle buses, by taxis, by the passenger's own vehicle, or by public transportation.

Intermodal freight transport is extremely common. Containerization is a popular system of intermodal freight transport, using ISO (International Organization for Standardization) containers that can be transported by plane, ship, truck, or train without opening the container and handling the freight. The use of containerization has greatly increased the efficiency of ports and of freight handling at airports and train stations. Roughly similar boxes were in use from the early days of railroads in order to make it easier to shift freight from train cars to other forms of transport, and for reasons of practicality various railroads began using containers that were more and more alike.

When the first railroads standardized their containers in the 1920s, others soon followed, and American military transport needs further encouraged standardization throughout the 1940s and 1950s.

The first purpose-built container ships, designed expressly to transport freight in standardized containers, launched in the 1950s. Intermodal freight transport took advantage of standardized containers at the same time, using trains, ships, and trucks to ship freight in the Yukon and Alaska. The deregulation of American transportation industries in the 1970s and 1980s made containerization more practical; prior to deregulation, special permissions were needed if a single transport vehicle carried multiple types of freight, an impediment to many of the benefits of containerization.

In the 21st century, 90 percent of nonbulk cargo travels by standardized container, on ships carrying thousands of shipping containers in five standard sizes, most of them roughly the size of rental storage units or small apartments. Special trucks and train cars have been designed to accommodate standard containers with a minimum of wasted space. Containerization has revolutionized freight security: knowing what is in the containers requires a level of knowledge that the casual criminal simply doesn't have, usually requiring illicit cooperation with someone directly involved with the transport.

Transport Economics

A branch of civil engineering, transport economics analyzes the distribution of resources in transportation systems. It is crucial for transportation providers to understand the supply and demand in their field, the effects of competition, and potential externalities—in no small part because the costs of infrastructure are so high, and it can be time-consuming and expensive to adjust to circumstances that haven't been properly planned for. Transport economics examines not only the business applications of transportation, but urban planning issues such as traffic congestion, road space, and the impact and costs of public transportation.

See Also: Boeing; British East India Company; Dutch East India Company; Ford Motor; Freight Forwarder; General Motors; Hyundai Motor; Lockheed Martin; Mitsubishi; Nissan Motor; Renault; Smuggling; Suez; Transport Delays.

Bibliography. Edward Bardi, John Coyle, and Robert Novack, *Management of Transportation* (Thomson South-Western, 2006); Maxwell Lay, *Ways of the World: A History of the World's Roads and of the Vehicles That Used Them* (Rutgers, 1992); Paul Roberts, *The End of Oil: On the Edge of a Perilous New World* (Houghton Mifflin, 2004); Kenneth Small and Erik T. Verhoef, *The Economics of Urban Transportation* (Routledge, 2007); Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (Free Press, 1993)

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Transport Delays

Global commerce depends on the smooth, reliable movement of materials, parts, and finished goods through their respective supply chains. However, as supply chains become more globalized with longer distances and lead times, there are greater possibilities for a shipment to be in transit longer than its expected delivery time. Sources of transport delays range from issues such as capacity constraints, missed transshipments, or lengthy customs processing, to natural disasters or terrorist attacks.

The impact of transport delays can be far reaching, with operational and financial costs on the immediate parties involved and ripple effects extending to unrelated parties. Successful businesses attempt not only to address the causes of transport delays, but also to build buffers in their systems and to develop contingency plans so that they can continue business operations with minimal effects.

Industry statistics reveal that transport delays are a common occurrence, although differences between transportation modes are considerable. Ocean freight is the most prone to delays. Analyzing the schedule reliability of ocean freight liner services, Drewry Shipping Consultants found that 21 percent of vessels arrived one day late, 8 percent arrived two days late, and 14 percent arrived three or more days late. Comparing individual shipping lines, performance ranged from an on-time arrival rate of only 4 percent to over 90 percent for the best-performing carriers. Road and air freight typically experience the least delay. Cargo 2000, an air freight industry association, reports that approximately 90 percent of air shipments are "flown as planned."

Causes of Transport Delays

Many causes of transport delays are chronic in nature. Examples include congestion, weather changes, missed connections, or security and customs processing. Limited port capacity can cause port congestion, forcing cargo ships to wait days to be unloaded. Likewise, roads and rail lines may be inadequate to meet demand, particularly during peak periods. For major U.S. road corridors, the Federal Highway Administration calculated buffer time indexes of 5–45 percent, indicating how much extra transit time should be allowed because of system variations caused by traffic congestion, weather, incidents, and work zones. Similarly, a transit time analysis for trucks in southern India found average delays of over 30 percent. Poor coordination presents additional problems.

For example, European industry data on combined transport trains showed that the major causes of delays were missing locomotives or staff at handover points along the route. These delays can be compounded by each connection or segment in a shipment's transport. One day's delay can result in a container missing its transshipment to another vessel, train, or truck. In the case of ocean liner services, it could be a week or longer until the next scheduled vessel.

Other transport delays are triggered by unusual events or circumstances. Examples include the September 11, 2001, terrorist attacks in the United States, which led to a disruption of air traffic for many days, as well as long delays for trucks at border crossings. Natural disasters such as the 2004 southeast Asian tsunami or Hurricane Katrina in 2005 also disrupted supply chains. Likewise, the 2003 West Coast port strike led to extensive delays that disrupted the holiday shopping season for U.S. retailers and customers, and impacted unrelated parties when cargo ships could not maintain their schedules. In other cases, a confluence of factors can create unexpected delays, as happened in 2008 at the Panama Canal when maintenance work, high demand, and labor slowdowns combined to delay cargo ships as long as 10 days.

Impact and Prevention

Transport delays can have a major impact on a firm's costs and its ability to maintain high customer service levels. In time-sensitive industries, serious delays may cause products in transit to spoil or depreciate in value by the time they are delivered. The industry trends of Just-in-Time and lean manufacturing aggravate a supply chain's vulnerability to transport delays, as a late shipment can leave a retailer's shelves empty or shut down a manufacturing plant if it runs out of a needed part. To guard against delays and other disruptions, firms typically hold extra safety stock inventory as a buffer. However, extra inventory comes with high holding costs. One case study showed potential differences in inventory holding costs of $0.4 million to $3.1 million annually because of unreliability in liner schedules for a company making regular shipments between Brazil and South Africa. Delays may also compel a firm to pay higher costs to expedite a shipment to keep needed items in stock.

At the macro level, transport delays can be reduced by identifying and addressing bottlenecks in transportation infrastructure. This requires a systems approach, as increasing a port's capacity to relieve congestion will have limited effect if inland carriers also lack sufficient capacity. Customs and security screening procedures can be streamlined to facilitate timely processing. By providing early notice of a shipment's contents to relevant government agencies, advance manifest initiatives allow clearance processes to begin even before arrival. Free trade agreements and common markets also minimize procedural delays. The European Union, for example, has eliminated almost all border clearance requirements within its 27 member countries.

At the firm level, shippers and carriers can analyze their processes to identify and address the causes of delays, as well as develop contingency plans for dealing with late shipments. When choosing carriers, firms should compare carriers' on-time reliability and recognize that the savings in transport costs for a less-reliable carrier may be negated by higher costs from stockouts, expediting, or increased inventory safety stock.

See Also: Bill of Lading; Distribution; Export; Import; Infrastructure; Supply Chain Management; Transportation.

Bibliography. Peter Brucker, Sigrid Knust, T. C. Edwin Cheng, and Natalia V. Shakhlevich, "Complexity Results for Flow-Shop and Open-Shop Scheduling Problems With Transportation Delays," *Annals of Operations Research* (v.129/1–4, 2004); Richard T. Hise, "The Implications of

Time-Based Competition on International Logistics Strategies," *Business Horizons* (September–October, 1995); Scott Johnson and Joanne Sedor, "Reliability: Critical to Freight Transportation," *Public Roads* (v.68/3, 2004); Bert Vernimmen et al., "Schedule Unreliability in Liner Shipping: Origins and Consequences for the Hinterland Supply Chain," *Maritime Economics & Logistics* (v.9, 2007).

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Treaty of Rome

The Treaty of Rome is the multinational economic agreement that created the European Economic Community (EEC), the forerunner of the European Union (EU), in 1958. Following two years of negotiations that began in Messina, Italy, in 1955, the Treaty of Rome was signed on March 25, 1957, and came into effect on January 1, 1958. An early example of European supranationalism, the objective of the Treaty of Rome was the creation of closer economic and political linkages between signatory nations including the founding of a common market and customs union.

The treaty was an example of the evolving 20th-century trend of European economic supranationalism. The effects of World War II motivated many European nations to adopt policies of closer economic and political cooperation. The Benelux Agreement (1944) established a common market between Belgium, Netherlands, and Luxembourg to facilitate more rapid economic recovery from the war. The success of the Benelux Agreement helped advance the idea of economic supranationalism in Europe, and the foreign minister of Belgium, Paul-Henri Spaak, was a key figure in the proposal and adoption of the Treaty of Rome.

Political considerations were also a factor in the Treaty of Rome. Many in war-torn Europe, including British prime minister Winston Churchill, began to advocate a federation among European nations as a catalyst for peace and stability and to more efficiently rebuild the economy and infrastructure of the continent. In 1951, the European Coal and Steel Community (ECSC) was created to remove both strategic industries, vital to warfare, out of the control of individual countries and place them under the regulation of a multinational authority. The ECSC established the foundation of the Treaty of Rome and the EEC by creating common markets among several European nations for coal and steel and by creating many of the institutional policies and structures that would later serve as the pattern for much of EEC bureaucracy. While the Treaty of Rome did contain elements addressing the goal of political cooperation, it stopped far short of creating a European political federation and was primarily focused on creating economic cooperation.

The Treaty of Rome created four distinct institutions, each of which would be managed by officials, judges, parliamentarians, and bureaucrats from member nations: the European Parliament, the Council of Ministers, the European Commission, and the European Court of Justice. The treaty reduced tariffs among the six original member states by 10 percent. However, the signatories of the treaty foresaw the development of more meaningful linkages including the elimination of all tariffs in the future. In the first decade of its existence, trade increased 400 percent among the members of the EEC.

The heads of state of six European nations signed the Treaty of Rome: Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany. Known originally as the Treaty Establishing the European Economic Community, the document was later renamed the Treaty Establishing the European Community. The alteration of the formal name of the Treaty of Rome was facilitated by the Maastricht Treaty of 1992, which established the EU and in effect superseded the Treaty of Rome and the EEC.

The Treaty of Rome was controversial, and the concept of a politically or economically unified Europe was not supported by all segments of European society. Britain was invited to participate in the Treaty of Rome and join the EEC but declined, regarding the process as an affront to its national sovereignty and as unwanted interference in its national economy. Internal opposition to the treaty existed within the signatory nations as well, often stemming from nationalist sentiment, fear of erosion of national identity, and distrust of other nations and the multinational bureaucratic entity that the treaty would create.

In France, Charles de Gaulle opposed his nation's participation in the treaty and as he would eventually regain power as France's head of state, the signing of the treaty was undertaken in a hurried fashion in order that the French government at the time could sign the document and bind France to the Treaty of Rome before de Gaulle could return to power.

See Also: Common Market; European Coal and Steel Community; European Union; Free Markets; Maastricht Treaty.

Bibliography. John Calmann, *The Common Market: The Treaty of Rome Explained* (Anthony Blond, 1967); Clive H. Church and David Phinnemore, *The Penguin Guide to the European Treaties: From Rome to Maastricht, Amsterdam, Nice and Beyond* (Penguin Books Ltd., 2003); Paul Close and Emiko Ohki-Close, *Supranationalism in the New World Order* (Palgrave Macmillan, 1999); Max Haller, *European Integration as an Elite Process* (Routledge, 2008); Robert Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton University Press, 2005); Henry Lloyd Mason, *The European Coal and Steel Community: Experiment in Supranationalism* (Nijhoff, 1955); Brent F. Nelsen and Alexander Stubb, *The European Union: Readings on the Theory and Practice of European Integration* (Lynne Rienner Publishers, 2003).

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Trinidad and Tobago

Trinidad and Tobago is a twin-island republic located in the southern Caribbean approximately seven miles off the coast of Venezuela. Trinidad, the larger of the two islands, is situated at Latitude 10 1/2 degrees N, Longitude 61 1/2 degrees W and occupies a total area of 3,000 sq. mi. Tobago, the smaller of the two islands, is located at Latitude 11 degrees N, Longitude 60 degrees W and occupies a total area of 186 sq. mi.

The islands of Trinidad and Tobago were discovered by Christopher Columbus in 1498. Trinidad became a British colony in 1802 and was enjoined administratively to Tobago in 1889. Trinidad and Tobago achieved independence from Britain in 1962 and became a republic in 1976. Trinidad and Tobago follows the Westminster system of government and has two major political parties—the People's National Movement (PNM) and the United National Congress (UNC). With the exception of the 1986–91 and 1995–2001 periods, the country has been ruled by the PNM. English is the official language of Trinidad and Tobago and the country has a population of 1.3 million. The population is comprised of 40 percent people of African descent and 40 percent of Indian descent. The remaining 20 percent of the population is made up of people of European, Chinese, or Middle Eastern ancestry.

In 2006, the per capita gross domestic product (GDP) of Trinidad and Tobago stood at approximately $17,000. This was up from roughly $10,000 in 2001. The economy grew at a rate of 12 percent in 2006, up from just over 4 percent in 2001. Over the period 2002–06, the economy has averaged growth in the region of 9.7 percent. Growth of the Trinidad and Tobago economy is driven largely by the energy sector. In 2006, the petroleum industry accounted for some 47 percent of the country's total GDP with the exploration and production subsector being the major contributor. The energy sector is focused on the production of natural gas and related downstream activities.

The country is a major exporter of ammonia, methanol, and direct reduced iron, and is the number one exporter of liquidized natural gas (LNG) in the Western Hemisphere. This export composition represents a fundamental shift in the energy sector, which has traditionally focused on oil production. The government of Trinidad and Tobago (GOTT) collected revenues in excess of $69 billion from the energy sector over the six-year period ending fiscal 2007. It should be noted, however, that the Ryder Scott Hydrocarbon audit report indicates that Trinidad and Tobago's proven natural gas reserves are at 17.05 trillion cubic feet (tcf); probable reserves are at 6.23 tcf; and possible reserves are at 7.76 tcf. This report suggests that the country's natural gas reserves would be depleted in 12 years, assuming no further successful exploration and current levels of utilization.

GOTT's energy policy calls for continued diversification of the energy sector and the promotion of downstream industries that strengthen linkages with the rest of the economy. In this regard, GOTT's budget for fiscal 2007 prioritized a number of major gas-based projects which included the following:

The Alutrint Smelter. This aluminum smelter has a planned capacity of 125,000 tons per annum and is a joint venture of GOTT (60 percent) and Sural of Venezuela (40 percent). The plant will produce rods, wires, and cable, with plans to establish production facilities for the manufacture of wheel alloys, car wheels, and rims.

The Essar Steel Complex. This integrated steel complex is designed to produce flat hot rolled coil, as well as hot briquette iron and slabs. A unit of Indian conglomerate Essar Global will own and operate the facility in Trinidad, and has signed an agreement to purchase 140 million cubic feet of natural gas per day for the plant.

The Methanol Holdings AUM Complex. Methanol Holdings (Trinidad) Ltd. (MHTL) owns and operates five methanol plants in Trinidad with a combined capacity to produce over 4 million metric tons of methanol per year. MHTL is the second-largest producer of methanol in the world. MHTL is establishing a new petrochemical complex for the production of 1.5 million tons of urea ammonia nitrate and 60,000 tons of melamine per annum.

The Gas-to-Liquids Plant. This plant is a joint venture between World GTL, Inc., and the Petroleum Company of Trinidad and Tobago (Petrotrin), GOTT's wholly-owned integrated petroleum company. World GTL is a New York–based company established in 2000, while Petrotrin was established in 1993 and is involved in a range of activities from exploration and development to the manufacture and sale of products including gasoline, liquefied petroleum gas (LPG), and kerosene. Gas-to-liquid (GTL) technology involves the chemical conversion of natural gas to liquid fuels. The Trinidad plant will produce 2,250 b/p/d GTL and will require 21 million cubic feet per day of natural gas feedstock for its operations.

The Methanol/Propylene/Polypropylene Project (MPPP). This plant is expected to have a capacity of 160,000 tons per annum and will provide the necessary building blocks for the development of a plastics industry.

See Also: BP; Caribbean Community (Caricom); Organisation for Economic Co-operation and Development; Socioeconomic Status; Venezuela.

Bibliography. Gorg Holger and Eric Strobl, "The Incidence of Visible Underemployment: Evidence for Trinidad and Tobago," *Journal of Development Studies* (v.39/3, 2003); Akhil Malaki, *The Role of Informal Institutions in Microfinance in Jamaica and Trinidad & Tobago* (VDM Verlag, 2008); Kirk Meighoo and Peter Jamadar, *Democracy and Constitution Reform in Trinidad and Tobago* (Randle, 2008); Moody's Investor Services, "Trinidad and Tobago Credit Analysis," www.finance.gov.tt (cited March 2009); Anthony Murphy and Eric Strobl, "Employer and Employee Ignorance in Developing Countries: The Case of Trinidad and Tobago," *Review of Development Economics* (v.12/2, 2008); Ralph R. Premdas, *Trinidad and Tobago: Ethnic Conflict, Inequality, and Public Sector Governance* (Palgrave Macmillan, 2007); D. J. Storey, "Racial and Gender Discrimination in the Micro Firms Credit Market? Evidence From Trinidad and Tobago," *Small Business Economics* (v.23/5, 2004); Eric Strobl and Frank Walsh, "Minimum Wages and Compliance: The Case of Trinidad and Tobago," *Economic Development and Cultural Change* (v.51/2, 2003).

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Tunisia

Located in north Africa, Tunisia has a population of 10 million, and was in ancient times the location of Carthage, the capital of the Carthaginian Empire. It then became a part of the Roman Empire, later being captured by the Arabs, and then was absorbed into the Ottoman Empire. Occupied by France in 1880, it gained its independence in 1956.

During the Carthaginian Empire, the area that is now Tunisia was the center of a rich and powerful civilization that had established itself as the center of a trading empire, with the Carthaginians exploiting the silver mines in Spain. However, the wealth of the city was sapped by the Punic Wars, and the city itself was sacked by the Romans in 146 B.C.E. Although the Romans built a new city on the site, it never regained its former glory. Cities and towns in Tunisia were stops on caravan routes across north Africa, but these declined with the increase in shipping. Under the Ottoman Turks, the city of Tunis became a center of learning and was also relatively wealthy, persuading the French to take it over in 1878, with their army taking control of the country two years later.

Under the French, the economy of Tunisia was linked to that of the French Empire, and many French and other European settlers moved to Tunisia, although more had moved to neighboring Algeria. After the fighting in World War II between the Germans and the Allies, the Axis was driven out in 1943, and nationalists started to agitate for independence from France, heavily influenced by events in French Algeria. This came about in 1956, with Habib Bourguiba becoming president of the country, a position he held until 1987. During that time, Bourguiba introduced many economic policies that resulted in the country becoming socialist, yet also taking a political stance of being largely nonaligned. During the 1970s, plans were broached to establish a gas pipeline through Tunisia, which would take natural gas from Algeria to Italy. With the rise in the price of oil, exploration in Tunisia located several new deposits to add to the Ashtart oil field, which started operations in 1973.

There were periods of economic stagnation, and there was labor unrest in 1968, 1978, and 1984. It also saw large numbers of import controls that helped with the development of industry in the country, although some of these were not as efficient as their competitors overseas, leading to problems when free trade policies were introduced in the 1990s. One of these was the textile industry established at Kairouan. President Bourguiba managed to get some concessions from the European Economic Community for Tunisia's exporting its textiles to their member states, but gradually these quotas were reduced. Carpets and rugs continue to be made in Tunisia for the export trade, and the craft industry has continued to operate in some parts of the country.

Following the overthrow of President Bourguiba, there were moves by the new government to free up the economy of the country and introduce free market reforms. However, the government started facing problems from Islamic fundamentalist groups, with events in Algeria once again impacting heavily on Tunisia. This coincided with a communist party, called the Mouvement de la Renovation, becoming a political force, as the government sought to implement reforms suggested by the World Bank. There were certainly allegations of human rights abuses, and when Bourguiba died in 2000 at age 96, tens of thousands of Tunisians turned up at his funeral to mourn someone who had presided over a long period of economic success.

The country's economy had slowly transformed after independence, but France accounts for 33 percent of Tunisia's exports and 25 percent of its imports. The agricultural sector continued to decline, and although it still employs over half the workforce of the country, it now makes up only 14 percent of the gross domestic product (GDP). Industry accounts for 23 percent of the workforce and contributes 31 percent of the GDP, while the service sector—which employs only 22 percent of the workforce—makes up 55 percent of the nation's GDP. Much of the income from the service sector comes from tourism, with Tunisia presenting itself as a safe, sunny destination, containing historic remains, for many European tourists. Indeed, 6.38 million tourists (2005) come to the country each year.

See Also: Africa; Algeria; Company Profiles: Africa; Company Profiles: Western Europe; European Union; France; World Bank, The.

Bibliography. Jeremy D. Foltz, "The Economics of Water-Conserving Technology Adoption in Tunisia: An Empirical Estimation of Farmer Technology Choice," *Economic Development and Cultural Change* (v.51/2, 2003); Fareed M. A. Hassan, *Tunisia: Understanding Successful Socioeconomic Development* (World Bank, 2005); International Monetary Fund, *Tunisia Financial System Stability Assessment Update* (International Monetary Fund, 2007); Taline Koranchelian, *How Does Employment Protection Legislation Affect Unemployment in Tunisia?: A Search Equilibrium Approach* (International Monetary Fund, Middle East and Central Asia Department, 2005); Alice Mesnard and Martin Ravallion, "The Wealth Effect on New Business Startups in a Developing Economy," *Economica* (v.73/291, 2006); Oxford Business Group, *Emerging Tunisia 2006* (Oxford Business Group, 2006); Pia Christina Wood, "French Foreign Policy and Tunisia: Do Human Rights Matter?" *Middle East Policy* (v.9/2, 2002).

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Turkey

Because of its geographical location, many businesses have operated from Turkey since early modern times, and the cities of Constantinople (now Istanbul) and Smyrna (now Izmir) were some of the busiest ports in

Workers sort through paper at a Turkish recycling plant. Turkey's economy has remained fairly strong with government involvement in the economy, particularly in the areas of banking, transportation, and communications.

the eastern Mediterranean. Many of the early western and central European trading companies operated through the Ottoman Empire, which then ruled the region from Constantinople, the most well-known being the British Levant Company and the Austrian Danube Steam Navigation Company.

Because of its pivotal position in terms of communications, the Ottoman Empire was one of the earliest countries to establish a telegraph line, the first being built in 1847. In 1881, the first telephone service was opened in Constantinople, but it was not until 1931 when telephone lines were run to Sofia, and then through to Berlin, that international calls were possible. And from the 1880s through to the early 20th century, the Austro-Hungarian, French, German, Italian, Romanian, and Russian governments all operated post offices in the country, mainly on the basis of ensuring regularity of business mail.

The loss of most of what was left of its European territories in the early 20th century, and its defeat in World War I, transformed the country and led to the creation of the Republic of Turkey in 1923, with its capital at Ankara. Constantinople was renamed Istanbul, but remained the center of much of the commerce in the country. By that time the Turks had won a war against the Greeks, and the victorious Turks had captured Smyrna and the other largely Greek port cities, expelling or killing the Greeks and causing most of the third country nationals to flee.

Modernizing Turkey

Under Ataturk, the new leader of Turkey, the country was modernized and transformed, dropping the script based on the Arabic script and using the European script. In 1930, the central Bank of the Republic of Turkey was established. Ataturk's aim was to build a new and vibrant country, and although he set the scene for what was to follow, most of the real economic transformation came after his death in 1938. Turkey remained neutral in World War II, and benefited from the U.S. investment in the country following Turkey's joining NATO and its use to station U.S. missiles. Turkey became a founding member of the Organisation for Economic Co-operation and Development (OECD) in

1961. The 1960s and the early 1970s were periods of economic growth, although Turkey had three military coups—in 1960, 1970, and 1980. The third one, on September 12, 1980, followed a long period of economic problems with inflation running at 130 percent a year, and political and criminal gangs acting with seeming impunity, frightening foreign investment, especially after Turkey's military intervention in Cyprus in 1974.

Following the restoration of democracy gradually during the 1980s and the reemergence of Suleyman Demirel, a former prime minister, as the president of the country in 1993, moves were made to bring the Turkish economy in line with those in Europe. Turkey began trying to get membership of the European Union, and became a member of the EU Customs Union on December 31, 1995. Although major unresolved political issues in the country remain, the economy has remained fairly strong with government involvement in the economy, with banking, transport, and communications being significant. There is wide disparity in wealth, with figures for *Forbes Magazine* in March 2008 showing that Istanbul had 35 billionaires, the fourth highest in any city after Moscow, New York City, and London.

In the agricultural sector, Turkey remains the largest producer of apricots, cherries, hazelnuts, quinces, and pomegranates, and is the second-largest producer of chickpeas, cucumbers, and watermelons. It is also a significant producer of apples, lentils, olives, tea, tobacco, and tomatoes. However, the vast majority of the agricultural sector still consists of small family-operated plots of land, and although it employs some 36 percent of the workforce (2005), it generated only 12 percent of the GDP of the country.

The industrial sector employs 23 percent of the workforce (2005), and makes up 30 percent of Turkey's GDP, with textiles and clothing (16.3 percent in 2005) being the largest sector, followed by oil refining (14.5 percent), food (10.6 percent), chemicals (10.3 percent), iron and steel (8.9 percent), and automotive production (6.3 percent). For the latter, the Devrim was the first car made in Turkey in 1961, and another Turkish car, the Anadol A1, became popular in the late 1960s and early 1970s. Turkey now produces nearly as many cars as Italy, and produces more television sets than any country in Europe. In terms of shipbuilding, Turkey is ranked number four in the world, after China, South Korea, and Japan.

In the service sector, tourism remains strong, with over 27 million foreign visitors to the country in 2007. Most people visit Istanbul, but many also visit the Mediterranean resorts in what has become known as the Turkish Riviera. The sites of World War I fighting at Gallipoli still garner much interest from Australian and New Zealand tourists.

See Also: Company Profiles: Middle East; European Union; Middle East; Organisation for Economic Co-operation and Development.

Bibliography. Habiba Anwar, Alica Henson, and Adam Jolly, *South East Europe and Turkey Business Handbook A Guide to Investment and Business Practice* (Global Market Briefings Publishing Ltd., 2009); Omar Faruk Genckaya and Ergun Ozbudun, *Democratization and the Politics of Constitution Making in Turkey* (Central European University Press, 2009); Willi Hemetsberger and Simon Quijano-Evans, *Turkey, Profile of a Converging Economy* (LexisNexis ARD Orac, 2007); Z. V. Hershlag, *Turkey, an Economy in Transition* (Uitgeverij van Keulen, 1958); Ahmet T. Kuru, *Secularism and State Policy Toward Religion: The United States, France, and Turkey* (Cambridge University Press, 2009); Ziya Önis and Fikret Şenses, *Turkey and the Global Economy: Neo-Liberal Restructuring and Integration in the Post-Crisis Era* (Routledge, 2009); Organisation for Economic Co-operation and Development, *Turkey* (Organisation for Economic Co-operation and Development, 2007).

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Turnkey

Turnkey refers to something ready for immediate use, or to the creation of a turnkey project, or to some other business practice. A turnkey business is one that is delivered with everything that is needed for operating the business immediately. A turnkey operation is one that delivers a product or service that can be used immediately by the buyer just by "turning the key." When the term *turnkey* is used for something that is ready for immediate use, the reference is to something that is ready almost in a "plug-and-play" fashion.

Types of Turnkey Goods and Services

In the construction industry, a "turnkey" job is one in which materials may be bundled by a supplier for a job that is standardized. A supplier for a turnkey plumbing job in a new house would bundle the parts, such as the toilet, pipes, connections, faucets, tub, shower stall, shower door, and other parts. This practice would allow the plumber to work without reference to a general contractor.

In the motor sports industry, a turnkey car would be one in which a car can be custom-built for a customer, who avoids the costs of locating parts, performing the labor, and doing all other tasks that are needed to restore or to rebuild a custom automobile, especially in the case of rebuilding a classic. A racer in the motor sports industry may also want to drive a race car that has a particular drivetrain or to use parts from a previously raced car. The parts can be incorporation into the turnkey car.

Established businesses are often advertised for sale as a turnkey business. The benefit is that the buyer is given the keys to the business, and then only has to turn the key to the door to be in business. New start-up businesses can also be turnkey businesses that are standardized and ready for operations, from the implementation of a complete package of construction and management tools.

A turnkey property in real estate sales is one that is ready for immediate occupation. Luxury vacation homes or vacation rentals are offered as turnkey properties, offering all possible amenities. However, if the property has to go through a turnkey process, then it refers to an open location that must be selected, negotiated for sale or lease, planned, constructed, furnished, and then occupied. For example, a department store or a store of any size, even a big box store, must go through various processes, which include stocking the store before the doors open. However, the project becomes easier, eliminating some of the uniqueness inherent in projects, if it is a turnkey project that has standardized and repetitive features.

Current business practices sometimes refer to projects that are called *turnkey projects*. These types of projects involve separate organizations being responsible for setting up the parts of a project, and then putting it into operation.

Projects are unique activities that have a beginning, middle, and an end. They are usually very specific sets of jobs that can be small, medium, or enormous in size. Turnkey projects are projects that are viewed systemically as a set of jobs. The various phases of the project are handled by different companies or organizations as sets of jobs, which may be construction, finishing, deliveries, equipment installation, testing, training, or other sets of tasks. The jobs in a turnkey project may be contracted to different organizations. The bidders may offer the best price or performance or other qualities needed to complete that part of the project. Sometimes turnkey projects are extended to become turnkey plus projects.

In the developing world, the purchase of turnkey projects from suppliers or franchisers has the advantage that the whole business is built, supplied, installed complete, and ready to open with employees trained and inventory available for sale or use. This approach cuts the costs to enter into a global market. It also allows entrepreneurs to invest at known costs and profit expectations in places such as Africa or South America. African mining interests have installed turnkey smelters at favorable locations, for example.

The globalization of the music industry has been coupled with the spread of the Internet. The use of turnkey Internet products and multimedia products allows for recordings that can be delivered via the Internet from locations previously unlikely for production.

Many companies globally are offering turnkey solutions to business needs, such as a company Web page that is designed and installed as a single project by another company. Other computer solutions are offered as a package that enables the users to participate in a global business almost immediately, if not immediately. However, any entrepreneur who is purchasing a turnkey business must exercise due diligence to make sure that the turnkey package actually includes everything needed.

See Also: Customization; Entrepreneurship; Franchising; Globalization; Optimization.

Bibliography. International Chamber of Commerce, *ICC Model Contract for the Turnkey Supply of an Industrial Plant* (ICC Publishers, 2003); International Trade Centre, *Turnkey Plants and Projects Engineering Services: A Handbook for Exporters from Developing Countries* (United Nations, 2001); William Packard, *Shipping Pools* (L.L.P.

Inc., 1989); John A. Volpe, *Turnkey Evaluation Guidelines* (U.S. Federal Transit Administration, 1996).

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Tyco International

Tyco International, headquartered in Bermuda, is a manufacturer of industrial products and provider of services to businesses and consumers. Tyco was founded in 1960 as a research laboratory to do work for the government. Tyco was incorporated in 1962 as Tyco Laboratories, and went public in 1964. Beginning in 1965, the company began to acquire other companies and between 1986 and 2005, the company grew rapidly through major acquisitions. The company's name was changed to Tyco International Ltd. in 1993 to reflect its worldwide presence.

In July 2007, Tyco International divided itself into three independent public companies by spinning off its passive electronics components manufacturing (Tyco Electronics) and its healthcare unit (Covidien). Tyco International now focuses its business on providing fire and security services and engineered products. Tyco International has approximately 118,000 employees who work in more than 60 countries.

Tyco's Business Segments

Tyco International is organized by five business segments: ADT Worldwide, Fire Protection Services, Safety Products, Flow Control, and Electrical and Metal Products.

ADT Worldwide provides electronic security monitoring services and devices to residential customers, commercial customers, industrial customers, and governmental customers. ADT employs 57,000 people, has 40 monitoring centers, and operates 500 offices in more than 50 countries around the world. Among its clients are eight of the top 10 global logistics companies, eight of the top 10 U.S. banks, and 80 of the world's top 100 retailers. In addition to fire, health, and intrusion monitoring services, ADT services provide access control, video surveillance, radio frequency identification, and antitheft services.

Fire Protection Services provides fire detection, fire suppression, and special hazard services to commercial, industrial, and institutional clients. Its clients include hospitals, hotels, commercial ventures, petrochemical plants, schools and universities, government facilities, airports, and ships at sea.

Safety Products manufactures and sells products in three areas: electronic security, life safety, and fire suppression. It produces many of the devices used by Tyco's ADT and Fire Protection units. Its security and surveillance products are in use at more than 300 airports. Its Scott brand breathing apparatuses are used by more than 15,000 fire departments. Its Ansul brand fire suppression products protect more than 75 percent of the top 100 oil and gas refineries. The Safety Products unit has 38 manufacturing facilities worldwide and serves customers in more than 100 countries.

Flow Control provides pipes, valves, valve automation, fittings, and heat tracing solutions to a variety of industries. Flow Control serves the food and beverage industry, the oil and gas industry, the power industry, the chemical industry, the water and wastewater industry, as well as process industries. Flow Control has more than 100 manufacturing and service locations in 24 countries serving its worldwide client base.

Electrical and Metal Products provides steel tubing and pipes, armored and coated wire and cable, metal framing products, and other metal products used in construction, mechanical, electrical, fire and security, and automotive applications. Electrical and Metal Products has 45 manufacturing and distribution facilities worldwide.

Company Goals

Management has a number of strategic goals for Tyco International. The company will expand through organic growth as well as through targeted acquisitions to broaden its range of products and services within the focus of its portfolio. The company will increase its presence in emerging markets, especially in India and China. For example, in April 2008, the company opened a research and development (R&D) center in China, its 15th worldwide, to better understand the local needs of its customers in China. The company will enhance its efficiency through its Operational Excellence initiatives. Tyco International also emphasizes its core values of integrity, excellence, teamwork, and accountability in its daily activities.

For 2007, Tyco International had revenues of $18.8 billion. Of those revenues, $8.9 billion were from the United States; $5.5 billion were from Europe, the Middle East, and Africa; $3 billion were from the Asia-Pacific; and $1.4 billion were from the other Americas. Its diluted earnings per share from continuing operations before special items was $1.93. Strong first-quarter earnings in 2008 led to an upward revision of revenue growth from 8 to 12 percent. Revenue improved in all five business segments.

See Also: Accountability; Acquisitions, Takeovers, and Mergers; Caribbean Community (Caricom); Company Profiles: Central America and the Caribbean; Corruption.

Bibliography. Alfred D. Chandler and Bruce Mazlish, eds., *Leviathans: Multinational Corporations and the New Global History* (Cambridge University Press, 2005); Marc J. Epstein and Kirk O. Hanson, *The Accountable Corporation* (Praeger Publishers, 2006); Greg Farrell, *Corporate Crooks: How Rogue Executives Ripped Off Americans—and Congress Helped Them Do It!* (Prometheus Books, 2006); Stewart Hamilton and Alicia Micklethwait, *Greed and Corporate Failure: The Lessons from Recent Disasters* (Palgrave Macmillan, 2006); Scott Wooley, "The Conglomerator Wants a Little Respect," *Forbes* (v.166/11, October 16, 2000).

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UBS

UBS AG is a global financial services company headquartered in Basel and Zurich, Switzerland. The company identifies itself as the leading global wealth management organization, a top-tier investment banking and securities firm, one of the largest global asset managers, as well as a market leader in Swiss private and commercial banking. The company also characterizes itself as a global, growth-oriented business that creates value by combining its expertise and finding synergies across the board.

UBS, as it is known now, was created in 1998. The company's roots, however, go deep into the 18th century when the first branch of UBS's predecessor, the Swiss Bank, was established. The company grew organically, and through various mergers and acquisitions, including such prominent acquisitions as the investment purchasing of banks Dillon Read (United States) and S. G. Warburg (United Kingdom). In 1998, the bank's direct predecessor, the Union Bank of Switzerland, merged with the Swiss Bank Corporation (SBC) creating a new company called UBS—which at that time ceased to be just an abbreviation for the Union Bank of Switzerland, but rather became a new brand name. In 2003, all UBS businesses and business groups—including UBS Warburg, UBS Paine Webber, UBS Asset Management, and so forth—relaunched under the common UBS brand name and under the same corporate logo—the three crossing keys that represent confidence, security, and discretion.

At present, UBS provides its clients with a variety of services, which are divided into three core business components. As a wealth manager, UBS provides its high-net-worth clients with customized solutions, ranging from asset management to estate planning to corporate finance. As a global asset manager, UBS advertises innovative investment management solutions to private, institutional, and corporate clients. These solutions involve offering its clients investment instruments associated with traditional assets, such as real estate, fixed income assets, and so forth, as well as some more advanced investment vehicles, like multimanager funds, hedge funds, and so on. As an investment banker and securities trader, UBS offers its corporate, institutional, and other clients research and securities products—anything from foreign exchange, energy and precious metals trading, fixed income instruments, and many others.

Although UBS has always positioned itself as a good corporate citizen, the company has not been able to avoid some major controversies throughout the years. For instance, in 2001, the company was accused of "sinking" Swissair by refusing to extend the line of credit to the national carrier in distress. In 2004, Indian government and business circles in India alleged that UBS played a significant role in the stock market crash, which resulted in the change of political power in that country. In 2005, the company was accused of racial discrimination in hiring and promotion, as well as of unfair employment practices in some of its U.S. branches. Although the lawsuit was later dismissed, it has left UBS with a somewhat damaged reputation. The most recent controversy played out in the last quarter of 2007, when Peter Wulffi had to step down as chief executive officer (CEO) of the company, bowing to pressure from the major stakeholders, amid enormous write-offs related to banking losses in the United States.

Recent Financial Performance

Up to the end of 2006, UBS has remained one of the world's most profitable financial services institutions, with posted net income of about CHF11.25 billion (or $9.4 billion at the time). Until 2007, the mixture of financial expertise, prudence, and risk aversion seemed to be working perfectly well for UBS and its major stakeholders. Starting in 2007, however, the financial performance of UBS has gone down tremendously, mainly because of massive losses the company had to endure due to the U.S. subprime mortgage crisis, as well as some expert-recognized blunders in the area of structured products and leveraged finance. In April 2008, the company reported that it expected to post net losses of about CHF12 billion (approximately $12 billion) in the first quarter of 2008, and that it would also take further losses and write-offs totaling approximately $19 billion on U.S. real estate and credit positions.

Despite financial underperformance and controversies, UBS remains a strong player in the financial services markets worldwide. The company's other business units are strong, and are expected to offset, to a certain extent, major financial losses in the banking sector. UBS has been thought to be among the best companies to work for—as an example, it has various active diversity programs, and it has been recognized as one of the 100 Best Companies for Working Mothers in the United States for several years in a row. UBS is also well known for its many sports sponsorship activities, including its close affiliation with Alinghi, an international sailing team participating in the prestigious America's Cup competition.

See Also: Acquisitions, Takeovers, and Mergers; Credit Suisse; Diversity; Investment Banks; Swiss Market Index; Switzerland.

Bibliography. The Economist.com, "Down the Matterhorn," www.economist.com (cited March 2009); MSNBC.com, "Lawsuit Alleges Discrimination at UBS: Ex-Employees Say Brokerage Firm's Diversity Attempts Mocked Non-Whites," www.msnbc.msn.com (cited April 2008); Dirk Schutz, *The Fall of the UBS: The Reasons Behind the Decline of the Union Bank of Switzerland* (Pyramid Media Group, 2000); UBS, "History of UBS (1937–1939)," www.ubs.com (cited March 2009); UBS, "Swiss Bank UBS in a Few Figures," www.ubs.com (cited March 2009); Wetfeet, *UBS AG: Wetfeet Insider Guide* (Wetfeet.Com, 2009).

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Ukraine

This European country was an independent nation until the 14th century, when parts of it were integrated into the Russian Empire, which gradually came to control nearly all of what had historically been the Ukraine. After the Russian Revolution, the Ukrainian Soviet Socialist Republic became a constituent part of the Soviet Union, but it gained its independence in 1991, becoming the Republic of Ukraine. Because of its long economic and political domination by the Soviet Union, until recently most of its major companies were successors to Soviet state enterprises.

History of the Ukraine

As far back as 1000 B.C.E., people in the Ukraine became known as cattle breeders—the Greek writer Homer makes mention of them—and later of horses. The Scythians and later the Sarmatians were involved in fighting the Romans. Trade in medieval times was along newly emerging trade routes, especially along the Dnieper River. In early modern times, the economy of the Ukraine was dominated by agriculture—with the Steppes producing much of the wheat for the region—and also heavy industry, with large underground coal fields and iron ore. There was also extensive trade around the port of Odessa in the Black Sea, which was increased with the development of Sevastopol as a major port, although its transformation into a Russian naval base sparked the Crimean War of 1853–56. During the latter part of the 19th century, much money—both Russian and foreign—was invested in building a large railway network, linking all parts of the Ukraine with European Russia. In Tsarist Russia, Kiev had a prominent role in publishing, containing a large number of printing firms, an industry that continues to the present day.

As a part of the Soviet Union, the Ukraine was a major source of hard coal, brown coal, iron ore, and industry. Kiev, the capital of the Ukraine, was one of the major industrial cities in the 1920s, and had extensive industrial capacity in regional centers, such as the city of Dnipropetrovsk. Much of the Ukraine was also involved in agricultural production, which led to the collectivization of the medium-sized farms run by the kulaks, or richer peasants, from 1929. The goal was to redistribute land to poorer peasants to increase production, but this failed disastrously with up to 400,000 kulaks being killed or dying. This wrecked the local economy, made considerably worse with the German invasion of the Ukraine in 1941, when much of the region was captured by the Germans and devastated by the war.

After the end of the Great Patriotic War, as World War II was known in the Soviet Union, there was a major rebuilding process. Dnipropetrovsk, a "closed city," became a major industrial and indeed political center. Many of the party elite under Leonid Brezhnev were from Dnipropetrovsk, giving it an important role within the region. The major industrial concerns in the Ukraine at this time included the Belotserkovshima Production Association, the Dnipropetrovsk Industrial Corporation, the Donetsk Excavator Plant, the Kharkhov Tractor Plant, the Mayak Kiev Plant, the Stankiev Machine-Tool Production Company, the Vinnetsa Plant for Tractors, and others located in and around specific cities.

USAID helped a Ukraine pickle cannery increase its production, leading to more income for farmers and cannery workers.

Postindependence

After independence in 1991, many of the government-owned industries that had operated in the planned economy were sold to the private sector, often at low prices, enabling people like Yulia Tymoshenko from Dnipropetrovsk to become massively wealthy. She gained the title "gas princess" due to her role as the president of the United Energy Systems of Ukraine, and her involvement in importing natural gas to the Ukraine from the Russian Federation. There was also considerable restructuring of the economy through programs of the World Bank and the International Monetary Fund.

About a third of the workforce in the country work in industry, and a quarter work in agriculture. The main industries in the Ukraine remain coal, electric power, iron, and other mining and extraction industries—manganese, nickel, and also uranium—and the manufacture of machinery and transport equipment. There is still heavy reliance on nuclear power, even after the Chernobyl disaster of 1986, and some 43.4 percent of electricity in the country is from nuclear power stations. In recent times, there has been an expansion of high-tech industries in Kiev. Ukraine is a member of the GUAM Organization for Democracy and Economic Development and the World Trade Organization (WTO).

See Also: Company Profiles: Eastern Europe; Eastern Europe; International Monetary Fund; Russia; World Bank, The; World Trade Organization.

Bibliography. Business Monitor International, *Emerging Europe Monitor: Russia, Ukraine, & Baltics* (Business

Monitor International Ltd., 2004); John P. Conbere and Alla Heorhiadi, "Cultural Influences and Conflict on Organizational Change in New Entrepreneurial Organizations in Ukraine," *International Journal of Conflict Management* (v.17/3. 2006); Economic Commission for Europe, *Financing Energy Efficiency and Climate Change Mitigation: A Guide for Investors in Belarus, Bulgaria, Kazakhstan, the Russian Federation, and Ukraine* (United Nations Publications, 2006); Yuriy Gorodnichenko and Yegor Grygorenko, "Are Oligarchs Productive? Theory and Evidence," *Journal of Comparative Economics* (v. 36/1, March 2008); Graeme P. Herd and Jennifer D. P. Moroney, *Security Dynamics in the Former Soviet Bloc* (RoutledgeCurzon, 2003); Ann Lewis, *The EU & Ukraine: Neighbours, Friends, Partners?* (Federal Trust & Kogan Page, 2003); Alexander Pivovarsky, *How Does Privatization Work?: Ownership Concentration and Enterprise Performance in Ukraine* (International Monetary Fund, 2007); Marat Terterov, *Doing Business with Ukraine* (GMB Publishing & Kogan Page, 2005); Marat Terterov, *Ukraine Since the Orange Revolution: A Business and Investment Review* (GMB Publishing, 2006).

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Uncertainty Avoidance

Uncertainty is a fact of organizational life, and all organizations develop mechanisms for coping with it. However, not all organizations behave alike in their effort to avoid perceived uncertainty. According to Geert Hofstede, this is because uncertainty avoidance is a culture-dependent variable, and not all firms are embedded in similar cultures. Understanding this cultural dimension can, therefore, be helpful for making sense of particularities observed in the organizational context.

According to Hofstede, seeking recourse to the levels of uncertainty avoidance of the country in which an organization functions is a reliable guide for understanding its organizing processes and possibly predicting its reactions in the face of novel situations. Because cultures are considered to be highly country-specific, the patterns of behavior that individuals tend to exhibit are significantly affected by the cultural milieu in which they find themselves, for the reason that culture is seen as the collective mental programming of individuals.

Strong uncertainty-avoiding countries tend to feel more threatened by the unknown aspects of the world, versus weak uncertainty-avoiding ones that do not experience uncertainty with analogous degrees of threat. As far as organizations are concerned, the dissimilar levels of intolerance toward ambiguity affect firms' reactions in the precautions that they take to "combat" uncertainty. We should thus expect the procedures of Japanese firms to be quite different from those developed by Singaporean ones, because Japan is in the upper echelons of the uncertainty avoidance ranking, while Singapore is the least uncertainty-avoiding country in the relevant index.

Coping by Using Technology, Rules, and Rituals

More specifically, according to Hofstede, organizations cope with uncertainty through technology, rules, and rituals. Concerning the technological dimension, high uncertainty-avoiding firms are particularly prone to adopting technological solutions and are thus more likely to seek guidance from external agencies that they see as experts. By contrast, low uncertainty avoidance firms appear more skeptical regarding solutions of this kind.

With respect to rules, strong uncertainty avoidance cultures are more fertile for the structuring of activities. This is explicable by the fact that formalization, standardization, and specialization function as absorbers of the anxiety provoked by perceived uncertainty, by making the unknown seem more controllable. Although rules constrain the possible actions that may be undertaken, this "limitation of freedom" is in an important sense anxiety reducing in absolving agents from the burden of having to choose between alternative courses of action with uncertain outcomes. On the other hand, firms in weak uncertainty avoidance cultures are expected to function less uncomfortably in relatively unstructured environments. This means that employees are more likely to take initiatives and possibly bend formal and informal rules, if they believe that acting accordingly will be beneficial for their organization.

Last, pertaining to rituals, strong uncertainty avoidance cultures are more susceptible to adherence to established patterns of behavior that do not necessarily increase the efficiency of the organization, but instead function as a "comfort blanket." In contrast, weak uncertainty avoidance cultures are less prone to succumbing to ritualistic behaviors because they are less likely to be paralyzed by anxiety.

Uncertainty Avoidance Differences

It should be noted that high uncertainty avoidance cultures are not superiorly rational compared to low uncertainty avoidance ones, or vice versa. The uncertainty avoidance dimension is simply meant to document culturally conditioned tendencies in collective behaviors, without taking an evaluative stance. There are, of course, situations in which we may reasonably expect the levels of uncertainty avoidance to have a direct impact on the achievement of certain ends.

For instance, strong uncertainty avoidance cultures feel more threatened by deviant ideas and are thereby plausibly expected to be more resistant to change. From this perspective, the levels of uncertainty avoidance can explain the different levels of innovative activity across countries. While inventions may indeed develop more frequently in weak uncertainty avoidance cultures, strong uncertainty avoidance ones may, however, be more suitable for the commercialization of innovative ideas.

Finally, it should be highlighted that according to Hofstede, the workplace is only one of the social arenas influenced by culture. Concerning the dimension of uncertainty avoidance, he stresses that it can explain not only the persistent differences observed in the workplace, but its explanatory power also extends to the domains of legal, political, and educational organizing, not to mention a society's philosophical and religious predispositions. For example, Hofstede argues that people in strong avoidance cultures tend to believe in truth "with a capital T," and more often ascribe to the dogma "There is only one Truth and we have it." Cultures of this kind tend to rely to a greater extent on religious doctrines and show a preference for grand theories. This is in stark contrast with weak uncertainty avoidance cultures, which exhibit more relativistic attitudes toward truth and theories about the nature of reality.

See Also: Confucian Work Dynamism; Hofstede's Five Dimensions of Culture; Individualism/Collectivism; Masculinity/Femininity; Power Distance.

Bibliography. Robert Michael Cyert and James G. March, *A Behavioral Theory of the Firm* (Prentice Hall, 1963); Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations* (Sage, 2002); Geert Hofstede and Gert Jan Hofstede, *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Its Importance for Survival* (McGraw-Hill, 2004); Bradley L. Kirkman et al., "A Quarter Century of Culture's Consequences: A Review of Empirical Research Incorporating Hofstede's Cultural Values Framework," *Journal of International Business Studies* (v.37/3, 2006); Bert Scholtens and Dam Lammertjan, "Cultural Values and International Differences in Business Ethics," *Journal of Business Ethics* (v.75/3, 2007); Linghui Tang and Peter E. Koveos, "A Framework to Update Hofstede's Cultural Value Indices: Economic Dynamics and Institutional Stability," *Journal of International Business Studies* (v.39/6, 2008).

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Underdevelopment

Economists and sociologists have studied economic inequality between countries, trying to understand the causes of underdevelopment. Some see it as a type of historical setback that can be overcome by passing through certain stages as developed countries have already done. Others see it as a situation characterized by a dualism that paralyzes society; the dominion of a privileged minority and the submission of a poor majority that lives in traditional conditions, and the economy; an archaic agriculture that coexists with a modern economy geared toward the exterior. Third parties make underdevelopment a situation of misery and blockage, a product of the development of rich countries, leaving underdeveloped countries dominated, plundered, and corrupted by their colonizers.

Characteristics of Underdevelopment

Even though there are marked differences between countries, this diversity of ideas obliges one to describe underdevelopment. One fundamental characteristic is rapid demographic growth, a situation caused by immersion in the first (reduction of rate of mortality) and in the second (reduction of rate of natality) phases of demographic transition, bleak life expectancy, and a particularly young social makeup; correspondingly suffering from nutritional and medical deficiencies, illiteracy, underemployment, and low living standards.

Another trait of these countries is the dominance of the primary sector, with a mediocre industry yielding low outputs and a confined tertiary sector, which as a whole cannot absorb the surplus of farm labor. Depending on the North/South exportation of a few raw materials, they also have a trade debt. Their savings are insufficient with the added inconvenience that capital should be used on services for an increasing population. To develop, they must take on a large external debt that converts the rate of demographic growth into the contrary of that of the gross domestic product (GDP). In this framework, transportation is insufficient, regional differences are clearly pronounced, and industrial regions are lacking, which furthermore concentrate on the coast just as the sprawling and anarchic housing development.

The phenomenon of underdevelopment has been named many ways by international organizations according to changing theories or expectancy of reaching development. While in 1949, the U.S. president Harry Truman (1884–1972) assigned his country the mission to favor "the improvement of living conditions and economic growth in underdeveloped regions," the French economist and sociologist Alfred Sauvy (1898–1990) termed poor countries as *Third World* in 1952, in clear reference to the Third Estate of the French Revolution (1789). As development theory rhythms were changing, this term evolved: during the 1960s, the term *least developed countries* (LCD) emerged, as did the terms *developing countries* (contrasting the North/South and the center/periphery, especially in the 1970s, the *Fourth World* in the 1980s, and in the 1990s, prior to development, some countries are called emerging markets.

The question arises of how to measure if a country is underdeveloped. It is often considered that a low GDP per capita (GDP/pc) is a symptom of underdevelopment. In 2005, the World Bank distinguished three country groups by income: a first division gathered countries with an average income of less than $875; a second division separated into two groups with an mid-range income, and GDP/pc of $876 to $10,725; and a third division of countries with a GDP/pc of more than $10,725. Countries are considered underdeveloped when their income is less than $875 and some in the middle subgroup up to $3,466. However, this indicator has its defects, because it does not show how the average income is distributed, and the U.S. dollar does not have the same value in a rich country as it does in a poor one.

That is why, in the wake of the work by Amartya Sen (Nobel Prize winner in economics in 1998), the United Nations Development Programme (UNDP) created the Human Development Index (HDI) that synthesizes life expectancy at birth, adult literacy rate, the gross combined rate of registration in primary, secondary, and postsecondary education, and GDP/pc in purchasing power parity in U.S. dollars (PPP in US$). The maximum HDI rating a country can receive is 1.00. From 177 countries analyzed, three uniform groups can be formed producing the following indicators: the 70 countries of High Human Development had an average of 0.897 HDI in 2005 (average GDP/pc in PPP in US$ of $23,986), 85 countries of Medium Human Development had 0.698 HDI (average GDP/pc in PPP in US$ of $4,876), and 22 countries of Low Human Development had 0.436 HDI (average GDP/pc in PPP in US$ of $1,112). By way of comparing, the Organisation for Economic Co-operation and Development (OECD) gave an average for its countries with 0.916 HDI (GDP/pc in PPP in US$ of $29,197).

Theories of Underdevelopment

Underdevelopment is subject to theoretical dispute. For some, it is merely a setback in development. For others, it is a product of history, stressing the economic exploitation inherited from colonization, and solving it by means of adapting to modernity its economic and social structures. Since the 1980s, in the face of the inefficiency of approaches of the dependency theory or neo-Marxism and the development of some Asian countries (newly industrialized countries), liberal thinking, with some clarifications, has been reclaimed.

Former outdated approaches cited ethnic and geographical, and cultural and institutional theories. The first used Joseph Arthur Comte de Gobineau's (1816–82) thesis formulated in *An Essay on the Inequality of the Human Races* (1855), in which he affirmed that indigenous people's genetic inheritance was a determinant cause of underdevelopment. There are authors who explain underdevelopment in geographical terms—the idea being that natural conditions, poorness of soils, and aridity of climates determine the situation.

With respect to ethnic determinism, it seems to fail to convince when regarding civilizations that in other times were capable of initiating growth mechanisms (the Pyramids of Egypt, the Great Wall of China, and Machu Picchu). Neither geographical position nor resource endowments seem sufficient to explain areas that were developed in the past and now are not (Egypt and Morocco during the Roman Empire), while others currently with mediocre resource endowments are developed (Australia and New Zealand).

A cultural and institutional theory defends the idea that to promote development, sociocultural and institutional action (the state) are necessary. The best-known approach is that of Max Weber (1864–1920) in his work *The Protestant Ethic and the Spirit of Capitalism* (1904), where he alleges that puritan ethics, defined as a rational conduct to reach economic success, influenced the development of capitalism. Later clarifications claim that existing inefficient institutions are due to the incompatibility between traditional culture and one necessary to develop. For example, the absence of a true right to private property in sub-Saharan Africa or certain fatalism before natural hindrances and poverty impede innovation. Theodore Schultz (1902–98) demonstrated that the continuity of poverty in such countries is more a result of a rational method similar to that of the West, rather than a problem generated by institutions.

Rostow, Gerschenkron, Nurske, and Singer

Currently, the most prominent theories are the liberal (modernization theory), the dependency, and the Marxist, and the neo-Marxist theory. The liberal position was defended by Walt W. Rostow (1910–2003), adviser to President Lyndon B. Johnson from 1963 to 1968. In his work *The Stages of Economic Growth: A Non-Communist Manifesto* (1960), he made a lineal analysis of growth considering underdevelopment as backwardness with respect to developed countries. He indicated that if a country with a retarded development (preindustrial) wanted to develop, it could do so by undergoing the relevant phases, and copying Western methods of development. Considering the phases a country must pass through to industrialize itself, Rostow established a model of five stages, the last three being "take-off," "drive to maturity," and the "age of high mass consumption."

This analysis was soon criticized. For Alexander Gerschenkron (1904–88), development did not follow the stages described by Rostow because less-advanced countries could skip stages by employing high technology created by developed countries, an advantage of being backward, to shorten the process. On the other hand, it was argued that undeveloped countries also need institutional instruments to channel that industrialization. Likewise, Simon Kuznets (1901–85), Nobel Prize winner in economics in 1971, criticized the theorization of Rostow, considering problematic the selection of five stages and its limits, the measurement of leading sectors of the economy, and the parameters utilized to quantify political and institutional structures. He showed that no Western economy had experienced the take-off stage nor doubled its gross fixed capital formation (GFCF).

In the 1950s, Ragnar Nurske (1907–59) formulated the doctrine of "the vicious circles of poverty." It described a situation in which diverse factors that are interconnected produce a stagnation from which it is difficult to escape. Poverty would originate from insufficient incomes and too-low savings to finance a productive investment; the weakness of demand, the narrowness of the domestic market, and the impossibility to stimulate the demand of the state (by means of the Keynesian multiplier) are supplementary obstacles to the increase in productivity. "A country is poor because it is poor"; however, supporting himself on Keynesian analysis, Nurske recognized that an exterior intervention could break that "vicious circle." That intervention would make the initiation of development possible by means of international aid and a balanced growth strategy: investments in economic and social infrastructures (the government's role) and development of productive investments.

These ideas were defended by Hans W. Singer (1910–2006), who stated, "an undeveloped country is poor because it has no industry and it has no industry because it is poor."

Classical Models

During the 1950s and 1960s, classical models of structural change acquired relevance, one of which is the "dual economy." Arthur A. Lewis (1915–91), in his work *Economic Development With Unlimited Supplies of Labour* (1954), considered a characteristic of underdeveloped economies as the coexistence of two sectors, one archaic—rural and overpopulated with marginal productivity of insignificant exploits—and the other modern—urban and industrial with foreign capital and high productivity. Under these conditions, surplus labor from agriculture could transfer to the industrial sector without diminishing traditional production. Hence, profits from modern entrepreneurs would allow the accumulation of capital and investment, and the increase of labor demand, production, and employment. The structural change would proceed until solving development backwardness in which the total surplus of labor from the rural sector was absorbed by that of the industrial.

In the same sense, the U.S. author Albert O. Hirschman (1915–) saw an unbalanced form of growth in "dualism," where a series of disproportionate advancements in a sector was followed by other sectors trying to reach the same. This permits a bottleneck mechanism to extend the field of induced investment and foment decision making and new investments. In this manner, the key to growth is an original investment that brings posterior investments.

Theory of Dependency

A second group of theories that explain underdevelopment are joined under the denomination of dependency theory. They are a group of varied economic models that try to explain the difficulties that some countries find to develop.

A first stage of the review of this theory can be drawn from the "thinking" of the Economic Commission for Latin America and the Caribbean (ECLAC), which was formed in the 1940s and 1950s. Propelled by the Argentinean economist Raúl Prebisch, it assembled around itself a group of Latin American economists and sociologists: Celso Furtado, Juan Loyola, Aníbal Pinto, Osvaldo Sunkel, and the Spanish sociologist Juan Medina Echerarría. Its reflection took as a starting point the dissatisfaction that the neoclassical theory caused, and considered it as inadequate to promote development in the Third World.

ECLAC addressed economic and social problems from a historical and holistic (development and undevelopment are a single process) perspective, set on the basis of the center/periphery model. Structures of peripheral countries were different from central countries, those being heterogeneous (export agriculture and unsophisticated subsistence agriculture), and specialized (exportation of few primary products, absence of industry, enclaves of modern sectors, and demand for imported manufactures).

In this structure, "development and underdevelopment were connected processes in a single global economy" in which the center (production and export manufactures) and the periphery (production and exportation of primary products) complemented each other within the international division of work. This asymmetrical relation accentuated international inequalities. In the opinion of ECLAC, free trade increased inequality, besides producing a deterioration of the real relation of interchange for the periphery's specialization in primary products. It defended the interior market as a path to growth (industrialization as substitute for importation [ISI]), an act that had certain success until the 1970s with improvements in health services and education in many LCDs.

Marxist and Neo-Marxist Viewpoints

From this stance, development/underdevelopment thinking evolves toward Marxist and neo-Marxist positions that considered economic exploitation inevitable. Karl Marx (1818–83) first considered the importance of colonies for the development of capitalism, but around 1875, he changed focus, insisting that barriers were generated by the very fact of colonialism. Despite these antecedents, Marxist analysis of underdevelopment was further advanced by Vladimir I. Lenin and prolonged by Rudolphe Hilferding.

In the mid-20th century, Paul A. Baran published *The Political Economy of Growth* (1957). In this work, he defended that underdevelopment was a historical product of colonialism and imperialism, and dependence originated from harmful international economic relations. Capitalism was an obstacle for progress in the Third World in such a way that an anticapitalist revolution (the construction of socialism) was the only means to develop.

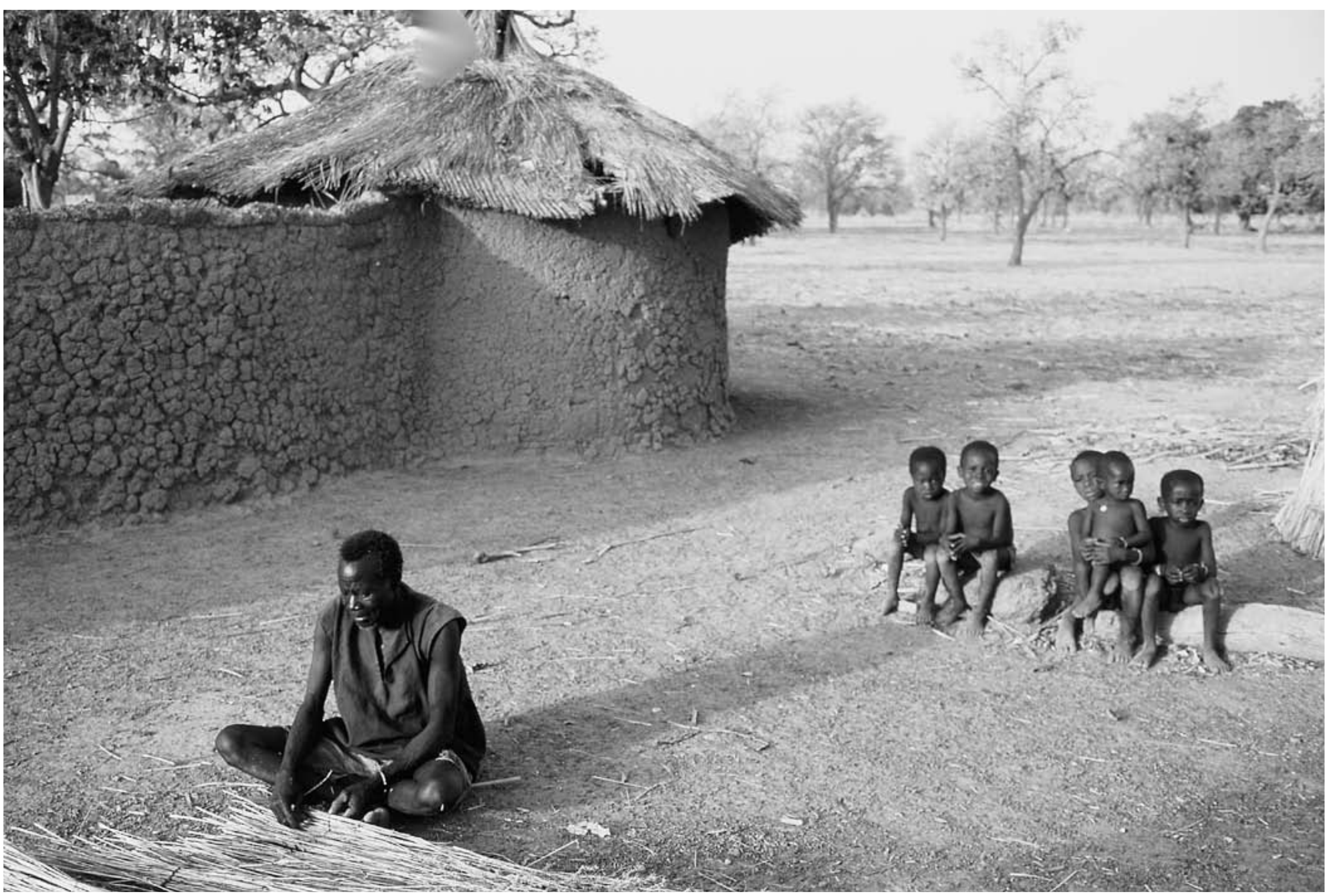
This focus was made popular in the 1960s and 1970s, although divided in tendencies. A first group of neo-Marxist authors were Andre G. Frank (*Capitalism and Underdevelopment in Latin America*, 1967) and Samir Amin (*Imperialism & Unequal Develop-*

ment, 1973) among others, which denied the possibility of sustained economic growth in the periphery and proposed the development of underdevelopment. They also described the negative evolution of the real relation of the interchange of manufactured goods/primary products for underdeveloped countries.

Another group was formed by C. Furtado (*Development and Underdevelopment*, 1961), O. Sunkel (*El Subdesarrollo Latinoamericano y La Teoría del Desarrollo*, 1970), and others as they reformulated the key dependentist approaches of ECLAC, admitting that economic growth was possible, although there would be contradictions between dependency and national development. And finally, the thesis from F. H. Cardoso and E. Faletto (*Dependencia y Desarrollo en América Latina*, 1969), for whom dependency permitted development of the periphery, although conditioned by contradictions and inequalities common to peripheral capitalism; the only possibility thereby was an "associated dependent development."

Since the crisis of 1973, developmental thinking evolved toward more liberal positions, putting in doubt interventionist state policies. At the same time, strategies of open development were successful in the newly industrializing countries (NICs) in Asia (Hong Kong, South Korea, Singapore, and Taiwan in 1970; and currently, China, India, Malaysia, the Philippines, Thailand, and Vietnam). Socialist countries saw themselves sinking as a confirmation of their development strategies' failure.

In the 1990s, national limits were seen as dissolving with the appearance of a global village, where private businesses became developmental agents in nations. The theory of globalization appears to describe how investment and employment are shifted (outsourced) from industrialized countries (center) to underdeveloped ones (periphery),



The landlocked west African nation of Burkina Faso is one of the poorest countries in the world. It suffers from a high population density, has few natural resources, and is seemingly caught in "the vicious circles of poverty."

permitting their own development (except in sub-Saharan Africa).

However, the problem of underdevelopment continues without a solution. The 1997 crisis of the NICs in Asia shows the limits of a liberal economy and compels the return of the state in economic life. With exception to South Korea and Taiwan, the NICs remain deposits of labor and poverty. Reasons other than dependency theory are being sought to justify the difficulties of development found in the lack of freedom and internal democracy, corruption, the squandering of resources, excessive military costs, the incompetency of authorities, the nationalization instead of privatization, or the emphasis on heavy industries instead of agriculture and light industry.

It is difficult to speculate over the future of underdevelopment theory, although there exists a certain consensus that underdeveloped countries will evolve in the framework of a globalized economy. In this setting, liberals have achieved the acceptance that economies need to be oriented toward the exterior; defenders of dependence theory have accepted state intervention in the economy and, a third position, that sees social questions and the fight against poverty priorities in the development process. This mix can be summed up by a well-known quote of the 1960s by Deng Xiaoping (1904–97) that summarizes the position of many countries: "I don't care if it's a white cat or a black cat. It's a good cat so long as it catches mice."

See Also: Africa; Asia; Central America; Comparative Advantage; Dependency Theory; Development Assistance; Dollar Hegemony; Economic Development; Emerging Markets; External Debt; Food and Agriculture Organization; Globalization; Green Revolution; Heckscher-Ohlin Model; Import Substitution; Infant Industry Argument; International Development Agency; International Monetary Fund; Latin America; Millennium Development Goals; Modernization Theory; Newly Industrialized Countries; Socialism; Sustainable Development; United Nations Conference on Trade and Development; World Bank.

Bibliography. African Forum and Network on Debt and Development, *Illegitimate Debt & Underdevelopment in the Philippines: A Case Study* (African Forum and Network on Debt and Development, 2007); Rafiul Ahmed and Prasenjit Biswas, *Political Economy of Underdevelopment of North-East India* (Akansha Publishing House, 2004); R. J. Barro and X. Sala-i-Martin, *Economic Growth* (MIT Press, 2004); K. S. Chalam, *Political Economy of Underdevelopment in Kalingadhra* (Zenith Books International, 2009); M. Cowen and R. Shenton, *Doctrines of Development* (Routledge, 1996); William Easterly, "Inequality Does Cause Underdevelopment: Insights From a New Instrument," *Journal of Development Economics* (v.84/2, 2007); B. N. Ghosh and H. Guven, eds., *Globalisation and the Third World* (Palgrave Macmillan, 2006); Amal A. Kandeel, *Jordan's Struggle for Survival: War in the Middle East and Arab Economies' Underdevelopment* (Pluto, 2008); M. H. Khalil-Timamy, *The Political Economy of Technological Underdevelopment in Africa: Renaissance Prospects, Global Tyranny, and Organized Spoliation* (Centre for Black and African Arts and Civilisation, 2007); Tetteh A. Kofi and Asayehgn Desta, *Saga of African Underdevelopment: A Viable Approach for Africa's Sustainable Development in the 21st Century* (Africa World Press, 2008); Kimse Okoko, Johnson N. Nna, and Ibaba S. Ibaba, *The Politics of Oil and the Development of Underdevelopment in the Niger Delta* (University of Port Harcourt Press, 2006); Akinyemi Onigbinde, *Development of Underdevelopment: Conceptual Issues in Political Economy* (Frontline Books, 2003).

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UniCredit Group

UniCredit Group is one of the leading European banking groups, with a core business of retail banking and other related services, but also offering asset management, insurance, and leasing services. During fiscal year 2007, the Group recorded an operating income of €29,655 million, an operating profit of €13,346 million, and employed 170,000 people. Today, UniCredit, whose origins date back to the establishment of Rolo Banca in 1473, operates through 9,714 branches in 23 European countries and has offices in 27 other markets.

The actual structure is the result of the merger of nine of Italy's largest banks and the recent acquisition of the German HVB Group and the Italian Capitalia Group. In central and eastern Europe, the network has been strengthened through the strategic acquisition of Ukrsotsbank in the Ukraine and ATF Bank in Kazakhstan. Their headquarters are in Milan, Italy, which represents the main market, accounting for roughly 51 percent of total revenues. In Italy, top competitors are Intesa Sanpaolo and Antonveneta. Outside national boundaries, its main European competitors are Deutsche Bank and Société Générale.

The Group has a leading position in Italy and Germany, where it is the second-largest player with a market share based on assets of 16 percent and 5 percent, respectively. In Austria, UniCredit is the first player with a market share of 19 percent. It is the undisputed leader in central and eastern Europe, where it offers a comprehensive product and service range to about 24 million retail, corporate, and institutional customers, provided with a strong network, which is twice the size of the second player. It has recently also started its expansion in central Asia. Its robust growth in international markets is carried out both organically and through strategic external activities.

The UniCredit Group is characterized by a division-based organizational model that represents a source of value creation and capitalization of growing opportunities. Some business lines—such as retail, corporate, and private banking—are common to all markets of operation. Retail banking is the most important source of revenue, generating about 38 percent of the total, followed by corporate banking, which accounts for 21 percent of total revenues. This strategic choice is based on the development of centralized divisions, allows pooling and leveraging their know-how to all group clients, regardless of their location, and transfers best practices to provide innovative products. The group's performance in core banking is one of the highest in Europe, allowing it to develop cross-selling activities for other financial products.

Other divisions, such as asset management, markets and investment banking, and global banking services, represent centers of excellence with the aim to increase product competitiveness and quality at a global level. Finally, to manage successfully the high economic growth characterized by a dynamic domestic demand and a high number of foreign direct investments, UniCredit has established a central eastern Europe division and a Poland market division. Support services, such as information and communication technology and back office activities are centralized, too, to fulfill the daily requests of all the divisions.

The centralization and coordination allowed by the divisional organizational structure does not contrast with the adoption of a multilocal approach. On the one hand, coordination ensures strategic support and generates added value for the growth of the Group's businesses: cost structures and internal processes are optimized, ensuring maximum synergies, savings, and operational excellence. On the other hand, the country-by-country approach is considered necessary to empower the local banks to oversee distribution networks and customer relationships.

This global approach is reflected in the UniCredit global brand strategy. In recent years, financial investments to build a strong brand both at the international level and at a local level have been high. It has been decided to align local brands closely with the UniCredit Group master brand, making it possible to significantly improve the efficacy and efficiency of marketing and communication investments. Positioning conveyed to the final consumer is focused on empowering optimism: the idea behind this concept is that people deserve encouragement in their private and professional lives. The objective is to create a single-minded, strong brand and presence throughout Europe, while maintaining the local brand value where awareness is high.

See Also: Acquisitions, Takeovers, and Mergers; Deutsche Bank; Global Brand Strategy; Kazakhstan; Positioning; Ukraine.

Bibliography. Datamonitor, UniCredito Italiano Group, www.datamonitor.com (cited March 2009); Shelagh Heffernan, *Modern Banking* (Wiley, 2005); Hoovers, UniCredit S.p.A., www.hoovers.com (cited March 2009); Unicredit-Group, www.unicreditgroup.com (cited March 2009); Ingo Walter, *Mergers and Acquisitions in Banking and Finance: What Works, What Fails, and Why* (Oxford University Press, USA, 2004).

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Unilever

Unilever is a modern multinational corporation employing over 180,000 people on six continents. It has research laboratories in England (Colworth and

Port Sunlight), Holland (Vlaardingen), Connecticut (Trumbull), New Jersey (Englewood Cliffs), India (Bangalore), Pakistan, and in Shanghai. With gross revenues from its worldwide operations in 2005 at €40 billion, Unilever is a major company, with its stock listed jointly on many stock exchanges as a Dutch firm (Unilever NV) based in Rotterdam, and as an English company (Unilever plc) based in London. However, the company has a unified board of directors and operates as a single firm.

Unilever Beginnings

The duality in Unilever's stock listing originated with its foundation in the 1930s when the Dutch margarine manufacturer, Margarine Unie, merged with Lever Brothers Company, a British soap maker. Their common motive for uniting was the ingredient palm oil, which was used in both the manufacturing of soap and margarine. The merger joined a soap maker with a food manufacturer, which have continued to be their major business focuses since the 1930s.

With the economies of scale achieved from the merger, the dual company was able to initiate new businesses in Latin America. During World War II, it was under some duress, as its Dutch center was in Nazi-occupied Holland. However, after the war, it recovered from its business losses on the Continent and began to expand again in the areas of soap making and foods.

Post–World War II Operations

In 1972, it bought the Canadian operations of A&W Restaurants, which are famous for selling root beer and fast food. It sold the chain in 1995. In the early days, soap was 90 percent of Unilever's revenues. However, by the 1980s, soap and edible fats sales were only 40 percent of revenues. In order to grow, it purchased the Brooke Bond Company in 1984, which manufactures PG Tips tea under the Brooke Bond label. Today Unilever claims that 35 million cups of PG Tips tea are consumed every day in Great Britain.

Unilever expanded its position in the skin-care market from soap to other products through the acquisition of Chesebrough-Ponds. The Unilever product list added food (Ragu spaghetti sauce), toothpaste (Pepsodent), skin-care products (Pond's cream and Vaseline), hairspray (Aqua-Net), and nail polish (Cutex). It continued its expansion into cosmetics in 1989 with the purchase of Faberge, the Calvin Klein cosmetic line, and the Elizabeth Arden line. The latter was sold in 2000 to FFI Fragrances.

When Unilever purchased Helene Curtis Industries in 1996, it established itself as a major company in the United States. The acquisition gave it control of the Suave and Finesse hair-care products, as well as Degree deodorant. It continued its American expansion in 2000 with the purchase of Best Foods. Then in April 2000, it purchased both Ben & Jerry's and Slim-Fast on the same day.

Today Unilever owns over 400 brands. Some are local brands, limited to only a few countries. Others, such as Lipton Tea, are widely recognized. It is also the largest ice cream manufacturer in the world. Most of its ice cream is marketed under the "Heartbrand," with Popsicle, Klondike, Breyers, and Ben & Jerry's being the exceptions. Almost all of Unilever's products are either in the food and beverage category, or in the home and personal care category. This is consistent with the origins of the company as a food producer and a soap maker.

Because of its presence in some of the more environmentally sensitive areas of the world, where tea and palm oil are produced, Unilever has taken a strong stand as an environmental champion. Since 1998, it has undertaken to engage in various forms of sustainable agriculture in producing its food products or ingredients used in personal care products. In 2007, it recruited the Rainforest Alliance as a certification agent. The Alliance certifies that Unilever teas produced in east Africa are grown through environmentally sound ways. By 2010, the company plans to market its Lipton and PG Tips teas in Europe as certified teas. By 2015 it will market globally as certified.

See Also: Acquisitions, Takeovers, and Mergers; Netherlands; Procter & Gamble; United Kingdom.

Bibliography. David A. Aaker, *Brand Portfolio Strategy: Creating Relevance, Differentiation, Energy, Leverage, and Clarity* (Free Press, 2004); Allen P. Adamson, *BrandSimple: How the Best Brands Keep It Simple and Succeed* (Palgrave Macmillan, 2007); Jason Clay, *Exploring the Links between International Business and Poverty Reduction: A Case Study of Unilever in Indonesia* (Oxfam Publishing, 2005); Geoffrey Jones, *Renewing Unilever: Transformation and Tradition* (Oxford University Press, 2005); W. J. Reader, *Fifty Years of*

Unilever (Trafalgar Square, 1980); Ben Wubs, *International Business and National War Interests: Unilever between Reich and Empire, 1930–1945* (Routledge, 2008).

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United Arab Emirates

The United Arab Emirates (UAE) is located on the Persian Gulf and is bordered by Saudi Arabia and Oman. There are seven states that make up this Middle Eastern federation. The seven states are referred to as “emirates,” and they include Abu Dhabi, Ajman, Dubai, Fujairah, Ras al-Khaimah, Sharjah, and Umm al-Quwain. Abu Dhabi is the capital of the UAE, and Dubai is the largest city. The official language is Arabic.

The country was established on December 2, 1971, as a federal constitutional monarchy, and the current president is Khalifa bin Zayeel Al Nahyan. He is the son of the first president of the UAE. When the first president died, his son succeeded him as the leader of this federation on November 3, 2004. Each emirate has its own ruler and has control over mineral rights and revenues. When established on December 2, 1971, the constitution provided for the positions of president and vice president. The ruler of Abu Dhabi is the president, and the ruler of Dubai is the vice president and prime minister. Each serves a five-year term.

Abu Dhabi is the UAE’s major oil producer and Dubai is the UAE’s commercial center. In addition to the above two positions, the government structure includes (1) a council of ministers led by the prime minister, (2) the Supreme Council of Rulers, and (3) a 40-member Federal National Council (FNC). The FNC functions as a consultative body. Twenty of the members are elected and the rulers appoint the remaining 20 members. The first election of members occurred in December 2006. There are no political parties in the UAE.

The UAE was called the Trucial States, which refers to the 19th-century truce (1892 treaty) between the United Kingdom (UK) and Arab sheikhs. In this agreement, the sheikhs agreed to (1) give territory only to the UK and (2) never to enter into any relationship with any other foreign government. In return, the UK offered to protect the Trucial Coast from hostile acts and assist with any land attacks.

Dubai is the commercial center of the United Arab Emirates and has been experiencing a construction boom in recent years.

The UAE is one of the most industrialized countries in the world. The gross domestic product (GDP) per capita is fifth in the world and third in the Middle East. The currency is the Emirati dirham. Petroleum and natural gas exports play an important role in the economy’s growth. The UAE became wealthy in the 1970s after they gained foreign direct investment funding.

Diversification and Growth

Mana Alotaba was appointed as the minister of petroleum in the late 1960s, and he has been credited with building the petroleum industry. Alotaba’s expertise and understanding of this market has earned him the legacy of being the president of the Organization of Petroleum Exporting Countries (OPEC) for a record six times. Although petroleum and national gas have contributed to the growth of the UAE’s economy, they had a desire to become less dependent on these two commodities as the primary resources for the territory’s revenue. As a result, they saw a need to diversify into other areas such as construction, manufacturing, and the service sector. Japan, South Korea, Thailand, and India are major markets, while western Europe, Japan, the United States, China, and India are major suppliers.

There are approximately 4.4 million people in the UAE, and the growth rate is 4 percent as of 2007. However, it should be noted that only 15 to 20 percent of the population are citizens of the UAE. Approximately 3 million people are in the workforce and 93 percent of this population are foreigners. During the mid-1970s, many believed that the foreign labor force was temporary and would decline when the construction industry started to bloom. However, that did not occur. Nationals were not interested in the new markets, and preferred the traditional managerial and administrative jobs in the public sector, oil, and financial services.

When traveling on business, it is important for foreigners to understand the customs and behaviors of the citizens. In this instance, the citizens of the country are predominantly Muslim and follow the laws of Islam. Some key points to remember when meeting include the following:

- Visitors are expected to abide by the local standards.
- Most of the body should be covered.
- Women should dress modestly.
- Alcohol and pork are inappropriate for practicing Muslims.
- Friday is considered the day of rest.
- Avoid bringing the topics of Israel and women into conversations.
- Shoes may be removed before entering a building.
- The decision maker in a meeting is usually the person who is silent.

See Also: Company Profiles: Middle East; Kuwait; Middle East; Oman; Qatar; Saudi Arabia.

Bibliography. Khaled Aljifri and Hussein Khasharmeh, "An Investigation Into the Suitability of the International Accounting Standards to the United Arab Emirates Environment," *International Business Review* (v.15/5, 2006); H. Irvine, "The Global Institutionalization of Financial Reporting: The Case of the United Arab Emirates," *Accounting Forum* (v.32/2, 2008); K. Martin and T. Karrar, "United Arab Emirates Seek to Curb Inflation," *Wall Street Journal,* Eastern Edition (April 19, 2008); Jeffrey Sampler and Saeb Eigner, *Sand to Silicon: Achieving Rapid Growth Lessons From Dubai* (Profile Books, 2003); Jason D. Shaw, John E. Delery and Mohamed H. A. Abdulla, "Organizational Commitment and Performance Among Guest Workers and Citizens of an Arab Country," *Journal of Business Research* (v.56/12, 2003); Marat Terterov and Anthony Shoult, *Doing Business with the United Arab Emirates* (GMB Publishing, 2006); "United Arab Emirates," *Euroweek* (May 2, 2008); "United Arab Emirates: Link to U.S. Dollar Kept," *New York Times* (January 4, 2008).

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United Kingdom

The United Kingdom of Great Britain and Northern Ireland (94,526 square miles, population 60,975,000, GDP $2.23 trillion in 2007) is an industrialized country of islands off the northwest coast of the European continent, consisting of four constituent countries: England, Northern Ireland, Scotland, and Wales. National administrative offices exist in all four countries, but are principally based in London, England. Its 14 overseas territories are the remnants of the British Empire, the largest empire in history, and the British head of state—presently Queen Elizabeth II (b. April 21, 1926)—presides over the Commonwealth of Nations as she does over the United Kingdom (UK) itself.

Terminology and Distinctions

There is a tendency to conflate nonsynonymous terms in relation to the United Kingdom and the British Isles. There are both geographical and political distinctions to make.

Great Britain refers to the largest island in the archipelago, on which are located the countries of England, Scotland, and Wales. Ireland is the second-largest island, off the west coast of Great Britain. Britain is a political-cultural term used for the United Kingdom, which includes Great Britain and Northern Ireland. The British Isles include all the islands in the archipelago, and thus encompasses southern Ireland, the sovereign nation sometimes called the Republic of Ireland or Eire.

Citizens of the UK are thus British, but more likely to refer to themselves as English, Welsh, Irish, or Scots. Non-English British citizens may sometimes be referred to by foreigners as English, and may find the conflation insulting or simply bewildering, as those in the American South feel when all Americans are grouped together as "Yankees."

Other islands within the United Kingdom include the Isle of Man and the Channel Islands (Guernsey and Jersey). These are Crown dependencies—nations over which the British monarch rules as head of state, but with their own heads of government handling the business of governance.

The Commonwealth of Nations consists of 53 sovereign states in a nonpolitical union, most of which were once part of the British Empire. Of those states, 16 are Commonwealth realms—those nations in which the British monarch is the head of state, often in a purely titular and honorary capacity: Antigua and Barbuda, Australia, the Bahamas, Barbados, Belize, Canada, Grenada, Jamaica, New Zealand, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Solomon Islands, Tuvalu, and the United Kingdom. The remaining members are Bangladesh, Belize, Botswana, Brunei, Cameroon, Cyprus, Dominica, Gambia, Ghana, Guyana, India, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Maldives, Malta, Mauritius, Mozambique, Namibia, Nauru, Nigeria, Pakistan, Samoa, Seychelles, Sierra Leone, Singapore, South Africa, Sri Lanka, Swaziland, Tanzania, Tonga, Trinidad and Tobago, Uganda, Vanuatu, and Zambia. The scope of the Commonwealth gives an indication as to the overwhelming size and ethnic and cultural heterogeneity of the British Empire at its peak.

Though the British Isles are considered part of the continent of Europe, the British will usually refer to "Europe" or "the Continent" to mean the mainland only, to distinguish it from Britain; "Europe" sometimes also designates the European Union, especially as an object of derision.

History

Inhabited since prehistoric times, the history of the British Isles was marked by a series of invasions and settlements by various groups from the Continent. The Roman Empire controlled the isles for four centuries, ending in 410, and the Latin name for the lands—Brittania—is still used to poetic ends. The Roman occupation brought Britain up to speed with the continent in the areas of agriculture, industry, and urbanization, and strengthened trade ties that remained when Rome did not. The Anglo-Saxon period followed, named for the invading Germanic tribes. The English language is descended from a mixture of their Germanic dialects with a strong Latin influence, and is one of the few major languages of western Europe that falls outside the Latin-derived Romance group; indeed, much of the Romance influence in English comes from dictionaries and grammar texts written in the 18th century with an eye toward "sophisticating" the language by making it more like French.

The first injection of French into the English language, though, came with the Norman Conquest of 1066, which removed the Anglo-Saxon rulers from power, replacing them with a French-born aristocracy. A long rivalry with France began, and a love-hate relationship with its culture and language (with some British patriots to this day pronouncing the "t" in "buffet" as a show of support for the Crown). They remained rivals during the age of exploration, as both nations carved out pieces of North America. The political unit of the United Kingdom originated in 1707, formalizing the union of Scotland and England that had begun 100 years earlier, when James VI of Scotland succeeded Elizabeth I of England to become James I, King of England. The 1707 treaty created the Kingdom of Great Britain, unified under a single parliament, a single monarch, a single constitution. The union was pivotal in strengthening the country for the massive expansions of its empire that followed over the next two centuries.

After the Seven Years War (1756–63), Britain became the world's dominant superpower, and arguably the most dominant such power since the fall of Rome. Winston Churchill later described the war as "the first world war," and the scope was indeed extraordinary. All the major powers of Europe were involved: Britain and its colonies, Prussia, Portugal, and the Electorate of Brunswick-Luneburg allied against Austria, Russia, France and its colonies, Sweden, Spain, and Saxony. The war began with Prussia's invasion of Saxony, and in a larger sense was precipitated by the rapid growth of the colonial powers and a thirst for dwindling resources.

Battles were fought in Europe, India, the Caribbean, the Philippines, Africa, and North America; the North American campaign is called the French and Indian War. After-effects of the war were far-reaching: France's colonial days were ended almost completely;

dissent against British rule and involvement in European conflicts flared in the American colonies, leading to the war for independence a dozen years later, and the British emerged as the largest colonial power with the greatest mastery of the sea. The war was one of the key conflicts studied by Napoleon Bonaparte, whose own ambitions led to the continent-spanning Napoleonic Wars a century and a half later.

Britain's empire expanded quickly without France to compete with, despite the loss of the United States; imperial efforts shifted to the already settled areas of Asia and Africa, rather than injecting settlements into new lands to grow British populations, as had been done with North America. Ireland joined the union in 1801. In 1921, the empire encompassed so much of the globe that the British monarch ruled over one-quarter of the world's population. But the following year, southern Ireland succeeded in its campaign for "home rule," seceding from the union while leaving Northern Ireland—Protestant, and in fear of a tyranny of a Catholic majority—to the rule of the UK.

The empire, like most of the empires of Europe, was dissolved after World War II, when the formation of the United Nations and attempts to prevent another world war led to a restructuring of the global distribution of power. At the end of the 20th century, legislative bodies were established for Wales and Scotland—the Welsh Assembly and the Scottish Parliament—and in the decade since, the nations of the United Kingdom have become more distinct from one another, as services such as healthcare vary according to the decisions of their various legislations. The Northern Ireland Assembly has comparable powers. A growing concern is the question of where this leaves England, which continues to be ruled by a body that is not exclusively English.

Though the strongest prime minister (PM) in recent British history was the Conservative Margaret Thatcher, the left-wing Labour Party has been in control since 1997, currently led by Prime Minister Gordon Brown. Like much of the world, in 2008 Britain entered an economic crisis, the full effects of and solution to which have not yet revealed themselves.

Politics

The United Kingdom is a constitutional monarchy, but lacks a written codified constitution—a situation so rare that many people forget that a "constitution" is a system of law establishing the procedures and foundational rules of a government, and that it need not necessarily take the form of a specific document. The Constitution of the United Kingdom thus includes Acts of Parliament, treaties, laws of the European Union, common law, informal constitutional conventions, and the royal prerogative: those powers that belong to the monarch (and are exercised, traditionally, by the prime minister in the monarch's name) that have no source in legal statutes. Because there are no statutes defining the royal prerogative, the specific limits and extent of the power of the monarch is undefined, but includes (based on previous royal actions) the power to issue passports and ratify treaties, the power to summon or dissolve Parliament, the power to declare war and peace, and the power to regulate the Civil Service.

Basic principles of the British constitution include the supremacy of Parliament (the exact limits of which have been under frequent debate for years) and the maxim that "the monarch reigns, but does not rule." The monarch traditionally abstains from active involvement in politics. Whether the monarch has any real authority or is just a figurehead is another matter of debate, though foreigners from non-monarchies outside the Commonwealth may have difficulty understanding that to be "just" a figurehead is still to be something sublime.

The bicameral Parliament system used in the United Kingdom is much like the system that has been adopted throughout the world. The 646 members of the House of Commons are elected via a first-past-the-post system from various electoral districts, while the 746 members of the House of Lords are appointed (and once consisted of hereditary peerages). The British Parliament is sovereign over the legislatures of Wales, Scotland, and Northern Ireland, and technically has the right to dissolve them at will.

The member of Parliament (from the House of Commons) who is selected by a majority in his house becomes the prime minister. This is traditionally, and nearly always, the leader of the majority party in that house. The monarch appoints the prime minister and his cabinet, but follows the PM-elect's recommendations in doing so.

The major political parties in the United Kingdom are the Labour Party, the Conservative Party, and the Liberal Democrats (formed in 1988 by the merger of the Liberal Party and the Social Democratic Party).

A member of the European Union, the UK is not part of the Eurozone, but continues to use its own currency, the British pound.

Economy

The United Kingdom is one of the largest economies in the world—the fifth-largest by market exchange rates, and the sixth-largest by purchasing power parity. The capital city of London is one of the financial centers of the world, and has been for centuries, rivaled if not matched only by New York, Hong Kong, and Singapore.

Once "the sick man of Europe" in the 1970s, Britain's economy was revitalized by the administration of Prime Minister Margaret Thatcher, who privatized many of the industries that had been nationalized in the 1940s. Despite the economic malaise of the world at large, the UK experienced steady economic growth from 1992 to 2008, its longest stretch of uninterrupted growth since the heyday of the British Empire 150 years ago. Inflation and unemployment are low, and have been low for some time.

The service industry accounts for 81 percent of the workforce, with industry at 18 percent, and agriculture a scant one percent; the British dependence on the Continent for much of its food supply is behind such disparate phenomena as the reputation of British food as rich but bland (a reputation dating to a time of more expensive and unwieldy transport, when fresh produce was unavailable in cold months) to the traditional giving of oranges as Christmas gifts, as their seasonality in southern Europe and the appropriateness of their expense coincided with the holiday.

British industry includes machine tools and industrial equipment, aircraft and motor vehicles, computers and electronics, metals, chemicals, coal and oil, paper, and textiles. The United States, Germany, France, and Ireland account for nearly half of their $442 billion (2007) in exports.

See Also: European Union; France; FTIndex; FTSE; Germany; Ireland; Stock Exchanges.

Bibliography. David Abernethy, *The Dynamics of Global Dominance, European Overseas Empires 1415–1980* (Yale University Press, 2000); Alfred Barnard, *The Whisky Distilleries of the United Kingdom* (Birlinn Ltd., 2008); Sydney J. Chapman, *A History of the Trade Between the United Kingdom and the United States: With Special Reference to the Effects of Tariffs* (Routledge, 2006); Jonathan Hollowell, *Britain Since 1945* (Blackwell Publishing, 2002); Caroline Lloyd, Geoff Mason, and Ken Mayhew, *Low-Wage Work in the United Kingdom* (Russell Sage Foundation, 2008); Angus Maddison, *The World Economy: A Millennial Perspective* (Organisation for Economic Co-operation and Development, 2001); Alistair Mutch, *Strategic and Organizational Change: From Production to Retailing in UK Brewing 1950–1990* (Routledge, 2006); Timothy H. Parsons, *The British Imperial Century, 1815–1914: A World History Perspective* (Rowman & Littlefield, 1999); Simon Smith, *British Imperialism 1750–1970* (Cambridge University Press, 1998).

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United Nations Centre on Transnational Corporations

Charged by the United Nations (UN) to provide research into foreign direct investment and the activities of multinational corporations, the United Nations Centre on Transnational Corporations (UNCTC) commenced operations in 1975. In 1992, it was disbanded and restructured as a component part of the United Nations Conference on Trade and Development (UNCTAD). The UNCTC became particularly noted for its investment policy assistance to developing countries, for its ultimately failed negotiations for a UN Code of Conduct on Transnational Corporations, and for initiating the annual *World Investment Report*, now published by UNCTAD.

The creation of the UNCTC may be seen as part of a wider movement initiated by developing countries called the New International Economic Order, in which they sought mechanisms to redress the economic power balance between themselves and richer developed economies. In 1972, against a background of rising concern by developing countries about the power wielded by multinational corporations, the UN Economic and Social Council enlisted a "group of eminent persons" to investigate the economic impact of such firms on developing nations. Out of their deliberations came the recommendation to establish a permanent commission of the Council on multinational corporations, with a supporting information and research center. Their recommendation was adopted, and a new Commission on Transnational Corporations with its supporting Centre on Transnational Corporations was created, the UN having preference for "transnational" over "multinational" in the title. In a program of restructuring, the UNCTC was closed in 1992, and after a year's hiatus, the UNCTC's activities became subsumed within an enlarged UNCTAD, eventually known as the Division on Investment and Enterprise.

Functions of the UNCTC

When it was established in 1974, a priority for the UNCTC was to write and gain agreement on a code of conduct for multinational corporations. Similar efforts, albeit more limited in scope, were also being made by the Organisation for Economic Co-operation and Development (OECD) and the World Health Organization (WHO), but the UNCTC's code was envisaged to provide explicit assurance to developing countries on the behavior of foreign (developed country) multinationals who were investing. The negotiations on the code were protracted, largely because of the differing perspectives among the developing countries, and reconciling these often divergent views became an insurmountable task.

A further problem was the breadth of the proposed code, which included corruption, human rights, the environment, transfer pricing, and international technology transfer. By the 1990s, the much-revised text looked dated, and some elements seemed irrelevant, as economic realities overtook the initial rationale. In particular, the proliferation of bilateral investment treaties (BIT) and the recognition of inward and outward foreign direct investment as an important part of economic development meant that negotiations over the code finally ceased. Elements of the draft code's intent resurfaced in the UN's Global Compact in 2000, a more all-embracing initiative on the fundamental ethics of corporate behavior.

A specific part of the UNCTC's remit was to provide support to developing countries in helping them better understand multinational firms, foreign investment, and the creation of appropriate investment policy and legal frameworks. To achieve this, the UNCTC ran cross-country seminars to share information on matters such as technology transfer, export processing zones, transfer pricing, and investment promotion and policy. The UNCTC advisory teams also helped individual developing countries in drafting regulations and laws. Supporting all of this advisory work were the UNCTC's original research and publications on multinationals and their investments. Its periodical *The CTC Reporter* (1976–90) summarized and disseminated some of this research, and in 1992, this evolved into a more conventional academic journal, *Transnational Corporations*.

A particular legacy of the UNCTC is its quinquennial publication *Transnational Corporations in World Development*, the last of which was published in 1988. This was superseded by the annual *World Investment Report*, which began in 1991, with the 1992 edition completed under the auspices of the UN Department of Economic and Social Development, before becoming a publication of UNCTAD from 1993 onward.

See Also: Corporate Social Responsibility; Multinational Corporation; Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development; World Health Organization.

Bibliography. Sidney Dell, *The United Nations and International Business* (Duke University Press, 1990); A. A. Fatouros, ed., *Transnational Corporations: The International Legal Framework* (Routledge, 1994); Torbjörn Fredriksson, "Forty Years of UNCTAD Research on FDI," *Transnational Corporations* (v.12/3, 2003); Tagi Sagafinejad, in collaboration with John H. Dunning, *The UN and Transnational Corporations: From Code of Conduct to Global Compact* (Indiana University Press, 2008).

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United Nations Conference on Trade and Development

The United Nations Conference on Trade and Development (UNCTAD), is both a conference held every four years and an organization within the United Nations (UN). The first Conference (UNCTAD I) was held in Geneva, Switzerland, in 1964, and subsequently it was institutionalized as a permanent body within the UN. UNCTAD was originally conceived by developing countries as a counterweight to the dominant position held in the world trading system by developed economies. Although accused of being ineffectual in its early years, UNCTAD has evolved into a more respected organization, still focused on assisting economic development but whose research into foreign direct investment (FDI) and provision of policy support is held in high regard.

A History of UNCTAD

During the 1950s, developing countries had little engagement with the emerging governance of international trade through the General Agreement on Tariffs and Trade (GATT). The principle of nondiscrimination in trade relations, as embodied in GATT, was seen as unhelpful to the future economic prosperity of developing countries. Marginalized from the GATT processes, these countries sought a way to press for preferential treatment in trade regulation. This was realized in the first UN-sponsored conference in 1964 (UNCTAD I), where developing countries gathered to argue for a system of positive discrimination in international trade regulation.

Those initial countries represented became known as the Group of 77 (G77). In what might be seen as a response to UNCTAD I, in 1965 Part IV of GATT was drafted, which gave leeway for developing countries to have special and differential treatment in trade policy. However, it was not until the 1970s that this potential became realized through what became known as the Generalized System of Preferences, first adopted by the European Community and Japan (1971), Canada (1974), and the United States (1976). Under this scheme, developing countries gained advantageous or zero tariffs on their manufactured goods when imported into participating developed nations, although there is uncertainty over how much developing countries as a whole gained.

By UNCTAD III in Santiago (1972), tariff policy was still the main focus, but discussion extended to the international monetary system and the power of multinational corporations. Through the 1970s, UNCTAD continued to support developing countries and in particular helped them to maintain their merchant marine fleets by establishing the Code of Conduct for Liner Conferences. By the 1980s, UNCTAD was providing increasing levels of technical support to developing economies, both in terms of policy and in more practical matters such as enhancing customs systems. Attitudes toward the success of UNCTAD vary, with the *Economist* arguing in 1992 that it was "still trying to live down its reputation as a sterile north-south talking shop and last bastion for those who champion an interfering state as the remedy for third-world poverty." But since then, UNCTAD has improved its research on the links between development and trade, extended its technical support for developing nations, and embarked upon closer cooperation with the World Trade Organization (WTO), specifically in providing support for firms through the jointly managed International Trade Centre, a cooperative venture between GATT and UNCTAD initiated in the 1960s.

With the demise in 1992 of the UN Centre on Transnational Corporations (UNCTC), UNCTAD became responsible within the UN for monitoring the activities of multinational corporations, and for providing research-based policy advice to developing countries on foreign investment. Much of this work has been reported in its flagship publication, *World Investment Report*. This annual publication, initially instigated by the UNCTC in 1990, has evolved into the primary source for information and analysis of multinationals.

Much of the underlying data used in this report are available online, including country FDI profiles and its famous listings of the world's largest multinational firms. Through these data, one can observe the growth of multinationals and the global spread of their activities. While these data are still beset with technical and methodological problems, they are well regarded and serve as a resource of lasting importance. UNCTAD also monitors changes to national and international regulation of FDI, and it is in these data that one has seen an overwhelming move to FDI liberalization since the early 1990s. Overall, it is this work on foreign investment and multinational corporations that has gained UNCTAD further prominence in the wider community of international business scholars and practitioners.

See Also: General Agreement on Tariffs and Trade; Multinational Corporation; United Nations Centre on Transnational Corporations; World Trade Organization.

Bibliography. Torbjörn Fredriksson, "Forty Years of UNCTAD Research on FDI," *Transnational Corporations* (v.12/3, 2003); Bernard M. Hoekman and Michel M. Kostecki, *The Political Economy of the World Trading System,* 2nd ed. (Oxford University Press, 2001); International Business Publications USA, *United Nations Conference on Trade and Development (UNCTAD) Handbook* (International Business Publications, 2007); Shigehisa Kasahara et al., *Beyond Conventional Wisdom in Development Policy: An Intellectual History of UNCTAD 1964–2004* (United Nations Publishing, 2005); "The Man From UNCTAD," *Economist* (April 7, 1992); Tagi Sagafi-nejad, in collaboration with John H. Dunning, *The UN and Transnational Corporations: From Code of Conduct to Global Compact* (Indiana University Press, 2008); United Nations Conference on Trade and Development, *UNCTAD Current Studies on FDI and Development* (Serial Publication and United Nations Publications, 2006).

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United Nations Industrial Development Organization

The United Nations Industrial Development Organization (UNIDO) was established in 1966, with headquarters in Vienna, Austria. UNIDO became a specialized agency of the United Nations (UN) in 1985. As a result, UNIDO has its own constitution and member states, and a regular budget. UNIDO works toward helping the developing countries in alleviating poverty and creating wealth through the development of the manufacturing sector.

The origin of UNIDO can be traced back to 1959, when the Industrial Section of the UN was separated out as a branch. Subsequently, the Industrial Section became a separate center as Industrial Development Center in 1962. The focus of the Industrial Development Center was on discussions and information dissemination. However, it was felt that this role needed to be broadened to include operational activities that could directly affect the industrial development of developing countries. As a result, UNIDO was created by Resolution 2152 (XXI) of the UN General Assembly in 1966. In the following years, several developing countries as well as intragovernmental committees suggested setting up a specialized agency. During the second general conference of UNIDO held in 1975 in Lima, Peru, the Lima Declaration on Industrial Development and Cooperation was adopted. The Lima Declaration expected developing countries to have a 25 percent share of global industrial output by 2000. To achieve this target, it was recommended to the UN General Assembly that UNIDO be converted into a specialized agency. However, industrialized countries had some concerns in making UNIDO a specialized agency, which led to considerable delay. It was only in 1985 that the formalities of converting UNIDO into a specialized agency were completed.

During the latter half of the 1990s, UNIDO faced challenges to its survival as many developed countries, which were also donors, quit the organization on the grounds that the organization was not run efficiently. It was also felt that with the end of the Cold War, there was no need for such an organization as industrial activities could be better carried out by the private sector. Between 1995 and 1997, several countries including the United States, Canada, Germany, the United Kingdom, and Australia withdrew from UNIDO. With a shrinking budget, UNIDO had to reform itself and find niche areas to create a place for itself. UNIDO streamlined its activities to make sure that there was no overlap with other multilateral agencies and started offering them as a package. The reforms did pay off, as UNIDO was ranked as the best specialized agency of the UN in a study by the UK Department of International Development in 2005. Some of the countries such as the United Kingdom and Germany have since rejoined UNIDO; however, the United States is still out of the organization.

UNIDO Activities

As of 2007, UNIDO had a membership of 172 states. Every two years, UNIDO holds a General Conference, which is its supreme governing body. The General Conference decides on policies and budget issues and appoints a director general every four years. UNIDO has two important organs—the Industrial Development Board with 53 members and the Program and Budget Committee with 27 members. These members are elected during the General Conference. UNIDO also has an Evaluation Group, which works as an independent evaluator of UNIDO projects. The Evaluation Group is under the Bureau for Organizational Strategy and Learning, which is the strategic think tank of UNIDO. Different UNIDO organs work based on the philosophy of result-based management and result-based budgeting.

UNIDO's activities are centered on three themes: poverty reduction through productive activities, trade capacity building, and energy and the environment. UNIDO focuses on small and medium-sized enterprise development, the rural sector, and women in its poverty-alleviation efforts. With respect to trade capacity development, UNIDO helps in developing the technical infrastructure for international trade activities, along with direct support to the export sectors. UNIDO's efforts on energy and environment conservation focus on helping countries fulfill their obligations on multilateral environmental agreements.

These efforts are in synchronization with several millennium development goals of the UN. UNIDO carries out these activities with the help of about 600 staff at the head office and about 500 staff in field offices around the world. UNIDO obtains its resources from donor countries, the United Nations Development Programme (UNDP), and several other agencies supporting the cause of poverty alleviation and environmental protection. UNIDO has been able to establish itself as an important UN agency. However, its future will depend on how efficiently it is able to pursue its goals.

See Also: Environmental Standards; Infrastructure; Trade Balance; United Nations Centre on Transnational Corporations; United Nations Conference on Trade and Development.

Bibliography. Department of Industrial Development, United Kingdom, "Assessment of UNIDO," www.unido.org (cited March 2009); International Business Publications USA, *United Nations Industrial Development Organization (UNIDO) Handbook* (International Business Publications, 2007); Carlos A. Magariños, *Economic Development and UN Reform Towards a Common Agenda for Action: A Proposal in the Context of the Millennium Development Goals* (UNIDO, 2005); I. A. M. Makombe, *Women Entrepreneurship Development and Empowerment in Tanzania: The Case of SIDO/UNIDO-Supported Women Microentrepreneurs in the Food Processing Sector* (University of South Africa, 2006); United Nations Industrial Development Organization, www.unido.org (cited March 2009).

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United Parcel Service

United Parcel Service, Inc., a courier company using the trademark UPS, was established on August 28, 1907, in Seattle, Washington, by 19-year-old James E. "Jim" Casey (1888–1983) and his 18-year-old friend Claude Ryan. Casey's father, Henry, an immigrant from Ireland who worked as a quartz miner, had died when he was young, and as the oldest of four children in the family, he found work as a delivery boy in Seattle. However, his mother, Annie, who had been born in Massachusetts, the daughter of Irish immigrants, encouraged him to run his own company.

Humble Beginnings

It was originally known as the American Messenger Company, and the two teenagers borrowed $100 to start it up. The business was involved in delivering parcels and letters, which included baggage from train stations, notes, and even food from restaurants. Casey stated that the company offered the "best service and lowest rates." Casey paid his younger brothers, Henry and George, until Henry started to work as a chauffeur for a real estate company, and George later found work as a clerk in a steamship company. However, they did work with other teenagers to make their deliveries. Some went on foot, while others used bicycles or motorcycles.

In 1913, when they bought a Model-T Ford, Casey and Ryan decided to merge with a competitor, Evert McCabe, who ran Motorcycle Messengers. The combined operation was called Merchants Parcel Delivery. They also introduced a system of combining the delivery service of packages to particular neighborhoods. In 1918, the trio hired a new employee, Charles W. Soderstrom, who ran their deliveries and started introducing more cars to the business. The reputation was soon sufficient for three of the main department stores in Seattle to use the company for its deliveries. In the following year, the business was so successful that they decided to add service to cover Oakland, California. Because of the increasing delivery network, they renamed the company United Parcel Service.

A New Name—United Parcel Service

The introduction of the common carrier service in 1922 allowed for much cheaper and, for some people, more convenient collections and deliveries. This involved having automatic daily collections, several attempts to deliver parcels, and automatic return of undeliverable mail. In this, the company was able to vastly improve its service by use of the telephone.

In 1930, UPS started running a service in New York, and by this time, it had started using a variety of services—its own and those of others—to cover the mainland United States, with large operations throughout the East Coast states. It was not long before the company's headquarters moved to New York City. During the 1940s and 1950s, the delivery service was expanded to allow UPS to cover addresses anywhere in the mainland United States, with the service being improved by the introduction of Blue Label Air service, which offered speedy delivery. In 1961, the company started using the package and shield trademark that was designed by Paul Rand, and it remained in use until 2003.

In 1975, UPS expanded service to Canada with the creation of UPS Ltd., later UPS Canada Ltd., which operated from its headquarters in Mississauga, Ontario. This proved successful, and in the following year, UPS began a domestic service in West Germany. In 1982, UPS Blue Label Air became UPS 2nd-Day Air Service, and six years later, as the amount of business increased, UPS established its own UPS Airlines.

Moving toward retail business, UPS acquired Mail Boxes Etc., Inc., in 2001, and the company has made heavy use of the internet, allowing customers to check delivery rates and track their packages. It has also enlarged its two main air hubs in Louisville, Kentucky, and in Cologne, Germany, adding to them a new office in Guangzhou, China. UPS has now grown to become the largest express carrier and package delivery company in the world, and also helps provide specialized transportation and logistics advice. It operates throughout the world, having an office in nearly every country, exceptions being places such as Andorra, Monaco, San Marino, and Vatican City, which are well covered by services in nearby countries, and countries such as Afghanistan, in which parcel delivery is not practical.

See Also: China; Entrepreneurship; Germany; Transportation; U.S. Postal Service.

Bibliography. David A. Garvin and Lynne C. Levesque, *Strategic Planning at United Parcel Service* (Harvard Business School, 2006); Thomas J. Heitert, *Part-Time Management Perceptions of the Current Safety Culture in the Operations Organization at United Parcel Service* (University of Central Missouri, 2008); Rodrigo Merino, *United Parcel Service Package Flow Technologies Implementation* (California Polytechnic State University, 2007); Greg Niemann, *Big Brown: The Untold Story of UPS* (Wiley, 2007); UPS, www.ups.com (cited March 2009).

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United States

The economy of the United States is the largest of any country in the world, and was estimated to be worth $13.81 trillion in 2007. This has been generated with a relatively low rate of unemployment and high levels of research and development, funded both by government and by the private sector. The result has been that the U.S. economy has been able to maintain a very high level of output per person, a situation it still maintained in spite of the economic downturn in 2008–09. The main problem, however, is that the United States has managed to generate the largest external debt of any country in the world.

A Brief History

The first Europeans who arrived in North America recognized the economic potential of the continent, and the abundant resources. As a result, the British attempted to establish colonies, such as Roanoke and Jamestown, but they were unsuccessful. They did manage some trade with the Native Americans, but there were not sufficient migrants there to generate their own internal demand. This came about during the 17th century, and especially from the early 18th century when the pioneers opened up farmland—often after wars with the Native American inhabitants—and there was an emergence of towns across what is now called the United States.

Certainly the early settlements in North America imported most of their goods from Britain, but gradually a manufacturing industry began to emerge, especially after the American War of Independence (1775 – 83), after which the United States started cutting its ties with Britain—although there was still some trade through Canada and the Caribbean. The United States also began trading more with France and the Netherlands, both allies in the War of Independence.

This period of breaking trade links with Britain coincided with the Industrial Revolution, which saw the emergence of machinery and factories capable of producing cloth and later many other items at far cheaper rates than had henceforth been the case. The British had always been protective of their industrial designs, and when the capitalist Samuel Slater (1768–1835) left Britain for New York in 1789, before he departed, he memorized the information needed to set up a mill—knowing that any such plans concealed in his luggage would get him into trouble—and built his own mill in Rhode Island, earning him the title of the "Father of the American Industrial Revolution."

Economic Growth

The U.S. economy was transformed soon afterward with the invention of the cotton gin by Eli Whitney, which led to the creation of a large slave plantation society—there were many slaves up to that point, but slavery was rapidly becoming unprofitable in many parts of the United States. And during the War of 1812, Francis Cabot Lowell was able to take designs for a cotton mill to the United States, and was able to build a mill in northern Massachusetts, capable of turning raw cotton into cloth.

This in turn led to the growth of the cotton industry, which soon became one of the main sources of wealth in the southern states, leading to the emergence of very large plantations and exporting cotton to Europe and elsewhere in the world. The result of the building of U.S. factories was that many items were no longer imported to the United States, and indeed the United States became an exporter of some of them. It had transformed from being a source of furs, timber, and tobacco to being a viable economic unit with its own large and wealthy home market.

The growth of the U.S. economy led to a major enlargement of the U.S. merchant navy. Before the War of Independence, U.S. ships had the protection of the British Royal Navy. Without them, they were at the mercy of many pirates operating from North Africa, and problems over piracy led to the Tripolitan War of 1801–05 and the war with Algiers in 1815. These were the first projection of U.S. military power overseas, and with the newfound confidence, it was not long before U.S. traders started operating throughout the newly independent countries of Latin America, and also in east Asia, where they sourced pepper and other spices. In 1854, Commodore Perry forced an entry to Japan, and there U.S. traders found a ready market for their produce. And there were even U.S. businesses involved in shipping ice to India at the time, well before the availability of refrigeration. Much of the ice would melt during the journey, but enough would survive to make the voyage profitable.

The American Civil War changed the nature of the U.S. economy and showed that the industrial power of the northern states was far more powerful than the agriculturally based economies of the South. However, the Confederates managed to establish a small navy, and their merchant raiders attacked and sank U.S. ships around the world, causing many shipping companies to experience so much trouble insuring their ships that they sold a large part of their fleets, ensuring that the British retained their control of much of the world's trade until the 1910s.

After the American Civil War, the westward expansion of the United States saw the country having access to far more land and raw materials than the early settlers could have dreamed of. Railroad companies mapped routes throughout the country, opening up new areas, creating new towns, and conversely also causing the decline in others that were bypassed by the railroads. The boom in railroad shares led to an early stock market boom, with the railroads becoming essential not just for human transport but also used for postal services, transporting cattle, and for raw materials. With migrants flocking to the United States, it was emerging as the largest and most powerful single market in the world.

It was in this climate that many of today's major U.S. companies had their origins. Global business today is dominated by some of these companies, and also their offshoots—although some have completely changed the focus of their business (and indeed some have changed the entire nature of their business).

In terms of media, the largest media organization in the world, News Corporation (or News Corp), run by Australian expatriate (and now a U.S. citizen) Rupert Murdoch, operates from its headquarters in New York City. Some of the best-known newspapers in the world operate from the major cities of the United States: *Boston Globe* (founded 1872, circulation 720,000);

Despite the economic downturn in 2008, the New York Stock Exchange remains the largest stock market in the world. The Chicago Stock Exchange, the Chicago Board Options Exchange, and NASDAQ remain substantial exchanges as well.

Chicago Tribune (founded 1847, circulation 1 million); *Los Angeles Times* (founded 1881, circulation 1.2 million); *New York Times* (founded 1851, circulation 1.2 million); *San Francisco Chronicle* (founded 1887, circulation 600,000); *St. Louis Post-Dispatch* (founded 1878, circulation 350,000); *USA Today* (founded 1982, circulation 2.3 million); and *Washington Post* (founded 1877, circulation 1 million). As well as the papers, and the periodicals such as *Forbes* (founded 1917, circulation 900,000); *Fortune* (founded 1930, circulation 933,000); *Harper's Bazaar* (circulation 750,000); *Harper's Magazine* (circulation 200,000); *Newsweek* (founded 1933; circulation 3.1 million); *Time* magazine (founded 1923; circulation 4.5 million), and many magazines, there are also the headquarters of the news agencies Associated Press (founded 1848); Bloomberg Business News, the Dow-Jones News Service, and United Press International (founded 1907).

Television stations range from the Public Broadcasting Service (PBS), and Columbia Broadcasting System (CBS) to Ted Turner's Cable News Network (CNN, launched on June 1, 1980, now a subsidiary of Time Warner), based in Atlanta, Georgia; and Rupert Murdoch's Fox News (launched in 1996). Many television programs made in the United States are shown around the world, helping to fund their makers, but also spreading U.S. culture, and in recent instances providing opportunities for merchandising products connected with the films. Singers and other entertainers from the United States have also been popular overseas, as have recordings of foreign entertainers in the United States.

The success of U.S. sports players has done much to raise the profile of the United States, with sportswear (often designed in the United States, but made overseas) earning large profits for Nike Inc. (founded in 1972) and other sports manufacturers.

Advances in Communications

In the realm of telecommunications, U.S. companies have led the world in innovation and in their networks. The invention of the telegraph system came largely through the Morse code of Samuel Morse, and Western Union expanded the telegraph system around the United States, with news about developments all over the country communicated to other areas during the American Civil War and the American Indian Wars. Expatriate Scotsman Alexander Graham Bell introduced the telephone in 1876, and the instrument was exhibited at the International Centennial Exhibition at Philadelphia in May 1877; George Coy established the first private telephone exchange in 1878. Initially people were concerned that the telephone service was only duplicating the telegraph service, and elsewhere in the world, some countries tried to limit the money invested in the telephone network, having spent so heavily on the telegraph network. Bell Corporation fought with Western Union, and managed to establish the largest telephone service in the world, exporting its technology around the world.

To give some idea of the advances in the telephone service in the United States—in 1910 the 100 largest hotels in New York had 27,000 telephone lines between them, nearly the same number as in the whole of France only a few years earlier. Bell Atlantic Corporation and BellSouth emerged from Bell Corporation in 1983, with other important telecommunications companies, including AT&T (American Telegraph and Telephone Corporation) and Nynex. And as the service expanded, the production of business directories—the "Yellow Pages"—started in Chicago in 1886 with Reuben H. Donnelly featuring companies listed by the services that they provided. Verizon now controls the publication of numerous telephone directories throughout the United States and overseas.

And with telecommunications, from almost the start of the film industry, the name *Hollywood* has come to represent the industry with countless films devised and filmed in and around Hollywood, California, where many of the most famous actors and actresses in the world live. Some large film companies have remained independent, but many are now owned by other organizations or have merged. Rupert Murdoch's takeover of Twentieth-Century Fox saw the incorporation of it into News Corporation as a part of that firm's desire to have access to Twentieth-Century Fox's film archives and resources.

The Growth of U.S. Industry

From World War I, U.S. financial sectors had started to overshadow their counterparts in Britain, and during the economic boom of the 1920s, U.S. banks grew considerably in terms of deposits and capitalization. Bankers' Trust, Citibank, JPMorgan Chase (from a merger of J. P. Morgan and Chase Manhattan), and Wells Fargo are some of the more well-known names in the banking sector. Many of these operate throughout the United States, although New York remains very much the commercial center of the country. Most major U.S. banks also have operations overseas.

One of the reasons for the predominance of New York is the New York Stock Exchange on Wall Street, the largest stock market in the world in terms of the dollar value of its listed companies. The Chicago Stock Exchange also remains important, as does the Chicago Board Options Exchange, and NASDAQ, which have also proven important for raising capital and investing and speculating in stocks and commodities. And the U.S. financial sector is certainly not limited to banks and exchanges. American Express remains one of the most famous symbols of U.S. capitalism around the world; and VISA (founded in Fresno, California, in 1958) and Mastercard (founded in 1966 by the United California Bank) both have their head offices in the United States.

The food and beverage sectors of the U.S. economy are heavily diversified, and, at one end, rely heavily on agricultural produce. Wheat from the Midwest and rice grown in California are sold around the world. Fruit from the United States is available in Latin America and the Pacific, and U.S. meat products are both consumed locally and exported. However, the most potent symbols of U.S. capitalism in the food and beverage sectors are undoubtedly the soft drinks and fast food outlets. Coca-Cola and its related drinks and Pepsi-Cola and its other beverages can be found all over the world, with the head offices of both—located in Atlanta, Georgia, and Purchase, New York, respectively—jealously guarding the secret formulas used to make the drinks.

Recipes are similarly guarded by McDonalds and KFC (formerly Kentucky Fried Chicken), with Ronald McDonald and Colonel Sanders both becoming well-known icons in their own right. McDonalds and KFC are perhaps the best known of the worldwide franchises, and there are many others, including retail shops and hotels. The purchase of these franchises has been a great source of revenue for the parent company, as is a regular share in their profits. The debate over genetically manipulated (GM) products, many designed by Monsanto, also had its origins in the United States, where many GM products were designed, with many offered for sale overseas.

Manufacturing and Raw Materials

With its wealth of raw materials, the United States is also a major player both in the raw materials themselves and in the value-added produce and the final manufactured products. Coal is still mined in the Appalachian Mountains, and Pittsburgh, Pennsylvania, is still one of the centers of the regional steel industry. Iron and steel were used to help build the railroad system throughout the United States, and also for shipbuilding. The biggest boom was, however, the establishment of the automobile industry with Ford, General Motors, and a number of other automakers and related industries operating from Detroit, Michigan. Gradually, however, with the cost of labor in the United States rising and greater competition from overseas, the U.S. steel industry, its automakers, and its shipbuilding have had to be dramatically curtailed, something exacerbated in 2007 with a considerable decrease in demand. The retail sector, through companies like Wal-Mart, has been relatively strong, although facing problems since 2007.

Tobacco was one of the first exports to Europe from North America, and through the Altria Group (formerly Philip Morris) and British-American Tobacco, the manufacture and sale of cigarettes, cigars, and other tobacco products is still important. But so too is the healthcare sector, with the many of the new "high-tech" medical machines, ranging from modern x-ray machines and scanners to fiber-optic cables and remotely-operated capsules designed in U.S. medical research centers. U.S. doctors are at the forefront of research into treatments for cancer and other diseases and medical conditions, and major U.S. pharmaceutical companies are involved in researching and developing new treatments and drugs.

The focus of much of the U.S. manufacturing industry moved to the more technologically oriented construction of airplanes and defense-related items. Indeed, with the U.S. defense expenditure nearly equaling that of the rest of the world combined, and with much of U.S. weaponry made at home or under license overseas, the military-industrial complex (referred to in his final speech as president by Dwight D. Eisenhower) remains a major element in the U.S. economy. While Boeing makes civilian planes, it has an extensive range of military materiel. Companies like Raytheon have developed some of the most technologically advanced weaponry in the world. Others, like Halliburton—originally an oilfield company established in Texas in 1919—became heavily involved in defense contracts.

Technology

New technology has seen the United States at the forefront of the "computer revolution." With high levels of education, and a very large and affluent middle class to use computers—although they are now used throughout U.S. society—the United States was the center of "high-tech" development initially aimed at the business market and then at private owners. Companies such as Texas Instruments, 3M, and NCR (National Cash Register) started the move, which later saw companies such as IBM (International Business Machines Corporation, founded in 1889) and Apple, Inc. develop personal computers and networks for both large corporations and small businesses. Bill Gates and Microsoft furthered the development of software for everyday use, and helped spur interest in the internet. This, in turn, led to companies such as AltaVista and Yahoo establishing search engines, a market now dominated by Google.

The dominance of this new technology can be seen by the merger of AOL (America Online) with Time Warner (itself a merger of the Time-Life Corporation of Henry Luce with Warner Brothers), to form AOL Time Warner. And it was not long before many companies came to take advantage of the opportunities of the internet, with eBay coming to be the dominant online auction site, and Amazon dominating the sale of books and other items.

Labor

Although much of the research into business in the United States is devoted to firms, the movement of labor is also very important. This involves U.S. executives moving to other countries to take positions in U.S. subsidiaries or in non-U.S. companies, and foreign executives moving to the United States. It also relates to the large numbers of migrants who move to the United States each year, an example being the increasing migration from south Asia, with Indian migrants being some of the best-educated communities within the United States—some 64 percent have completed at least one university degree. There are also migrants from lower socioeconomic groups working in low-paid jobs, especially in California and in the Southwest. Many of these migrants (some of whom are also well qualified) arrive from Mexico and Central America.

Trade and the United States

One of the main problems that was faced by U.S. industry was the formation of trading blocs around the world, in particular the European Economic Community, which was renamed the European Union (EU) in 1992. Now consisting of 27 countries from a wide range of climatic and geographical conditions, and with major restrictions on trade with nonmember countries, the United States suddenly found that some of its industry, particularly its agricultural goods, were excluded from one of the largest single markets in the world. This was partly alleviated by the opening up of the economy of China, and also the countries of the former Soviet Union. U.S. predominance was under challenge from the EU, especially with the introduction of the euro in 1999/2002.

To counteract the enlarging EU through the 1990s, in December 1993, the United States helped launch the North American Free Trade Agreement (NAFTA), a move initially unpopular, as parts of the country feared a flood of goods made in Mexico, where manufacturing costs were much lower. In 1989, Asia Pacific Economic Cooperation (APEC) was established to promote trade and investment in the Pacific Basin. This allowed U.S. companies to continue to export to many of the countries in the Pacific, as they had done for a long time, especially to Australia and the more powerful economies of southeast Asia, the countries also being members of the regional grouping the Association of Southeast Asian Nations (ASEAN), which had been established in 1967.

In recent years, the United States has decided to embark on a series of free trade agreements with friendly countries working in a bilateral manner. These include the U.S.-Israel Free Trade Agreement (1985), followed by more bilateral free trade agreements with Jordan in 2001, with Australia, Chile, and Singapore in 2004, with Bahrain, Morocco, and Oman in 2006, and with Peru in 2007. These agreements have allowed the United States to continue to have access to these markets so crucial to developing and expanding its trade around the world.

See Also: Altria Group; Anglo-American; AT&T; Citigroup; Company Profiles: North America; European Union; Export; Ford Motor; Free Trade; General Motors; Import; Industrialized Countries; International Business Machines; J.P. Morgan Chase & Co; Microsoft; North American Free Trade Agreement; Stock Exchanges; Technology; Time Warner; Wal-Mart Stores; Wells Fargo.

Bibliography. Robert G. Albion et al., eds., *The Growth of the American Economy: An Introduction to the Economic History of the United States* (Prentice Hall, 1944); Diana Furchtgott-Roth, *Overcoming Barriers to Entrepreneurship in the United States* (Lexington Books, 2008); Stephan F. Gohmann et al., "Economic Freedom and Service Industry Growth in the United States," *Entrepreneurship Theory and Practice* (v.32/5, 2008); George Kozmetsky and Piyu Yue, *The Economic Transformation of the United States, 1950–2000: Focusing on the Technological Revolution, the Service Sector Expansion, and the Cultural, Ideological, and Demographic Changes* (Purdue University Press, 2005); Chad Montrie, *Making a Living: Work and Environment in the United States* (University of North Carolina Press, 2008); Jessica Gordon Nembhard and Ngina Chiteji, *Wealth Accumulation & Communities of Color in the United States: Current Issues* (University of Michigan Press, 2006); David Sandalow, *Freedom From Oil: How the Next President Can End the United States' Oil Addiction* (McGraw-Hill, 2008); Cornelia J. Strawser et al., *Business Statistics of the United States: Patterns of Economic Change* (Bernan Press, 2008); John H. Wood, *A History of Macroeconomic Policy in the United States* (Routledge, 2009).

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United Technologies

United Technologies Corporation (UTC) is a global technology company with a history of pioneering innovation in aerospace, aviation, helicopter design, climate control, elevator design, and hydrogen fuel cells. Founded by engineers who created new industries, UTC continues to create products that consume fewer resources and produce less emissions during manufacture and in operation. The United Technologies Research Center scientists specialize in fields as diverse as fluid dynamics, advanced materials, controls, modeling, and simulation. In 2007, UTC invested $3.6 billion in company- and customer-funded research and development.

UTC maintains a balanced portfolio of businesses spanning a range of geographies and markets. In doing so, it is able to take advantage of both long and short business cycles, thereby reducing the impact of downturns in individual markets or economies. In 2007, UTC revenues exceeded $54 billion, which doubles revenues received since 2000. Earnings per share grew 15 percent in 2007 to $4.27 per share. Total shareholder revenue for 2007 was 24 percent, ranking UTC first among the Dow Jones Industrials and within the top quartile of the Standard & Poor's (S&P) 500. Regularly rewarded for performance with external recognition, UTC ranks among the 100 Most Sustainable Companies in the World at the Davos World Economic Forum and on the Dow Jones Sustainability Indexes. *Fortune* magazine ranked UTC first among aerospace and defense companies in its annual 2007 Most Admired survey.

Despite having headquarters in Hartford, Connecticut, 62 percent of UTC's revenues and 65 percent of UTC's employees remain outside the United States. UTC employs 225,600 employees worldwide.

UTC businesses include the following:

Carrier: Employees 42,800, Revenues $14.6 billion, Operating Profits $1.4 billion, www.carrier.com. Carrier is a heating, ventilation, air conditioning, and refrigeration (HVACR) company that provides systems, components, controls, and services for residential, commercial, industrial, and transportation companies. In 2007, Carrier won 69 percent of 2008 Beijing Olympics–related air conditioning contracts. Other customers include Princeton University, Mayo Clinic, and Asda/Wal-Mart.

Hamilton Sundstrand: Employees 18,300, Revenues $5.6 billion, Operating Profits $967 million, www.hamiltonsundstrand.com. Hamilton Sundstrand is an electrical power company that provides power generation and distribution systems, engine accessories, flight control systems, and pilot controls, light-emitting diode (LED) lighting, and fire protection products for aircraft and military ground vehicles. Hamilton Sundstrand is prime contractor for the National Aeronautics and Space Administration's (NASA's) space suit/life support system, electric power system, and various other systems for international space programs. Other customers include Airbus and Singapore Airlines.

Otis: Employees 62,900, Revenues $11.9 billion, Operating Profits $2.3 billion, www.otis.com. Otis is an elevator company that designs, manufactures, installs, services, and upgrades elevators, escalators, and moving walkways for buildings. Contract projects include the Beijing Olympics, Tres Molinos (Spain), New Songdo City (Seoul, Korea), and Bahrain City Centre. Otis currently maintains a service portfolio to 1.6 million elevators and escalators worldwide.

Pratt & Whitney: Employees 38,500, Revenues $12.1 billion, Operating Profits $2 billion, www.pw.utc.com. Pratt & Whitney provides turbofan engines for large commercial and military aircraft, and turboprop engines for regional, business, light jet, utility, and military aircraft. It also provides turboshaft engines for military and commercial helicopters, maintenance, repair, and overhaul services, and fleet management services. Customers include NASA's space shuttle and Vision for Space Exploration, and Lockheed Martin. Pratt & Whitney was also chosen by The Spaceship Company to power the White Knight Two launch aircraft for the world's first commercial passenger suborbital spaceship.

Sikorsky: Employees 14,600, Revenues $4.8 billion, Operating Profits $373 million, www.sikorsky.com. Sikorsky is a military and commercial helicopter company offering fixed-wing aircraft, spare parts and maintenance, and repair and overhaul services. Customers include the U.S. government and U.S. Navy fleet. The most well-known Sikorsky product is the Black Hawk helicopter.

UTC Fire & Security: Employees 47,200, Revenues $5.8 billion, Operating Profits $443 million, www.utcfireandsecurity.com. UTC Fire & Security is an electronic security and fire safety company that provides safety systems, software and services, design, integration, installation and servicing of access controls, intruder alarms, video surveillance, and fire detection and suppression systems. The company also provides monitoring, response, and security personnel services. UTC Fire & Security currently services more than one million global customers.

UTC Power: Employees 586, www.utcpower.com. UTC Power provides fuel cell systems for on-site, transportation, space, and defense applications. Customers include the U.S. space shuttle program, Navantia (Spanish shipbuilder specializing in submarines), and Van Hool (Belgian hybrid electric transit bus manufacturer). In 2007, *R&D* magazine rated UTC Power's PureCycle geothermal power system as one of the 100 most technologically significant products introduced during that year.

See Also: Distribution; EADS; Lockheed Martin; Multinational Corporation; Transportation.

Bibliography. Michelle Mowad, "Life Sciences, Technology Industries Proving Lucrative for UTC Area Office," *San Diego Business Journal* (June 25, 2007); United Technologies, *United Technologies Corporation 2006 Corporate Responsibility Report: At the Intersection* (United Technologies, 2006); United Technologies, *United Technologies Corporation 2007 Annual Report* (UTC, 2007).

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Universalism/Particularism

Universalism and particularism together comprise one of seven "cultural dimensions" identified by the Dutch cross-cultural researcher, Fons Trompenaars, in his book *Riding the Waves of Culture*. (Other dimensions include Individualism/Collectivism, Neutral/Affective, Specific/Diffuse, Achieved Status/Ascribed Status, Internal/External, and Sequential/Synchronic and some are discussed elsewhere in this encyclopedia.)

Universalists and particularists differ in the priority they give to laws, rules, circumstances, and interpersonal relationships when making decisions. Universalists tend to emphasize rules and laws over relationships and circumstances while particularists tend to emphasize relationships and circumstances over rules and laws. Given this cultural dimension's potentially strong influence on decision making, individuals, groups, and organizations engaging in business that spans cultures can benefit from understanding it.

In particularistic cultures, people view laws and rules as guidelines that help organize the way people relate to each other. They do not see laws and rules as ends in themselves or as artifacts of an "exemplary" culture, but rather the means to the end or ideal of human friendship and harmony. Emphasis is placed on friendship and looking at the particular situation to decide, based on that friendship, what is right or wrong, rather than looking to a general rule or code.

In universalistic cultures, people view laws and rules as the ideal or the end goal. They view these codes or values as immutable standards that uphold society, including all friendships and relationships. Great emphasis is placed on agreements, codes of law, formal contracts, and other forms of rules to decide what is right. The details of the situation or the nature of the relationship of the parties involved is less important to the universalist than following the rules and laws, at all times and in all places.

National and Individual Levels

It is useful to consider universalism/particularism at different levels, including national and individual levels. Although it is difficult to associate entire nations and cultures with either universalism or particularism (because of the significant variance on these dimensions within these nations and populations), it is possible to examine averages of nations and to sense general differences among cultures. (Fons Trompenaars [and Charles Hampden-Turner], for example, have suggested that Switzerland, Canada, the United States, Sweden, and the United Kingdom represent strong universalist cultures, while Venezuela, Korea, Russia, China, and Portugal represent strong particularist cultures.)

At the individual level, people who behave according to universalistic patterns are referred to as universalists and people who behave according to particularistic patterns are referred to as particularists. Although, obviously, not everyone can be classified as a particularist or a universalist, it is possible that many, if not most, people tend to subscribe more to one perspective than the other. To further illustrate the difference between a particularist and a universalist, we turn to a commonly used example:

Two close friends are driving down the street at a speed significantly over the legal limit. The driver of the car fails to see a pedestrian crossing the road and strikes him, resulting in a lawsuit.

Assuming no other form of evidence is available, the universalist would be more likely to testify in court that his or her friend was exceeding the speed limit than the particularist, because the universalist would place emphasis on the law (over the friendship) and the particularist would place emphasis on the friendship (over the law). Although this example is simple and perhaps an exaggeration of the expected behaviors of universalists and particularists, it succeeds in making the difference between the two clearer—the universalist's loyalty tends to lie with rules and laws, while the particularist's loyalty tends to lie with relationships and depend on situational specifics. So what does this mean for business?

Universalism/Particularism in Business

In the business context, universalists and particularists can behave quite differently because of the different emphasis they place on rules and relationships. For example, universalist managers and companies may tend to justify the allocation of rewards and resources (such as pay) based solely on the objective merits and work accomplishments of employees. However, particularists may be more likely to justify resource allocation based on the subjective consideration of functionally irrelevant characteristics, such as tenure, family size, and friendship. In the formation of agreements or contracts, universalists might expect or demand clarity, uniformity, and absolute dedication to the fulfillment of the contract, without option to back out. On the other hand, particularists may view an agreement or contract as fluid, changeable, and continually renegotiable, depending on changes that might occur in the relationship or environment.

Universalists and particularists are likely to differ in the way they make decisions involving moral issues. By way of the example provided above (with regard to the two friends who hit a pedestrian in a speeding car), it is clear that universalists and particularists may come to completely different decisions in identical circumstances, both believing their course of action to be correct and ethical. But referring again back to the speeding car example, are both courses of action always ethical? Part of the difference of opinion that can exist among universalists and particularists might stem from the reality that not all ethical decisions are obviously "black and white" and that not all rules apply equally well in all possible situations.

For example, we might consider a pure universalist claiming that some action is always wrong or unethical and a particularist simultaneously suggesting that the same action can indeed be wrong, but that it depends entirely on the surrounding circumstances and the people involved. (The "action" in question for this context might be anything that is questionably ethical—speeding, paying bribes, lying, abortion, doing special or secretive favors, impersonating, etc.) Considering the many topics or actions upon which a universalist and a pure particularist might therefore differ in their opinion about what is ethical, to the "neutral" observer, deciding who is actually morally right in a given situation is not always easy or clear, and strong feelings may even be associated with the differing positions.

Therefore, when people who are engaging in business across cultures are aware of the differences between universalist and particularist cultures, they can potentially be better prepared for differences when they arise. When preparation and education are absent, however, misunderstandings (or worse) can multiply, and business cooperation can subsequently suffer. Specifically, when particularists adhere to their perspectives too resolutely, blindly, and/or inconsiderately, they can find themselves isolated from any real global conversation or interaction—including profitable business opportunities. By the same token, overbearing universalists run the risk of ethnocentrism (being guilty of believing that their own culture, rules, laws, and systems are superior to all others), resulting in a similarly unfortunate and deprived situation. This reality underscores the importance of cross-cultural training, especially for repeat expatriate employees or employees who travel or plan to travel frequently to foreign countries as part of their jobs and careers.

See Also: Achieved Status/Ascribed Status; Cross-Cultural Research; Ethnocentrism; Individualism/Collectivism; Specific/Diffuse; Time Orientation.

Bibliography. Nancy J. Adler and Allison Gundersen, *International Dimensions of Organizational Behavior* (Thomson/South-Western, 2008); Helen Deresky, *International Management: Managing Across Borders and Cultures* (Pearson Prentice Hall, 2008); Oded Shenkar and Yadong Luo, *International Business* (Sage, 2008); Alfons Trompenaars and Charles Hampden-Turner, *Riding the Waves of Culture: Understanding Cultural Diversity in Business* (Nicholas Brealey Publishing, 2002).

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Upstream

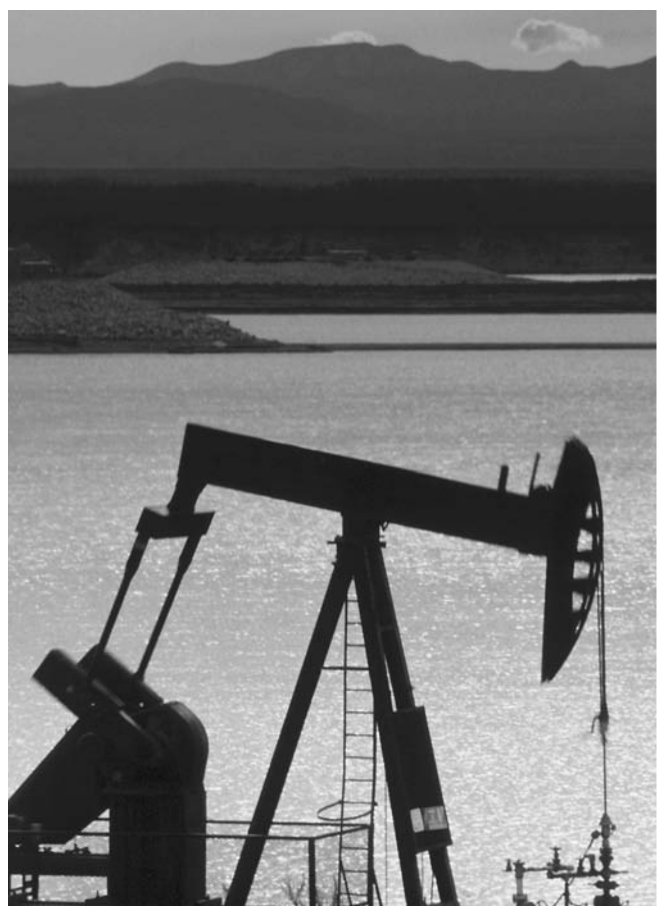
The term *upstream* has historically been used in the natural resource industry, and specifically in the oil and gas industry, to refer to activities that relate to the finding, associated development activity, and production of crude oil and natural gas or related petroleum products to the point where they are either landed, if produced from deep water, or enter a pipeline system if on land, or are transported into a processing plant as a feedstock for follow-on processes.

The origins of the term are in the sense of the location of the deposition of minerals in a streambed, for example, gold-panning activities (even older than petroleum exploration and production) where heavy minerals were deposited downstream from the water's source but originated "upstream." It is, however, also used today to refer to activities that are focused toward the code writers by generators of bugs and system fixes; in bioprocesses where it refers to the origination of new biological materials, and is even used to refer to data transfer speeds between clients and host servers analogously to uploading.

Crude or unrefined oil had been used for lamps and lubrication and sourced from ground seeps for many centuries. However, nowadays it is produced through pressurized wells, which force the oil out of the rocks in which it lies, after which it is pumped to the surface and separated. Oil wells are deep and costly, and the search continues for new sources and better recovery rates.

It was not until the latter part of the 19th century that the oil fields of Baku (now in modern-day Azerbaijan) attracted the interest of various European investors, followed by interest in Peru, Persia (modern-day Iran and the home of the precursor of today's BP plc), and Trinidad. Shell became involved in the oil business through the founding Samuels family's ability to supply maritime transportation to the Baku fields and thorough production in the Dutch East Indies (Sumatra)—modern-day Indonesia. In the United States, the discovery of oil in Pennsylvania in the mid-19th century spurred a commercially based oil boom, with further discoveries made in other areas, such as Oklahoma and Texas.

Typically, oil and gas are owned by the nation or state where the reserves are located, or through personal title-based mineral rights that may be bought and sold. The latter may be separable from land ownership. Oil and gas is discovered through a process of exploration and then produced or "won." Historically, the right to produce was granted or sold by the



The term upstream *has been used in the oil industry to refer to the activities of finding and processing crude oil.*

oil and gas owners (either state or individual) through concessions, although more recently and for larger developments, this partnership has taken the form of production-sharing or risk-sharing contracts.

Organizing the Industry

Prior to the 1970s, several large producing states believed that they were not being adequately compensated for their national resources that the governments perceived as exploited and removed by large nonnational companies to benefit economies. This led to the formation of the Organization of Petroleum Exporting Countries (OPEC) cartel, which has been successful in voicing the concerns and needs of member producing states, and also in setting the production rates of their members to attempt to impact the market price of crude oil. OPEC was instrumental in changing the legal basis for cooperation with externally based nonnational companies to one of coproduction and codevelopment of knowledge and expertise, using production-sharing contracts. Today's typical new development would include several partners who use contractual cooperative mechanisms to ensure that the development and production is managed appropriately for all parties and stakeholders, and whose cooperation is related to specialist knowledge and risk sharing as well as resource capture.

The upstream oil and gas businesses have been key drivers of innovation through the use of new technologies, such as four-dimensional (4D) seismic to assess oil in the reservoir and its ease of production. However, the industry has also been a key driver in the movement toward greater accountability and corporate social responsibility. Oil and gas exploration and production has always been a high-risk business: fire hazards and spills are not new events, but our increasing consciousness of environmental matters and greater accountability to local stakeholders have contributed to a higher awareness of the need to balance the quest for oil with the needs of the local environment and its stakeholders. As oil and gas fields reach the end of their producing lives, more attention is now paid to disposal and restitution, and a once-secretive industry is gradually becoming more openly accountable.

See Also: BP; Chevron; Concession (in Negotiation); ConocoPhillips; Corporate Social Responsibility; Downstream; Eni; ExxonMobil; Gaz de France; GazProm; Iran; Joint Venture; LUKOIL; Marathon Oil; Middle East; Pemex; Petrobras; Petronas; Saudi Arabia; Total.

Bibliography. James H. Bamberg, *British Petroleum and Global Oil, 1950–1975: The Challenge of Nationalism* (Cambridge University Press, 2000); James H. Bamberg, *The History of the British Petroleum Company: The Anglo-Iranian Years, 1928–1954* (Cambridge University Press, 2000); Arthur Beeby-Thompson, *Oil Pioneer: Selected Experiences and Incidents Associated With 60 Years of World-Wide Petroleum Exploration and Oilfield Development* (Sidgwick & Jackson, 1961); Daniel Johnston, *International Petroleum Fiscal Systems and Production Sharing Contracts* (PennWell, 1994); Andrew Kakabadse and Mette Morsing, *Corporate Social Responsibility: A 21st Century Perspective* (Palgrave Macmillan, 2006); Michael J. Watts, "Righteous Oil? Human Rights, the Oil Complex and Corporate Social Responsibility," *Annual Review of Environment and Resources* (v.30, 2005).

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Uruguay

Uruguay, officially known as the Oriental Republic of Uruguay, is the second-smallest country in South America, with an area of 68,036 square miles. Brazil forms its eastern and northeastern border, while Argentina bounds it on the west and northwest. In the south, Uruguay possesses slightly over 400 miles of Atlantic coastline. Its population, as estimated in 2008, is 3,477,778 people. The majority, nearly 90 percent, are of European ancestry with the remainder claiming to be of African or Indian descent.

Uruguay was originally occupied by the Spanish early in the first half of the 16th century. Because there were no gold or silver deposits, major settlement would not occur until the beginning of the 18th century. At the beginning of the 17th century, however, the Spanish introduced cattle to the region, beginning what would become and remain an essential part of the Uruguayan economy.

In 1493, the year after Columbus's first landing, Pope Alexander VI divided the New World between Spain and Portugal. The region, although Spanish,

Gauchos herd cattle on an Uruguayan ranch. The Spanish first introduced cattle to the region in the beginning of the 17th century, and livestock ranching still plays a key role in the country's economy.

was claimed by the Portuguese in Brazil. That factor would influence Uruguay's history into the 19th century. Even now, there are many speakers of Brazilian Portuguese in Uruguay. In addition, Uruguay found itself dragged into the Napoleonic Wars. As the British were fighting against Spain—then one of Napoleon's allies—they occupied the capital city of Montevideo in 1807 with 10,000 troops before moving on to Rio de Janeiro.

In 1816, Uruguay declared independence from Spain, and was then promptly invaded by Brazil. That occupation would last until 1825, and full independence, as the result of a deal brokered by the British, would come three years later. Through most of the 19th century, after its revolution and liberation from Spain, Uruguay was engaged in both internal and external conflicts. There was a 12-year civil war, a war with Paraguay in the 1860s, and small-scale border conflicts with Brazil.

Despite the political and military unrest, immigration, mostly from Spain, Italy, France, Germany, and Russia, resulted in a large population growth, accompanied by economic growth, largely based on its agricultural exports. Through the second half of the 19th century, the country's standard of living was high, according to some sources, higher than in the United States. The government from the 19th century, well into the 20th century, focused on creating a welfare state. With a strong economy, Uruguay was able to do this with little difficulty until the middle of the 20th century. That level of support for social programs could not be sustained, however. As the century progressed, an increase in the country's debt and the failure of the economy to keep pace with the requirements of a welfare state caused a decrease in services.

In common with many Latin American nations, Uruguay was, for a time (1973–85), under the rule of a military dictatorship. This era saw severe political repression and many Uruguayans emigrated. An estimated 600,000 left the country for Europe, the United States, Canada, and Australia. With the voluntary departure of the military, a civilian government came to power in early 1985. From that time until 2005, the governments were mainly dominated by the Red (Colorado) Party, a centrist-rightist party. Since 2005, in common with several South American governments, Uruguay has been governed by a leftist party, who won by a very narrow majority.

Economic Challenges

Economically, Uruguay is currently a very mixed picture with improvements over the past few years. There have been severe economic problems dating back to 1999, although the nation itself has a history of dependable industries, a very well-educated population (98 percent literacy rate), and an improving infrastructure. The economic problems, beginning in the late 1990s that were exacerbated by problems in neighboring Argentina, have decreased. Up until that time, the economy in the 1990s had been growing at a rate of 5 percent yearly. The problems Uruguay faced have been an indicator of the way in which Latin American economies affect each other. Argentina's economic problems caused the withdrawal in 2002 of large amounts of Argentine funds that had been deposited in Uruguayan banks. The loss of this capital decreased the value of the Uruguayan peso. The decline of the Uruguayan economy at this was reflected in the nation's gross domestic product (GDP) decreasing by 20 percent.

In 2004, the situation began to improve. Uruguay received assistance from the International Monetary Fund (IMF) and has succeeded in making repayments as well as adjusting its economy to follow IMF guidelines. The peso is now stronger and prices for Uruguayan exports have risen. The estimated GDP for the country is $37.19 billion, with an inflation rate of 8.1 percent, and unemployment at 9.2 percent. Foreign investment, principally through the creation of a paper mill that began operations in 2007, has also occurred.

In the early 2000s, tourism was dramatically hurt, in large part as a result of the economic problems in neighboring Argentina. The tourist industry has begun to recover, however, with the government's Ministry of Tourism emphasizing resorts such as Punta del Este as tourist destinations. Most of the tourists are currently from Chile, Brazil, and Argentina.

Uruguay has, in large part because of its stability and low cost of living, become a destination for retiring Americans to live.

See Also: Argentina; Brazil; International Monetary Fund; Latin America; Mercosur/Mercosul.

Bibliography. Robert Jackson Alexander, *A History of Organized Labor in Uruguay and Paraguay* (Praeger, 2005); Charles D. Ameringer, *The Socialist Impulse: Latin America in the Twentieth Century* (University Press of Florida, 2009); Carlos Casacuberta and Néstor Gandelman, *Protection, Openness, and Factor Adjustment: Evidence From the Manufacturing Sector in Uruguay* (World Bank, Development Research Group, Trade Team, 2006); CIA, "Uruguay," *World Factbook*, www.cia.gov (cited March 2009); Embassy of Uruguay, Economic and Commercial Department, www.uruwashi.org (cited March 2009); Fernando M. Gonçalves, *The Optimal Level of Foreign Reserves in Financial Dollarized Economies: The Case of Uruguay* (International Monetary Fund, Western Hemisphere Department, 2007); Marco Piñon et al., *Macroeconomic Implications of Financial Dollarization: The Case of Uruguay* (International Monetary Fund, 2008); Joel P. Trachtman and Chantal Thomas, *Developing Countries in the WTO Legal System* (Oxford University Press, 2009).

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Uruguay Round

Begun in 1986, the Uruguay Round was the largest round of trade negotiations under the General Agreement on Tariffs and Trade (GATT), with 123 countries participating. The negotiations of the Uruguay Round had a very broad agenda and included agreements pertaining to trade in agriculture, manufactured goods, services, intellectual property, and other products. The negotiations concluded on April 15, 1994, and led to the creation of the World Trade Organization (WTO) in January 1995.

In the years immediately after the conclusion of World War II, there was a strong international consensus to develop supranational institutions and agreements that would foster peace, stability, and cooperation among nations. In the area of trade, efforts were made to create an International Trade Organization (ITO), which would serve to create and implement international trade policies with a goal of reducing trade barriers, resolving trade disputes, and enforcing multilateral trade agreements. The attempt to create an ITO failed in 1948, but the effort did lead to GATT, signed by 23 countries and including over 45,000 trade concessions affecting about $10 billion of trade (one-fifth of the world's total at the time).

Progress Through the Creation of GATT

GATT consisted of a series of eight rounds of negotiations with each round focusing on different sets of core issues, but with all rounds designed to reduce barriers to trade, in a broad multilateral process. The early GATT rounds focused on further reducing tariffs on an ever-wider array of products. The agenda shifted slightly in the 1960s with the Kennedy Round, which added an antidumping agreement and a section on development, and was signed by 62 countries. In the 1970s, the Tokyo Round included agreements on nontariff barriers for the first time and also introduced various reforms to the overall GATT system, and was agreed to by 102 countries. The multilateral approach to reducing trade barriers culminated in the Uruguay Round, begun in Punta del Este in 1986 and concluding in Marrakesh, Morocco, in 1994, with a final agreement signed by 123 participating countries.

The initial negotiating agenda for the Uruguay Round aimed to extend GATT to cover trade in services and intellectual property, and to introduce reforms to the sensitive areas of agricultural and textile trade. The trade ministers from member countries put all of the original GATT articles up for review and set forth an aggressive four-year time line for the process. This marked the first time that multilateral trade negotiations had included discussion of national agricultural policies with the intent of creating a more market-oriented agricultural trading environment through the reduction of government agricultural support programs. These programs frequently led to surplus production in developed countries, to the detriment of agricultural producers in less-developed countries.

Two years into the process, ministers met in Montreal, Canada, to assess progress, and set forth a more detailed agenda for the remaining two years. At that point, agreements had been reached on market access for tropical products, a streamlined dispute settlement system, and the creation of the Trade Policy Review Mechanism, which provided for regular reviews of GATT member nation trade policies.

In 1990, ministers met in Brussels, Belgium, with the intent of concluding the Uruguay Round. Instead, disagreements over agricultural trade reforms thwarted these plans and put the entire process in jeopardy. New deadlines were agreed upon and were then missed, as the political environment for free trade deteriorated and new issues were brought up that made reaching a consensus even more difficult. Significant ideological differences between the United States and the European Union (EU) were at the center of the conflict.

Finally in 1992, the United States and the EU settled their differences in an agreement that came to be known as the Blair House Accord. Progress continued over the next year, with agreement being reached among the United States, Canada, Japan, and the EU. More than eight years after the process had begun, the Uruguay Round came to an end with the signing of a final agreement. As in other GATT rounds, however, this agreement also included an agenda for additional negotiations in the future. This agenda formed the basis for what has come to be known as the Doha Round of trade negotiations.

The impact of the Uruguay Round has been somewhat mixed. In the area of agriculture, there have been relatively small reductions in national agricultural subsidies among developed nations and many of the objectives of the Uruguay Round provisions have yet to be realized. In other areas, however, such as intellectual property rights, significant progress toward the Uruguay Round objectives has been made.

See Also: Doha Round; Free Trade; General Agreement on Tariffs and Trade; Trade Liberalization; Trade Pact; World Trade Organization.

Bibliography. Kym Anderson, "The WTO Agenda for the New Millenium," *Economic Record* (1999); Bhagirath Lal Das, *An Introduction to the WTO Agreements* (Zed, 1998); Alejandro Jara and Carmen M. Dominguez, "Liberalization of Trade in Services and Trade Negotiations," *Journal of World Trade* (v.40/1, 2006); Don Kenyon and David Lee, *The Struggle for Trade Liberalisation in Agriculture: Australia and the Cairns Group in the Uruguay Round* (Department of Foreign Affairs and Trade, 2006); Will Martin and L. Alan Winters, *The Uruguay Round and the Developing Countries* (Cambridge University Press, 1997); Brian McDonald, *The World Trading System: The*

Uruguay Round and Beyond (Palgrave Macmillan, 1998); World Trade Organization, *The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations* (World Trade Organization, 2008).

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U.S. Agency for International Development

The U.S. Agency for International Development (USAID) is a U.S. government agency that has been charged with the provision of technical and other assistance to developing and, more recently, transitional countries around the world. It is an independent government agency, headed by the administrator. The secretary of state (that is, the Department of State) provides foreign policy guidelines and the Agency works closely with the State Department, both in the United States and abroad. USAID missions are often attached to U.S. diplomatic missions and the officials are provided with full diplomatic cover.

USAID's work is focused on the promotion of democracy and furthering of free markets (market economy) and enabling citizens of the foreign countries to make a better living. In achieving the former task, USAID is supporting the U.S. foreign policy goals (promotion of democracy and free markets).

USAID Beginnings

The Agency was set up by an executive order of the then U.S. president John F. Kennedy, following the promulgation of the Foreign Assistance Act, in 1961. It is believed that the roots of USAID are in the post–World War II assistance to Europe, especially through the Marshall Plan, from which a number of countries in the Western Hemisphere that were severely affected by World War II benefited greatly. Similarly, President Harry S. Truman's Point Four program has contributed to the changing perception of the U.S. role in international affairs and rebuilding war-torn Europe.

Upon the completion of the activities under the auspices of the Marshall Plan, the U.S. Congress created the Mutual Security Agency in 1951, and in 1953, the Foreign Operations Administration to consolidate economic and technical assistance on a worldwide basis. In 1954, the International Cooperation Administration (ICA) was established. The newly formed ICA managed aid for economic, political, and social development purposes. ICA was not independent in delivering its tasks and it had been noticed. Also, at those times, major players in the foreign development assistance arena were multilateral donor organizations, primarily the United Nations (UN).

The Mutual Security Act promulgated in 1954 introduced the concepts of development assistance, security assistance, a discretionary contingency fund, and guarantees for private investments. And the 1957 revisions of the Mutual Security Act provided the legal framework for the development of the Development Loan Fund (DLF), which enabled ICA to become a lender as well. However, all the organizations that dealt with international assistance failed to provide for long-term sustained growth; it was necessary to reform the system of U.S. government foreign assistance, and in 1961, USAID was formed and major negative remarks on the position and powers of the previous aid agencies were addressed, making USAID prone to be more successful from the very outset.

Today's USAID

USAID as a government agency is bound by U.S. foreign policy and its work is based on three pillars: (1) economic growth, agriculture, and trade; (2) global health; and (3) democracy, conflict prevention, and humanitarian assistance. USAID supports long-term and equitable economic growth and advances democracy through its work. The Agency's budget is roughly 0.5 percent of the U.S. government budget, but it is seeking new forms of public-private partnership and now works in collaboration with more than 3,500 voluntary and nongovernmental organizations that are interested in the advancement of human conditions in foreign countries and uphold the values promoted by U.S. foreign policy.

Historically, USAID had an unchallenged position in providing foreign assistance beside some special programs executed by the Department of State. Now, the U.S. foreign assistance picture is more complicated, as former president George W. Bush had set up the Millennium Challenge Corporation (MCC) as a U.S. government-owned corporation, and the Office of the Global AIDS Coordinator. MCC was established in 2004 to work with the poorest countries in the world, upholding the position that (foreign) aid is the most effective when it reinforces good governance, economic freedom, and investments in people.

As it has proven to be rather complicated to coordinate efforts by a few government-sponsored agencies, as a part of the recent (2006) reform of the U.S. foreign assistance program, the post of the director of foreign assistance has been created. The post is charged with ensuring the efficiency and effectiveness of U.S. foreign assistance and provision of "value-for-money" models, where the taxpayers will be satisfied with the outputs and outcomes achieved through the spending of public money in assisting foreign jurisdictions. The post is also to ensure better alignment between the Department of State and USAID, and between all payers in the foreign assistance field in the United States that are funded from the public coffers.

The very environment in which international development assistance is provided has changed. While in the past, international and regional organizations were major donors and provided technical assistance, now the national development agencies play a major role in providing assistance. Most Western democracies will have a government agency with the remit similar to USAID, or if the independent body does not exist, there will be foreign assistance programs operating from within the foreign ministries.

USAID operates in five geographic theaters: Europe and Eurasia, sub-Saharan Africa, Latin America and the Caribbean, Asia, and the Middle East. Although there are regional initiatives that cover a few countries, most of the projects are single-country based. However, the fact that the project is single-country focused does not mean that USAID will not collaborate with other donors, but more that the project will be country specific and country monitored.

At the moment, a new U.S. model of foreign aid and assistance is emerging with a multitude of players covering the particular target countries. It seems that USAID will continue to play a pivotal role in that model.

See Also: Africa; Asia; Caribbean Community (Caircom); Economic Development; European Union; International Bank for Reconstruction and Development; Latin America; Middle East; Trade Balance; World Trade Organization.

Bibliography. N. Dammann, *My 17 Years with USAID: The Good and the Bad* (Llumina Press, 2003); Jess T. Ford, *Foreign Assistance: USAID and the Department of State Are Beginning to Implement Prohibition on Taxation of Aid* (U.S. General Accounting Office, 2004); Gregory D. Kutz, *Financial Management: Sustained Effort Needed to Resolve Long-Standing Problems at U.S. Agency for International Development* (General Accounting Office Reports & Testimony, 2003); M. Maren, *The Road to Hell: The Ravaging Effects of Foreign Aid and International Charity* (Free Press, 2002); L. A. Picard et al., *Foreign Aid and Foreign Policy: Lessons for the Next Half-Century* (M. E. Sharpe, 2007); R. Riddell, *Does Foreign Aid Really Work?* (Oxford University Press, 2007); Charles H. Teller, "Lost Opportunities and Constraints in Producing Rigorous Evaluations of USAID Health Projects, 2004–7," *IDS Bulletin–Institute of Development Studies* (v.39/1, March 2008); U.S. Agency for International Development, www.usaid.gov (cited March 2009).

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U.S. Postal Service

The U.S. Postal Service (USPS) handles over 40 percent of the world's mail volume. In 2007, it delivered 212 billion pieces of mail to over 145 million addresses. With almost 37,000 retail postal outlets and a fleet of more than 210,000 vans and trucks, revenues in 2007 were close to $75 billion. The USPS's workforce of 786,000 employees makes it the second-largest civilian employer in the United States, after Wal-Mart. However, although this government agency enjoys a legal monopoly on the delivery of first-class mail and bars others from using its customers' mailboxes, it has experienced increasingly stiff competition. Its monopoly power has been undercut by new forms of technology that reduce the demand for its services. In the wake of declining mail volume, it had reported a net operating loss of $5.3 billion in 2007 and it faces calls for fundamental reorganization.

Establishing the Postal Service

In 1792, the United States Postal Service became a cabinet-level department of the federal government. It established a system of post offices and post roads, using high prices for the delivery of letters to subsidize newspaper delivery and the building of additional post offices and routes in rural areas. The post office soon became the largest enterprise in the country and employed about three-quarters of all federal government civilian workers by 1830. In the early 1800s, its speed and innovative hub-and-spoke delivery system impressed many Americans. Then the arrival of steamboats and railroads brought considerable competition in the 1830s, as entrepreneurs began carrying mail between cities.

By 1845, private enterprises carried about two-thirds of intercity mail. Other businesses sprang up to offer delivery of mail within cities, providing innovations, including home delivery, street corner letterboxes, and postage stamps. Some argued that the government-run post office was redundant. However, the political clout of postal employees and transportation contractors and the desire of politicians to reward supporters with patronage positions saved the post office. Congress responded in 1845 by drastically cutting postage rates and by granting the post office a monopoly on all carriage of intercity mail, forbidding private competition. In 1872, the post office further secured its monopoly position with legislation banning delivery of mail within cities by competitors.

Ending the Monopoly

The Postal Reorganization Act of 1970 replaced the cabinet-level Post Office Department with the USPS. In 1979, its monopoly on express mail was lifted and private businesses, such as United Parcel Service (UPS) and Federal Express, entered the market, easily outperforming the USPS. Simultaneously, faxes, e-mail, and other forms of electronic telecommunications developed as substitutes to traditional mail. In 2005, bulk advertising mail surpassed first-class mail (such as personal letters, postcards, and bills) in terms of total volume. From 2002 to 2006, first-class mail volume fell by about 5 percent—and volumes dropped by 7 percent for periodicals, 7.5 percent for priority mail, 8 percent for express mail, 10 percent for international mail, 22 percent for registered mail, and 35 percent for cash on deliveries (CODs).

Despite this increasingly fierce competition, rising costs have forced the USPS to substantially increase its prices. Between 1970 and 2008, the price of a first-class stamp soared from 6 cents to 42 cents—a 600 percent increase, considerably higher than the average economy-wide increase in prices of 450 percent.

The USPS purchased over 30,000 ethanol-capable vehicles, making it the biggest U.S. buyer of alternative-fuel vehicles.

Research shows that the USPS's costs are high for two major reasons: high wages and low productivity. Although the law requires the Postal Service to maintain wage and benefits levels comparable to similar work in the private sector, its average compensation is about 40 percent above market. (This excludes unfunded liabilities of approximately $75 billion for workers compensation, pensions, and postretirement health insurance.) Moreover, rather than economize on its expensive labor, the USPS feels pressure to preserve jobs by keeping open low-volume facilities and delaying the installation of efficient new mail-handling technologies. As a result, its annual total factor productivity growth was only 0.3 percent from 1972 to 1999, before climbing to 1.5 percent per year from 2000 to 2006. These rates are far below the pace of productivity growth in the rest of the U.S. economy.

Other nations have responded to similar problems by corporatizing their post offices, turning them into free-standing corporations, whose job is to maximize profits. These corporations are given the flexibility to improve productivity, shut down unprofitable operations and lines of business, redeploy workers, implement pay-for-performance plans, borrow capital from private markets, and enter into joint ventures. Some countries have completely privatized their post offices and removed barriers to entry from competitors. These reforms have generally brought major productivity improvements and cost reductions without delivery disruptions. The major roadblock to such reforms in the United States is the political power of the USPS's large workforce.

See Also: Deutsche Post; Pension Systems; Productivity; Technology; United Parcel Service; United States.

Bibliography. Leah Platt Boustan and Robert A. Margo, *Why Did Ghettos "Go Bad"?: Evidence from the U.S. Postal Service* (National Bureau of Economic Research, 2007); Lois M. Davis, *The Role of the United States Postal Service in Public Safety and Security: Implications of Relaxing the Mailbox Monopoly* (RAND Corporation, 2008); R. Richard Geddes, "Policy Watch: Reform of the U.S. Postal Service," *Journal of Economic Perspectives* (v.19/3, 2005); David M. Henkin, *The Postal Age: The Emergence of Modern Communications in Nineteenth-Century America* (University of Chicago Press, 2006); Institute for Career Research, *Careers with the United States Postal Service* (Institute for Career Research, 2007); Anthony Pajunas, Edward J. Matto, Michael Trick, and Luis F. Zuluaga, "Optimizing High Transportation at the United States Postal Service," *Interfaces* (v.37/6, 2007); Luqman Strauther, *The Mail Carrier: "Things Customers Need to Know, From Inside the Mind of a Mailman"* (AuthorHouse, 2007); United States Postal Service, *The United States Postal Service: An American History, 1775–2006* (United States Postal Service, 2007).

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Uzbekistan

This central Asian republic, which shares borders with Kazakhstan, Turkmenistan, Tajikistan, Kyrgyzstan, and Afghanistan, has a population of 27.3 million, and covers a land area of 172,742 square miles. A landlocked country, it is one of only two countries in the world that is entirely surrounded by other landlocked countries. In medieval times, Uzbekistan was a wealthy entrepôt with the cities of Tashkent and Samarkand, being astride the famed Silk Road on which goods were traded between Europe and China. This continued through the Mongol occupation of the region, but declined in the 17th century because by this time, much of the trade went by ship. During the early 19th century, Uzbekistan became a part of the Russian Empire and later became a constituent part of the Soviet Union. In 1991 Uzbekistan gained independence as a nation from the Soviet Union.

During the time that Uzbekistan was a part of the Soviet Union, the centrally planned economy resulted in the establishment of a large cotton industry, drawing much water from the Aral Sea, heavily depleting the water supplies from it. With Uzbekistan being desperately poor throughout this period, the Soviet Union spent considerable funds on infrastructure, which saw the improvement of healthcare, education, and transportation. Many of these business structures were run centrally from Moscow, and this saw the emergence of a Russian managerial class, albeit at the time in state-owned corporations. As a result, most of the businesses in the country are still Russian, even though ethnic Russians make up only 5.5 percent of the country's population.

Postindependence

After independence, the Uzbekistan Economic Model was introduced from 1994, by which state control of many companies continues, with a reduction in imports and an attempt by the country to achieve self-sufficiency in energy. Many people were disappointed that there was no real attempt to introduce a large private sector, and Uzbekistan remains one of the least industrialized countries in central Asia. It was also no longer able to access as many of the raw materials from other parts of the former Soviet Union as had previously been the case.

The country is now the second-largest exporter of cotton and the sixth-largest producer. It is also relatively rich in natural resources with significant deposits of coal, oil, natural gas, and copper: roughly 2.5 million tons of coal and 65,000 tons of copper mined in 2005, and an average output of 126,000 barrels of crude oil each day in the year 2005. The country is also the seventh-largest producer of gold in the world, with some 99 tons being mined each year. Mining also results in some 80 tons of silver and 1,770 tons of uranium each year. However, in spite of this, much of the population in the country is desperately poor. Average monthly wages are as low as $50 and the average gross domestic product (GDP) of the country is $535 per year.

Agriculture continues to employ, officially, some 44 percent of the population, but it is believed that some 20 percent of the population are unemployed or underemployed (against the official rate of 0.7 percent). Some observers believe that only 28 percent of the population work in farming. As a result, the importance of the cotton crop means that at harvest time, teachers and students take part in the harvest. This, in turn, has led to some foreign companies, in opposition to the use of child labor, refusing to stock items made from Uzbek cotton. The per capita GDP is $2,283, the lowest of any of the former republics of the Soviet Union. Corruption in Uzbekistan is regarded as serious, with the country ranked 137 out of 159 countries in the Corruption Perception Index in 2005; it ranked 175 of 179 in 2007.

See Also: Company Profiles: Central Asia; Kazakhstan; Russia; Ukraine.

Bibliography. Tom Fleming, *Taxi to Tashkent: Two Years with the Peace Corps in Uzbekistan* (iUniverse, Inc, 2007); International Monetary Fund and Uzbekistan, *Republic of Uzbekistan: Poverty Reduction Strategy Paper* (International Monetary Fund, 2008); Martin C. Spechler, *The Political Economy of Reform in Central Asia: Uzbekistan Under Authoritarianism* (Routledge, 2008); Manuela Troschke and Andreas Zeitler, *Privatization and Corporate Governance in Kazakhstan and Uzbekistan: Insights from a Corporate Survey in Food and Light Industries* (Osteuropa-Institut, 2006).

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Value Added Tax

Value added tax (VAT) is a type of tax on goods and services levied by the government in which they are sold. In some countries, such as Australia, Canada, Egypt, and New Zealand, the VAT is called a "goods and services tax" (GST). The VAT is not charged on exports. VAT is called a consumption tax because it is paid by the consumer using the value of the product. It is also called an indirect tax because it is collected from an entity (the seller) other than the end user who pays the tax. A VAT is an important source of revenue for governments, especially those that cannot generate substantial revenue from income or property taxes.

VAT differs from a sales tax in that a VAT is assessed at each stage of the production process as a percentage of the value added to the product. These stages might include raw materials, manufacturing, wholesale and retail. On the other hand, a sales tax is usually levied only on the end product. For example, if a sales tax of 10 percent is applied to a desk worth $1,000, then the end customer buying the desk from a desk retailer would pay $100 in sales tax and $1,000 to the desk retailer. All other entities involved in each stage of producing the desk would pay no tax. If a VAT of 10 percent is applied to the same desk, the end customer will pay $100 in VAT. If the desk builder has purchased wood and supplies for the desk totaling $400, he/she is thus assessing $600 of value that he/she has added in creating the desk. The desk builder would pay the 10 percent VAT of $40 on the supplies. When he/she remits payment of the VAT to the government, he/she will remit the total VAT assessed on the end value of the desk ($100) minus what he/she has already paid ($40), to total $60 based on the added value. In effect, each stage of the production process pays only the tax applicable on the value added by that entity.

One benefit of the VAT system over traditional sales tax is that it is applied to all commercial activities based on the margin of the transaction. The net income to the government is the same. A disadvantage of the VAT is that each entity involved in commercial activities must maintain accounting of the gross margin for each product.

The VAT is assessed in two ways. The first method is called the CIF + duty because the VAT is assessed as a percentage of the total value of the item cost, insurance, freight, and duty. The second method is called FOB + duty because it is calculated as a percentage of the total free on board value plus its duty. The free on board indicates that freight and insurance is paid by the seller (supplier).

The VAT on services is levied on the cost of the service rendered based on the VAT level of the place where the service took place. In the case when the supplier of the services is established in a different nation from where the service took place, he/she usually assesses the amount of the VAT based on the location of his/her establishment. For example, if a tax consultant is based in Germany but renders services in the Netherlands, he/she will assess the VAT on his/her services based on Germany's rates. For certain services, such as entertainment, the VAT is assessed by and paid to the government where the service takes place.

Currently, 135 countries use a form of VAT. The VAT on a product varies by country of origin, country of import, and product type. Throughout the world, the VAT rates range from 5 percent to 25 percent. For example, in the European Union, regulations require that member nations have a VAT rate of at least 15 percent and a tax rate for supplies for goods and services of at least 5 percent. Each member nation is free to specify its own rates.

See Also: Cost, Insurance, and Freight; Taxes.

Bibliography. Richard M. Bird and Pierre-Pascal Gendron, "CVAT, VIVAT and Dual VAT; Vertical 'Sharing' and Interstate Trade," *International Tax and Public Finance* (v.7, 2000); Richard M. Bird and Pierre-Pascal Gendron, *The VAT in Developing and Transitional Countries* (Cambridge University Press, 2007); M. Keen and S. Smith, "Viva VIVAT!" *International Tax and Public Finance* (v.7, 2000); C. E. McLure, "Implementing Subnational VATs on Internal Trade: The Compensating VAT (CVAT)," *International Tax and Public Finance* (v.7, 2000); Organisation for Economic Co-operation and Development, *Consumption Tax Trends: VAT/GST and Excise Rates, Trends, and Administration Issues* (OECD, 2006); Alan Schenk and Oliver Oldman, *Value Added Tax: A Comparative Approach* (Cambridge University Press, 2007); A. A. Tait, *Value Added Tax: International Practice and Problems* (International Monetary Fund, 1988).

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Value at Risk

Value at Risk (VaR) provides an estimate of the greatest likely loss if a known risk were to occur. It may represent the loss in value of a portfolio of shares if a market slump occurred. In practice the analyst calculates the greatest loss that could arise in 99 percent of all cases. This means that in 1 percent of cases the loss would actually exceed the amount of the calculated VaR, which is effectively a boundary value. It is a probabilistic statement; if a VaR is estimated to be £1 million with a confidence of 99 percent (probability of 0.99) then a loss of more than £1 million might be expected on one day in every 100. A slightly more mathematical definition is given by P. Jorion: "VaR measures the worst expected loss over a given time interval under normal market conditions at a given confidence level".

There are several factors underlying the growth of VaR as a risk-management tool. Firms increasingly hedge their exposure to sources of market risk. Financial market volatility can dramatically impact the profitability of firms, particularly those firms that improperly hedge market risks. The experience of Enron, Orange County, Long-Term Capital Management, Metallgesellschaft, and Barings Bank illustrates the magnitude of large unanticipated events that are not going to be captured by standard VaR forecasts.

The VaR approach offers an appealing summary statistic of portfolio risk embodied within a single statistic. Specifically, VaR is a powerful operational tool to establish position limits for traders, but also enables managers and regulators to control to some extent the firm's overall margin between risk and return.

But while the concept of VaR is straightforward, its implementation is not. There are a variety of models and model implementations that produce very different estimates of the risk for the same portfolio. These difficulties were highlighted when regulators presented some of the largest banks in the world with the same test portfolio and asked them to compute the VaR. The answers varied widely, causing regulators to adjust their thinking on how the measure may be used to manage market risk. The difficulties in model-based evaluation were considered in a Bank of England study on valuation practices in banks. Another important point is the divergence in a model's implementation within software and how it, too, affects the establishment of a risk measurement standard. Discrepancies arise because of the VaR's extreme sensitivity to the modeler's choice of parameters.

See Also: Auditing Standards; Hedging; Management Science; Risk; Risk Management.

Bibliography. Jon Danielsson, *The Value-at-Risk Reference: Key Issues in the Implementation of Market Risk* (Risk Books, 2007); P. Jorion, *Value at Risk: The New Benchmark for Managing Financial Risk* (McGraw-Hill, 2007); Francesco Saita, *Value at Risk and Bank Capital Management* (Elsevier Academic Press, 2007); Martin Scheicher and Burkhard Raunig, *A Value at Risk Analysis of Credit Default Swaps* (Dt. Bundesbank, 2008); *Value-at-Risk Theory and Practice* (Chapman & Hall, 2009).

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Value Chain

The term *value chain* is used in two distinct contexts. The concept has developed into a well-known notion within global business and management theory since it was launched by Michael Porter in 1985. Meanwhile, Raphael Kaplinsky's reinterpretation of the concept is much used within developmental economics. The purpose of this entry is to explore the difference between the two potential meanings of the concept of a value chain and their different implications for understanding competition within global business.

The concept of a value chain was originally promoted by Michael Porter in the book *Competitive Advantage: Creating and Sustaining Superior Performance,* in which he explores the underpinnings of competitive advantage in the individual firm. A value chain describes the sequence of activities that firms perform to add value to a certain product or service. The difference between the total added value and the total costs to operate the chain results in a profit margin. The success of a company in managing a profitable value chain, maximizing value creation while minimizing costs, is an important aspect of competitive advantage.

Porter distinguishes between primary activities and support activities. Primary activities are directly concerned with the creation or supply of a product or service. They can be grouped into five main areas: inbound logistics, operations, outbound logistics, marketing and sales, and service. These primary activities are linked to support activities that help to improve efficiency such as procurement, technology development, human resource management, and strategic planning.

Porter showed that a company's competitive strategy should not be aimed at fine-tuning one activity of the chain, nor does it suffice to improve all the different activities. Although these value activities are the building blocks of competitive advantage, the value chain is more than a mere collection of independent activities. Value activities are linked within the value chain and these linkages determine competitive advantage or disadvantage. For Porter, streamlining the value chain is not enough; he puts the competitive logic of cost leadership and diversification up front.

Porter's insights on competition and the concept of the value chain have gained much attention in academia and management. Numerous empirical analyses have made use of the concept of a value chain and since 1985, the concept itself has even been reinterpreted. Raphael Kaplinksy broadened the scope of the analysis by stepping outside the individual firm. For Kaplinsky, a value chain describes the full range of activities that are required to bring a product or service from conception, through the different phases of production (involving both the primary and support activities), delivery to final consumers, and final disposal after use. Even when a primary or support activity has been outsourced by a particular firm, it still forms part of the total value chain that supports a product or service.

The big difference between Kaplinsky and Porter is that Kaplinksy reconstructs the value chain in relation to a certain product or service, not a particular firm. Only when there is full vertical integration would the two meanings of a value chain coincide. Porter saw the difference but called this network of interfirm linkages a value system, while James Womack and Daniel Jones refer to it as a value stream, adding further to the conceptual confusion.

Given his different definition of a value chain, Kaplinsky also has different insights to offer on the sources of a company's competitive advantage within global business. Whereas Porter wants to show how firms can successfully manage their internal value chain, Kaplinsky discusses how firms can successfully upgrade within a broader value chain, specializing in these nodes of the chain that are the most profitable ones because they offer the least competition. To Kaplinsky, diversification and cost leadership are but two ways through which a firm can arm itself against competition. Another strategy is to try to escape the pressures of competition by adopting a number of overlapping but related strategies: identifying pockets of activity that benefit from barriers to entry, learning how to leap over the barriers constructed by rivals, generating new barriers to entry (notably through innovation), and doing so on a dynamic basis.

Kaplinsky's reinterpretation of the concept has also triggered much empirical investigation, more so in the field of developmental economics than management studies. This leads to a situation in which the same term is used in two different contexts, meaning two different things. To highlight the difference with Porter's value chain analysis, researchers who use Kaplinsky's conceptualization have started speaking about global value chain analysis, underlining the interfirm and spatial nature of the linkages they are studying.

See Also: Competition; Cost Structure; Value Network; Vertically Integrated Chain.

Bibliography. The Global Value Chains Initiative, www.globalvaluechains.org (cited March 2009); Matthias Kannegiesser, *Value Chain Management in the Chemical Industry: Global Value Chain Planning in Commodities* (Physica-Verlag, 2008); Raphael Kaplinksy, "Globalisation and Unequalisation: What Can Be Learned from Value Chain Analysis," *Journal of Development Studies* (v.37/2, 2000); Raphael Kaplinsky, *Globalization, Poverty & Inequality* (Polity Press, 2005); Thomas Koenig, *Market Driven Development and Poverty Reduction: A Value Chain Analysis of Fresh Vegetables in Kenya and Tanzania* (SLE, 2008); Jeff Neilson and Bill Pritchard, *Value Chain Struggles: Institutions and Governance in the Plantation Districts of South India* (Wiley-Blackwell, 2009); Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (Free Press, 1985); James P. Womack and Daniel T. Jones, *Lean Thinking: Banish Waste and Create Wealth in Your Corporation* (Simon & Schuster, 1996).

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Value Network

The value network models value creation in the context of firms that create value by making it possible for customers to exchange goods, information, and capital. The value network model is most suitable for the representation of value creation for firms that compete in the network economy. Such firms manage clubs or sets of customers. The firms are not the network; they merely provide networking services to their customers. Typical examples include telecommunications firms, airlines, postal and financial services firms, and stock exchanges. Value is created by making exchange viable and efficient by reducing transaction costs. Firms that create value by making possible exchanges link clients or customers who are or wish to be interdependent for exchange purposes.

The value network model is one of three value configuration models. Value configuration analysis is based on the premise that competitive advantage stems from the performance of discrete activities by firms. All value configuration models share the underlying logic that by disaggregating a firm into its strategically relevant activities, managers can understand the behavior of costs and the sources of differentiation and hence understand competitive advantage. A value configuration analysis entails the identification of the primary activities of a firm and thereafter the study of the economic implications of those activities. The models assist managers in determining what activities a firm should perform, and how, and what is the configuration of the firm's activities that would enable it to add value.

Initially the value chain was advanced to assist managers in creating sustainable competitive advantage through the analysis of how companies create value. Proposed in 1985, the value chain, which has become popular worldwide, appropriately describes value creation in the manufacturing sector of the economy. However, the value chain fails to model value creation of telecommunications companies, consulting firms, doctors, lawyers and banks, and e-business. Its relative importance to managers has also been reduced as the contribution of manufacturing companies to gross national product has fallen since the 1980s, with current manufacturing share of gross domestic product at merely 15 percent in many developing countries. These factors have given rise to two complementary value configuration models, namely the value shop and the value network.

The value network model disaggregates the exchange-facilitating firm (value network) into its strategically relevant activities. The primary activities are "network promotion and contact management," including activities associated with the management of the adoption of a specific technology or the choice of a specific network provider, the selection of customers who are allowed to join the network, and the initiation, monitoring, and termination of customer contracts; "service provisioning," including activities associated with the initiation, maintenance, and termination of a range of exchange relations between customers; "network infrastructure operation," including activities associated with the development, rollout, and maintenance of the physical or informational infrastructure. The primary activities must be performed simultaneously to create value. For example, the technical features of the infrastructure affect the availability of services and the availability of services affects customers joining the network. To the extent to which one of the three primary activities is underdeveloped or not functioning, value creation is negatively affected.

Value network services are typically affected by network externalities. Network externalities exist when customer value is not only affected by the quality feature of the service but also by the number of other customers (global network externalities) and/or the composition (identity and number) of a specified group of customers (local network externalities) affiliated with the exchange-facilitating firm (value network). Scale is therefore a primary value driver in value networks. Accordingly, technology standard wars, standardization of platforms, and fierce competition at the initial stages of service introduction have been repeatedly observed in such industries as telecommunications, high technology, and banking.

The industry system where such firms operate is characterized by both interconnection and vertical coproduction of services. Unlike value chain and value shop firms, competing value network firms are typically interconnected to one another. For example, the existence of a telephone subscription with one mobile phone operator does not preclude a telephone call to a customer of a different mobile phone operator. Another unique strategic connection is the prevalence of various value network firms to cooperate in the delivery of a new service. For example, internet banking is only possible because of vertical coproduction by telecommunications and banking firms.

Managers of value networks face strategic challenges in terms of determining whether to expand to serve new communities of customers or serve the same customer set but enable more types of exchanges, as well as whether to expand by acquiring competitors or merely interconnecting with them.

See Also: Comparative Advantage; Value Chain; Value Shop.

Bibliography. Raphael Amit and Christoph Zott, "Value Creation in E-business," *Strategic Management Journal* (2001); Øystein Fjeldstad and Espen Andersen, "Casting Off the Chains," *European Business Forum* (2003); Michael L. Katz and Carl Shapiro, "Network Externalities, Competition and Compatibility," *American Economic Review* (v.75/3, 1985); Michael E. Porter, *Competitive Advantage* (Free Press, 2004); Charles B. Stabell and Øystein D. Fjeldstad, "Configuring Value for Competitive Advantage: On Chains, Shops, and Networks," *Strategic Management Journal* (1998).

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Value Shop

Value shop models value creation at the firm level in the context of firms that create value by mobilizing resources and activities to resolve a particular customer problem. The value shop model is most suitable for the representation of value creation for firms that compete in the knowledge economy. Typical examples include consulting firms, law firms, accounting firms, and health service organizations. The principal value creation logic is the provision of a perceived beneficial solution to a customer's problem.

The value shop model is one of three value configuration models. Value configuration analysis is based on the premise that competitive advantage stems from the performance of discrete activities by firms. All value configuration models share the underlying logic that by disaggregating a firm into its strategically relevant activities, managers can understand the behavior of costs and the sources of differentiation and hence understand competitive advantage. A value configuration analysis entails the identification of the primary activities of a firm and thereafter the study of the economic implications of those activities. The models assist managers in determining what activities a firm should perform and what configuration of the firm's activities would enable it to add value.

Initially the value chain was advanced to assist managers in creating sustainable competitive advantage through the analysis of how companies create value. Proposed in 1985, the value chain, which has become popular worldwide, appropriately describes value creation in the manufacturing sector of the economy. However, not only does the value chain fail to model value creation of, for example, telecommunication companies, consulting firms, doctors, lawyers, and banks, but also its relative importance to managers has been reduced as the contribution of manufacturing companies to the gross national product (GNP) has fallen since the 1980s with current manufacturing share of the gross domestic product (GDP) at merely 15 percent in many developing countries. Those factors have given rise to two complementary value configuration models, namely the value shop and the value network.

The value shop model disaggregates the problem-solving firm into its strategically relevant activities. The primary activities of problem-solving firms are problem findings and acquisition including activities associated with recording; reviewing and formulating the problem to be solved and securing the rights to solve a problem; problem solving including generation and evaluation of alternative solutions; choice including choosing among alternatives; execution or implementation activities of the chosen solution; and monitoring and evaluation including activities associated with monitoring and measuring the extent to which the implemented solution has solved the original problem. The primary activities are recurring. To the extent to which a problem is yet to be solved, a new round from problem finding and acquisition to monitoring and evaluation begins.

A unique characteristic of value creation in the context of problem solving is the existence of two-sided information asymmetry. For manufacturing firms (value chain), the transformation process of inputs into outputs must be well understood prior to its execution. For problem-solving firms (value shop), the appropriate solution cannot be predefined. This dimension of information asymmetry makes the customer and the willingness to reveal problem-related information essential to the quality of the suggested solution. The other side of the two-sided information asymmetry relates to the inability of customers to ascertain the suitability of a specific firm to solve a particular problem. Price, which is a vital distinguishing purchasing factor for buyers of physical products, is only of secondary importance for the customers of problem-solving firms. Low prices for problem-solving services are usually associated with lesser proficiency in solving problems. Furthermore, in the presence of information asymmetry, value shop firms invest heavily in establishing their reputation. Firms develop a reputation relating to the type of problems that they can solve, the process by which they solve problems, as well as their expected remuneration.

Another distinguishing characteristic of value creation in the context of problem solving is the importance of project selection. Project/problem selection determines the path of competence development in firms as well as firm reputation. Taking into consideration the importance of project/problem selection, problem-solving firms routinely turn away potential projects. The industry is characterized by its extensive use of both referrals and subcontracting. Problems that do not fit with either the underlying competences of the problem-solving firm or its strategic competence development trajectory are referred to other more specialized problem-solving firms. For example, a general practitioner (doctor) commonly refers patients to more specialized professionals. Problems that require the collaboration of multiple problem-solving firms are disaggregated to manageable projects that are thereafter subcontracted to specialized firms. Typical strategic challenges that managers of value shop firms face include the tension between specializing in a narrow set of problems versus investing in knowledge breadth, which increases the range of problems that their firms can solve and the tension between taking upon, rejecting, referring, and subcontracting new problems.

See Also: Value Chain; Value Network.

Bibliography. Raphael Amit and Christoph Zott, "Value Creation in E-business," *Strategic Management Journal* (2001); Øystein Fjeldstad and Espen Andersen, "Casting Off the Chains," *European Business Forum* (2003); Petter Gottschalk, *Knowledge Management Systems: Value Shop Creation* (Idea Group, 2007); Michael L. Katz and Carl Shapiro, "Network Externalities, Competition and Compatibility," *American Economic Review* (v.75/3, 1985); Michael E. Porter, *Competitive Advantage* (Free Press, 2004); Charles B. Stabell and Øystein D. Fjeldstad, "Configuring Value for Competitive Advantage: On Chains, Shops, and Networks," *Strategic Management Journal* (1998).

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Variable Costs

The total cost of a product can be segregated into two broad components: fixed costs and variable costs. Unlike fixed costs, which are constant for a given time period, variable costs change proportionally to the volume of the production units. Variable costs can be defined as those costs that vary in direct proportion to the quantity of output.

Such a classification of cost is done in a marginal costing system where costs are segregated into fixed and variable costs to compute the break-even point (level of operation where there is no profit and no loss) and margin of safety (the actual level of production less the break-even point). Variable costs can be labor costs, material costs, or overhead costs. Material costs and direct labor costs (those labor costs that are directly related to production) are variable costs as these costs vary directly with output. Examples of variable costs are packaging material costs, fuel cost for a transport company, and so forth. Variable cost is not the same for all firms in an industry. It depends on many factors such as size of the firm (large firms may have lower variable costs because of economies of scale), strategy of firm (self-production or subcontract), and so forth.

Certain costs that are currently fixed in nature can be turned into variable costs and vice versa. For example, by subcontracting the loading and unloading activity that was earlier done by permanent employees, a firm will have to pay a charge based on the actual volume instead of the fixed wages to the current employees. Similarly, costs that are variable in nature can be converted to fixed costs. For example, a firm that was earlier selling its products through retailers had to pay a fixed commission (margin) to the retailer. If the firm starts selling its products through its own retail outlets or through the internet, the costs become fixed, as they need to pay rental, salary, and other costs. One of the reasons for cheaper prices over the internet than at retail outlets is that while the company saves significantly in terms of commission and other selling expenses, the fixed costs are also very low.

Dell is able to auction its products online at a cheaper price because it saves in variable costs such as dealer's commission, store expenses, and so forth. Further, since Dell auctions huge quantities at a time, the fixed costs per unit decrease significantly. The e-tickets concept became so popular because airlines can save the variable costs that were earlier incurred in printing tickets, commission to airline agents, and so forth. Such benefits ultimately were transferred to the customers.

Furthermore, there are certain costs that are fixed up to a certain minimum level of production (fixed cost) and become variable after a particular level. For example, electricity charges are subject to a minimum fixed charge + a variable component for each unit consumed after a certain minimum level. Such costs are classified as semivariable costs.

In a continuing business, the cost incurred to produce an additional unit of output is the variable cost only because fixed cost is constant irrespective of the output. Unlike variable cost, an increase in output implies decrease in fixed cost per unit. The difference between sale price per unit and the variable cost per unit is termed *contribution* per unit. It is called so because it signifies how much the sale of an additional unit contributes to the fixed costs and profits of the business. So long as the contribution is positive, the profit of a firm can be increased by increasing the sales volume. It is always advisable to discontinue operations if the contribution per unit is negative because it implies increasing loss with each additional unit of output.

Break-even point is computed by dividing the total fixed costs by the contribution per unit. Sale quantity greater than break-even point implies net profit and sale quantity less than the break-even point implies net loss.

Estimating the variable cost per unit is very important while bidding for supply to any bulk buyers or for a one-time contract where a discounted sale price is not going to affect the sale price to other existing customers. In case we have unused installed capacity, any sale price above the total variable costs will result in increase in net profit of a firm. This is because the additional revenue (bulk order price x bulk order quantity) will be greater than the additional costs (variable costs x bulk order quantity). Therefore, the bid price should consider only the variable cost and not the total cost of the product.

See Also: Cost Accounting; Fixed Costs; Managerial Accounting; Sales.

Bibliography. Robert N. Anthony, David F. Hawkins, and Kenneth A. Merchant, *Accounting: Text and Cases* (McGraw-Hill Irwin, 2007); Srikant M. Datar et al., *Cost Accounting: A Managerial Emphasis* (Pearson/Prentice Hall, 2009); Richard Edwards, *The History of Cost and Management Accounting: The Experience of the United Kingdom* (Routledge, 2009); Craig Newmark, *Readings in Applied Microeconomics: The Power of the Market* (Routledge, 2009); Peter Whittle, *Networks: Optimisation and Evolution* (Cambridge University Press, 2007).

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Venezuela

The South American country of Venezuela, which shares borders with Colombia, Brazil, and Guyana, is one of the major oil producers in the Americas. It was taken over by the Spanish in the early 16th century, initially controlled from Santo Domingo (in the modern-day Dominican Republic), and from 1717 from Bogotá as a part of the Viceroyalty of New Granada. Part of the campaign for independence in Latin America started in Venezuela in 1806, with independence for Gran Colombia in 1819. In 1829, Gran Colombia fell apart and Venezuela became fully independent, with its capital established at Caracas.

Throughout much of the 19th century, Venezuela was plunged into a series of civil wars and this led various governments to borrow heavily from Great Britain, Germany, and Italy. This led to a later government reneging on payment of the loans, and the three countries sent ships to the Caribbean to blockade Venezuela's ports in 1902, forcing the new government to start repaying the loans. However, this did lead to the emergence of the dictatorship of General Juan Vicente Gómez, who took power in 1908 and ruled until his death in 1935. Although the nature of his rule was extremely unpopular, he did have access to vast wealth to sustain his long rule. This was because of the discovery of oil and its wide exploitation in Venezuela in the 1920s.

The Venezuelan oil industry owes much to Manuel Antonio Pulido, who recognized the hidden wealth in the country in the late 19th century. At that time, it was used for paraffin, but with the increasing popularity of the automobile, engineers from the United States, the United Kingdom, Germany, and the Netherlands started prospecting for oil, having to carve roads through the jungles to remote locations where oil drills were established. It was not long before drilling for oil started in Lake Maracaibo, later leading to the building of elaborate pumping stations.

Throughout the dictatorship of Juan Vicente Gómez, some 3,500 families continued to own about 80 percent of the richest farmland in the country, and they enjoyed much of the wealth from oil. The oil industry also tended to result in a neglect of agriculture, which led to the country having to import food, which, in turn, resulted in a rise in prices. The death of Gómez in 1935 paved the way for two more military governments. However, the people started protesting and in 1945, Rómulo Betancourt came to power leading the Acción Democrática Party, which planned to make the economy of the country more socialist. Reforms were introduced, but eight months later, this ended with a military coup. In 1958 Betancourt's supporters overthrew the military and he became president, becoming the first democratically elected president who stood down at the end of his term in office.

Oil continued to provide money for the Venezuelan government, and with the oil price increases in 1973–74, and again in 1979, the country started to become wealthy. However, in the 1980s, there was an economic downturn and unemployment rose, followed by an increase in inflation to such an extent that it looked as though Venezuela would not be able to pay back its international debts. Austerity measures were introduced in February 1989, and in demonstrations and rioting in Caracazo, some 300 people were killed. This instability led to Hugo Chávez Frías attempting to stage a coup d'état. Chávez was jailed but was released and in November 1998, his supporters won a majority in the congress and Chávez himself became president. He assumed office at a time of major economic problems in the country, with some 70 percent of the population living at or below the poverty line and about 35 percent of the population believed to be making a living by black market trading.

Since his time in power, Chávez has faced the hostility of the Venezuelan elite, but his control of the oil industry allowed the government to have more money to spend on the country's infrastructure and also to give extensive aid to other countries in Latin America. For some people, Chávez became a hero; for others, he was detested and there were a few attempts to overthrow him including a coup d'état, which was launched by oil executives in 2002. With Venezuela's gross domestic product (GDP) per capita being $6,100, one of the highest in Latin America, the country controls many gas stations throughout the United States, with about 55 percent of its petroleum exported to the United States, and substantial exports to the Netherlands Antilles where it is refined. About a third of the country's imports come from the United States, with considerable imports from Colombia and Brazil. Venezuela has also applied to join the Mercado Común del Sur (Mercosur), but that entry has only been ratified by Argentina and Uruguay.

See Also: Company Profiles: South America; Latin America; Mercosur/Mercosul.

Bibliography. Ralph Arnold et al., *The First Big Oil Hunt: Venezuela 1911–1916* (Vantage, 1960); Romulo Betancourt, *Venezuela's Oil* (Allen & Unwin, 1978); Steve Ellner, *The Venezuelan Petroleum Corporation and the Debate Over Government Policy in Basic Industry 1960–76* (Institute of Latin American Studies, University of Glasgow, 1987); Weine Karlsson, *Manufacturing in Venezuela: Studies on Development and Location* (Almquist & Wiksell International, 1975); Edwin Lieuwen, *Petroleum in Venezuela: A History* (University of California Press, 1967); Laura Randall, *The Political Economy of Venezuelan Oil* (Greenwood Press, 1987); Heinz Sonntag and Rafael de la Cruz, "The State and Industrialization in Venezuela," *Latin American Perspectives* (v.12/4, 1985).

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Venture Capital

Venture capital is a type of financing used by small and medium-sized businesses. Because these companies are early in their development cycle, they are riskier investments, leaving them unable to get traditional financing from banks. Although venture capital is a relatively small fraction of global corporate investments, it has contributed to an amazing amount of economic growth, facilitating the emergence of companies such as Microsoft, Google, and Yahoo. Venture capital is usually invested in return for equity (shares) in the company rather than fixed debt, as to account for the greater risk these investments represent. Venture capital is usually invested with a three-to-seven-year perspective. Failure rates can vary anywhere from 20 to 90 percent of the portfolio, and expected returns are between 30 to 100 percent (to offset for failures within the portfolio).

Venture capital has the advantage of being available for risky and new businesses as well as providing access to venture capitalists, who are usually industry experts able to supply valuable insight to the companies they invest in. Nonetheless, obtaining venture capital implies a certain loss of control in management decisions, and can be quite costly in terms of administrative costs and time. Venture capital fills an important gap in the financing cycle, enabling the growth of high-risk companies.

There are five main types of venture capital adapted to different companies. A smaller venture capital investment is called seed capital, and is used by companies to create a prototype and fund basic market research. Start-up capital is used to fund recruitment of key management as well as finalizing the product for commercialization. Early stage capital is used to increase productivity and increase company efficiency, while expansion capital is used to enter new markets. The last stage of venture capital, late stage capital, is used to increase capacity and marketing, while preparing for the exit of the venture capital.

Venture capital can be obtained through two different processes. Some companies will negotiate milestone-type financing, where the next amount of financing will be made available once it reaches predetermined goals. For example, a company could link milestones to sales: once a sales target is reached, the venture capital would be released. The advantage is that the company can raise great amounts of capital upfront, leaving less pressure in the future to secure more funding. Other companies prefer seeking venture capital in the form of financing rounds, entering a new financing round after certain internal goals are met. In these cases, venture capital firms who have already invested in these companies usually require a right of first say, so they can be the first company to evaluate the potential investment and decide if they want to invest in the next round. The advantage is that financing terms are advantageous when negotiated as the company progresses. As the product is more successful, there is less risk for the investor, and the company can divest less equity, or give up less control than if it had negotiated the financing up front.

The venture capital investment usually takes the form of equity in ordinary shares, but can take many other forms. Financing is usually based on company effort, venture capitalist effort, venture capitalist preference, and feasibility of the underlying technology. The three main structures of venture capital investments are ordinary shares, preferred shares, and debt. Ordinary shares are cheaper for the company to finance in the short term, and profit expectations can be quite elevated for the investor, but usually imply a loss of control for the company (due to the emission of voting shares). Preferred shares have priority over ordinary shares in case of bankruptcy and usually have fixed dividends, but do not always carry a voting right. Finally, debt is usually secured against existing assets, and requires fixed repayment; this is also called venture debt.

Once a venture capitalist has made an investment, he or she can establish two types of relationships with the company. Some venture capitalists take a hands-off approach, leaving the management in charge of the raised funds; these are called silent partners, as the company is not allowed to disclose the name of the new investor. Others will prefer a more hands-on approach, supervising through a seat on the board of directors, sharing their expertise to increase the possibility of success.

Advantages and Disadvantages

The main advantage of venture capital is accessibility to liquidity, as traditional lenders (such as banks) usually do not provide funds to young, unproven companies. Without assets or sales, growing companies need access to investors to take them to the next stage of growth. Venture capital fulfills that role. The other advantage is that having venture capital translates into access to the expertise and networks belonging to venture capitalists. These investors have a vested interest in the success of the company, and can often supply expertise in recruiting the management team and the board of directors, as well as assisting in obtaining additional financing.

Venture capital imposes some constraints on the organization; as the company gives shares in exchange for liquidity, there is a loss of control in management decision making. For example, some investors will take a hands-on approach, requiring a seat on the board of directors so they can keep an eye on their investment. Some go as far as requiring a veto on major decisions as a condition for investing. This can effectively restrict the decision capacity of the current management. Getting venture capital also requires considerable investment in terms of time and money; from presentation to negotiation to signature, it is not uncommon for the process to take between three to six months. Finally, between 5 percent and 10 percent of the amount raised is often used to pay legal and investment fees.

Venture Capital Firms

Many venture capital firms are limited partnerships with a pool of investment capital; they invest the capital in selected companies under the guise of a portfolio. Venture capital firms can have portfolios ranging from the low millions up to billions of dollars. Most venture capital firms enter an investment with a perspective of three to seven years. After this period, venture capitalists usually try to exercise their exit strategy. Traditional exits include IPO (initial public offering, or being listed on the stock market), sale of equity to another company, or repurchase by management.

Venture capital firms fill an important gap in the financing chain. They are able to finance businesses that cannot rely on government subsidies, but which are still too risky for banks. As such, venture capital is an important actor to finance innovation, enabling the introduction of new products and processes to the market. Also, by their unique position in the financing chain, these firms are often essential to commercializing inventions generated by private and public research institutions.

See Also: Debt; Initial Public Offering; Investment Banks.

Bibliography. Franklin Allen and Wei-ling Song, "Venture Capital and Corporate Governance" (Wharton Financial Institutions Center, Drexel University, September 29, 2002); Laura Bottazzi, Marco Da Rin, and Thomas Hellmann, "Who Are the Active Investors? Evidence From Venture Capital," *Journal of Financial Economics* (September 2007); Astrid Romain and Bruno Van Pottelsberghe, "The Economic Impact of Venture Capital," Discussion Paper Series 1: Studies of the Economic Research Centre, Deutsche Bundesbank (n.18, 2004).

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Verizon Communications

Verizon Communications, Inc., provides broadband and telecommunications services to more than 100 million personal and business consumers. It was formed on June 30, 2000, with the merger of Bell Atlantic Corporation and General Telephone and Electronics Corporation (GTE). It was one of the largest mergers in United States business history, valued at more than $52 billion at the time of the announcement. The merger began on July 27, 1998, and took almost two years, until June 30, 2000, to become effective. Verizon began trading on the New York Stock Exchange on July 3, 2000, and in 2004, its shares became a part of the Dow Jones Industrial Average. Its line of businesses includes television, wireless telephone, local wireline telephone, and broadband internet services. According to the Fortune 500 list of 2007, Verizon is the 13th-largest company in the world. Verizon currently employs approximately 235,000 people and serves customers in more than 140 countries. It had operating revenues of $93.5 billion and operating income of $15.6 billion in 2007. Verizon has its corporate headquarters in Manhattan.

Verizon Business provides communications to large businesses in 150 countries, serving 97 percent of the Fortune 500.

Although Verizon is a relatively new company, its parent companies have a long history of operating in the telecommunications industry. Both Bell Atlantic and GTE had grown and evolved through a series of mergers, acquisitions, and divestitures. Prior to the merger, GTE and Bell Atlantic were among the largest telecommunications companies in the world. In 1999 GTE had revenues of more than US$25 billion, while Bell Atlantic had revenues of more than US$33 billion. GTE served approximately 35 million access lines in the United States, Canada, the Dominican Republic, Puerto Rico, and Venezuela. It was the leading wireless service provider in the United States, serving 7.1 million customers. It provided wireless services to more than 6.7 million customers outside the United States. Bell Atlantic's domestic telecom unit had 43 million access lines. Its wireless global unit managed 7.7 million customers in the United States and also served Latin America, Europe, and the Pacific Rim.

Business Segments

The different businesses of Verizon are clubbed in two segments—Wireline and Wireless. As of March 2008, Wireless has a 49 percent share in revenues, while Wireline has a 51 percent share. In terms of operating income, Wireless has a 75 percent share, while Wireline has a 25 percent share. Verizon's Wireline operations include Verizon Telecom and Verizon Business. Verizon Telecom provides local and long-distance telephone services, broadband video and data services, and other communication services to consumers and small and medium-sized businesses in 28 states in the United States. It has over 40 million access lines, 8.5 million broadband connections, and approximately 2.15 million video subscribers.

Verizon Business was formed in 2006 when Verizon acquired MCI, Inc. This acquisition made Verizon the largest telecommunications company in the United States, until BellSouth and AT&T merged, which relegated Verizon to second place. It is a leading provider of innovative communications and information technology solutions to large businesses and governments in 150 countries around the globe. Verizon Business has a customer base of over 70,000, which includes 97 percent of the Fortune 500.

Verizon's wireless business segment operates as Verizon Wireless, which is a joint venture between Verizon Communications and United Kingdom–based Vodafone Airtouch, with Verizon holding majority ownership (55 percent). Verizon Wireless began its operations on April 3, 2000. Soon after, GTE's wireless operations also joined Verizon Wireless. It provides wireless voice and data products and services as well as equipment sales to over 67.2 million customers across the United States. Based on revenue, Verizon Wireless is the largest American wireless company and largest wireless data provider, with annual revenue of $43.9 billion as of 2008. This wireless network is 100 percent digital.

Verizon's main competitors include AT&T, Cablevision, Comcast, Cox Communications, Time Warner Cable, and Alltel. In spite of a very competitive industry, Verizon has been able to maintain its competitiveness, both in terms of quality of services and customer satisfaction, because of the reliability of its networks. Its wireless network is the most reliable network in the nation and its wireline network has a reliability factor of 99.99 percent. Verizon has topped the American Customer Satisfaction Index for four years running.

See Also: AT&T; China Mobile Communications; Company Profiles: North America; Deutsche Telekom; Telecom Italia; Time Warner; Vodafone.

Bibliography. Verizon, "Business Units," investor.verizon.com/business (cited March 2009); Verizon, "Corporate History," investor.verizon.com/profile/history (cited March 2009).

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Vertically Integrated Chain

A vertically integrated chain represents a series of make or buy decisions made by firms, beginning with raw materials and manufacturing (backward integration) and moving forward to distribution and marketing (forward integration). To this end, a firm may build or buy a wholly owned subsidiary, secure a minority shareholding, or join in a formal or informal strategic alliance to provide a specific segment of its value chain anywhere in the world where costs are lower and access to consumer markets are closer. The anticipated end result is a higher ratio of value to cost at each stage of the value chain. The assessment of value versus cost is complex because host country market characteristics, trade barriers, attitude toward foreign direct investment, and some 27 other location advantages, many industry specific, will influence ultimate cost.

The vertically integrated chain represents trade-creating as well as efficiency-seeking forms of foreign direct investment, reflecting both the rationalization of the operations of the multinational enterprise and the value chain specialization of affiliated companies in its internal and external network. While the vertically integrated chain increases intrafirm knowledge and goods flows, as well as the international exposure of the affiliates, in-depth, fine-grained analysis of location advantage factors is needed to understand exactly how location matters to the firm. It is important to understand the specific role given to or earned by affiliates in the company. They may act as "globally rationalized" subsidiaries performing a particular set of activities in the vertical chain or have a regional or world product mandate. John Cantwell argues that the vertically integrated chain increases intrafirm trade, building upon the location advantages benefiting each subsidiary, thereby leading to an increase of both intermediate goods trade and international production.

While traditional vertical integration has declined, vertically integrated chains have become more common as companies have begun to outsource critical elements of their business processes and sources of their supplies, whether through the minority investments and strategic alliances mentioned above or through contracts with outsource companies. The multitude of relationships needed to keep their businesses running and their customer needs satisfied compounds the firm's business risks. While companies benefit from lower labor costs, their risks increase substantially because of the political and economic instability in some of these regions. Contracts among companies are also difficult to monitor when the companies operate in a continually evolving network.

It is not enough to create a culture within individual organizations. The challenge is to create a cross-organizational culture in which the interests and the values of the partners coincide. In all forms of networks, the important managerial characteristics to be developed are trust and commitment as well as social norms of mutuality, solidarity, role integrity, harmonization of conflict, and restraint of power. As a result, constant monitoring of political and economic conditions in these regions must occur in addition to the regular risk metrics. Today, there is an increased focus on operations risks. In the United States, Sarbanes-Oxley has contributed to the focus by requiring senior managers and boards of directors to achieve a deep understanding of all significant financial/nonfinancial risks threatening their businesses.

Industries, as well as individual firms, may constitute vertically integrated chains. Technology, chemicals, and pharmaceuticals are three examples. In industries that constitute parts of a vertically integrated chain of system-compatible components, survival and success are not necessarily the result of superior performance, but may be determined by the possession and exercise of power to set the rules. A dominant integrated-system firm in the industry sets the rules under which potential competitors can enter and survive in the peripheral equipment and software markets. The critical rules are those that govern product design. The nature of these rules is determined by industry structure and, in particular, firm specialization or integration on the one hand and market concentration on the other hand. By introducing incompatibilities, large firms can impede rivals without having to suffer the losses of price cutting. Control of the rules of the game across the industry's markets includes the power to regulate the rate, direction, timing, and source of commercially viable innovations. Control of product design standards also enables large leading firms to block the pioneering effort of rivals. Here, the problem is the oligopoly control of innovation by others, which in the case of developing countries may affect total national host country output as well as national economic growth.

See Also: Comparative Advantage; Distribution; Locational Advantages; Make-or-Buy Decision; New Trade Theory; Outsourcing; Risk; Strategic Alliance; Subsidiary; Value Chain; Virtual Vertical Integration.

Bibliography. John Cantwell, "The Relationship Between International Trade and International Production," in *Surveys in International Trade*, David Greenaway and L. Alan Winters, eds. (Blackwell, 1994); Anthony J. Daboub and Jerry M. Calton, "Stakeholder Learning Dialogues: How to Preserve Ethical Responsibility in Networks," *Journal of Business Ethics* (v.41, 2002); John H. Dunning, "The Determinants of International Production," *Oxford Economic Papers* (v.25/3, 1973); John H. Dunning and G. Norman, "The Location Choice of Offices of International Companies," *Environment and Planning* (v.19/5, 1987); Naushad Forbes, *From Followers to Leaders: Managing Technology and Innovation in Newly Industrialized Countries* (Routledge, 2002); Kathryn Rudie Harrigan, "Matching Vertical Integration Strategies to Competitive Conditions," *Strategic Management Journal* (v.7/6,1986); Alan M. Rugman, *Multinationals and the Canada–United States Free Trade Agreement* (University of South Carolina Press, 1990).

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Vietnam

Vietnam is a long, narrow country located in southeast Asia, covering an area of 330,363 sq. km. Vietnam

Hmong ethnic minority farmers in Vietnam, where agricultural productivity growth has been surpassed by industry.

has shared borders with Cambodia, China, and Laos. The country had a population of 82.2 million in 2004 and the population growth has been around 1.2 percent annually. The average population density of the country is approximately 246 per sq. km. Life expectancy for the population as a whole was estimated to be 70.61 in 2005. The primary ethnic group in the country is the Vietnamese, with significant numbers of ethnic minorities, primarily consisting of Chinese, Hmong, Thai, Khmer, Cham, and Montagnards. Hanoi is the capital; it and Ho Chi Minh City (Saigon) are the two largest cities in the country. Vietnamese is the official language of the country and Mahayana Buddhism is the most popular religion. Vietnam has a very high literacy rate of well over 90 percent; however, much of the population has limited access to education. The Vietnamese Communist Party (VCP) has a monopoly on political power within the country. Vietnam is a member of the Association of Southeast Asian Nations (ASEAN) and the Greater Mekong Subregion.

Vietnam's history has been closely intertwined with that of China. It is commonly believed that Vietnamese culture originated in the Red River Valley and has slowly diffused in a southerly direction. The area of modern-day Vietnam was under Chinese rule for approximately 1,000 years beginning around 111 B.C.E., which was then followed by around 900 years of independence. Vietnam became a French colony in the 19th century, and in 1954 became divided into Communist North and U.S.–supported South Vietnam. Following a lengthy civil war, the country was reunited in 1975 under Communist rule.

Initially, following the reunification of the country, the economy fared poorly; however, starting with reforms in 1986, the economy has seen fairly rapid and steady growth. The economy grew by 8.5 percent in 2007, which followed an average growth rate of 7.8 percent in the previous five years. Per capita gross domestic product (GDP) grew by 5.6 percent in 2007 and it is estimated to be 5.6 percent and 6.7 percent in 2008 and 2009, respectively. Investment has been extremely high in Vietnam, contributing to over 40 percent of GDP in 2007. However, inflation has continued to be a problem and was 19 percent in March 2008. Vietnam has a substantial and growing negative trade balance. After a year of seeing the Vietnam (VN) Index prices rise by 144 percent in 2006, stock prices declined sharply in 2007.

The industrial sector of the economy has been the primary driving factor in recent GDP growth, with the private sector's growth exceeding that of the public sector. Agriculture productivity, however, has lagged behind, with only 3.4 percent growth in 2007. Unemployment was at 4.6 percent in 2007. A severe shortage of skilled labor has resulted in a rapid rise in professional salaries and high staff turnover rates. Other difficulties encountered by international businesses in Vietnam have been identified as the country's having insufficient infrastructure and excessive bureaucracy. The central government's expenditure measured as a percentage of GDP has risen from 30.6 in 2003 to 32.4 in 2007 and is by far the highest in southeast Asia.

Vietnam's economic performance has had a substantial impact on reducing poverty in the country. From the early 1990s to 2005, it has been estimated that the percentage of the population living in poverty has fallen from well over 50 percent to 29 percent. However, the declines in poverty have been unevenly divided, with urban areas, particularly Ho Chi Minh City, seeing both rapid rises in average income and declines in poverty, while the declines in poverty in many rural areas have been more modest. It has been reported that corruption and an inefficient public sector, including the state-owned banks, are obstacles that need to be overcome for the country to continue to experience rapid economic growth and further reductions of poverty.

See Also: Asia; Asian Development Bank; Asian Financial Crisis; Asian Tigers; Asia-Pacific Economic Cooperation; Association of Southeast Asian Nations.

Bibliography. Asian Development Bank, *Outlook 2008: Workers in Asia* (Asian Development Bank, 2008); Frederick R. Burke and Thành Vinh Nguyen, *Business Operations in Vietnam* (Tax Management, Inc., 2006); Jayant Menon, "Can Subregionalism or Regionalism Aid Multinationalism? The Case of the Greater Mekong Subregion and the Association of Southeast Asian Nations Free Trade Area," *Journal of Greater Mekong Subregion Development Studies* (v.2/1, 2005); K. W. Taylor, "Surface Orientations in Vietnam: Beyond Histories of Nation and Region," *Journal of Asian Studies* (v.57/4, 1998).

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Virginia Company

The Virginia Company was a joint-stock company that was chartered by King James I of England in 1606. Its purpose was to build up the British merchant fleet, find precious metals, and establish a permanent British presence in North America to counter the Spanish threat. Originally called the London Company, the Virginia Company held monopoly trading rights under its royal charter and was designed to generate a profit for its investors.

In 1607, 105 settlers arrived in current-day Virginia at the mouth of the Chesapeake Bay and founded the Jamestown Colony, which was America's first permanent settlement. These settlers agreed to undertake the risky voyage across the Atlantic because they were offered land for farms by the Virginia Company. However, 67 of the 105 first settlers died within one year of arriving.

The surviving settlers were joined two years later by 800 new arrivals, most of whom also died of disease and starvation. By 1623 the mortality had been high enough that the British launched a royal investigation, which found that 4,000 of the approximately 6,000 settlers who had migrated to Virginia since 1607 had died. The life expectancy in the first two decades of the Virginia settlements was a mere two years.

Scholars have argued that the high mortality rates among settlers were not entirely because of harsh conditions and disease. While these were important factors, mismanagement has also been blamed. Rather than devoting company resources to agricultural equipment, livestock, and food supplies for the settlers, management of the company devoted its resources to sending more and more emigrants across the Atlantic. The colony may have therefore simply been overrun with colonists who did not have adequate food and housing facilities.

Another aspect of potential mismanagement may have led to the Indian massacre of 1622. Wesley Frank Craven argues that the Indian attack was invited by having settlements too widely scattered and by the Virginia Company's failure to provide settlers with adequate arms and ammunition. Whatever the actual reasons for its failure, the Virginia Company charter was annulled in 1624.

The Virginia Company's objective was to generate a profit; however, profitability was never achieved and the company's venture into the New World was a financial disaster. The financial losses to the Virginia Company mirrored the hardships the settlers faced upon arrival. Neither principal nor interest on the Virginia Company's total investment of over £200,000 was ever repaid.

Despite its initial failure, settlers in the region eventually discovered that tobacco crops flourished there. Tobacco was ultimately a perfect crop for British economic interests. As J. J. McCusker and R. R.

Menard describe in their classic work on the colonial economy, tobacco

> permitted the English to acquire a commodity from a colony rather than on the international market; it created a processing industry in England and a valuable product for re-export; it attracted capital and labor to profitable employment across the Atlantic; and it provided Virginians the means to purchase manufactures and commercial services in the English market.

The long-term importance of the short-lived Virginia Company lies in its organizational form as a joint-stock company. This form of organization was, at the time, very new. The first joint-stock companies were formed only about 50 years before the Virginia Company's charter was issued. The risks of exploration of new territories an ocean away were very high and few investors, even those with partners, were willing to bear such risks. This was particularly true in explorations of this nature in which the investor had very little control over the project. Joint-stock companies circumvented these problems by limiting each investor's liability to his investment. This allowed a large number of small investments to be combined for the large sums needed for such a venture. Many scholars believe that joint-stock companies, such as the Virginia Company, were among the most important developments in the building of the modern world.

See Also: British East India Company; Dutch East India Company.

Bibliography. W. F. Craven, *Dissolution of the Virginia Company: The Failure of a Colonial Experiment* (Oxford University Press, 1932); David Feinberg, *Virginia Company History Sources* (Library of Virginia, Archival and Information Services Division, 2003); J. J. McCusker and R. R. Menard, *The Economy of British America: 1607–1789* (University of North Carolina Press, 1985); Virginia Company of London and Susan M. Kingsbury, *Records of the Virginia Company of London, Volumes 1–4* (Heritage Books, 1999).

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Virtual Vertical Integration

Vertical integration is the degree of control and ownership that a company has on the value chain it is a part of. Vertical integration allows a company to be self-sufficient in terms of intermediate goods and distribution of the final products or services. Apple, a premier computer and consumer electronics company, is a vertically integrated company. Apple has its own hardware-building facilities, software engineering department, exclusive distributorship, and service centers for its products.

Vertical integration reduces the cost and uncertainty of transactions with outside firms and facilitates quality control measures across the entire value chain. Under vertical integration, all the business entities in the value chain are under the same ownership, so they coordinate their activities much better than they would if they were competing firms.

While the advantages of vertical integration are tremendous, it also poses great challenges to a company. The company trying to take over its suppliers' or distributors' business may not have the industry knowledge to run those businesses properly. Vertical integration also increases the bureaucratic, accounting, and management costs. These drawbacks frequently offset the benefits of vertical integration.

Virtual vertical integration is a business integration model based on information sharing that captures the advantages of traditional vertical integration, but bypasses the disadvantages associated with it. Virtual vertical integration is an important strategy to consider for any firm with global presence. For firms that engage in business in vertically related activities across different countries, forming traditional ownership-based vertical integration is very difficult because of foreign country regulations, differences in business culture, and exchange rate volatility. Virtual integration offers these companies an attractive strategy to reap the benefits and avoid the pitfalls of vertical integration. Dell, a leading tech firm, and Toyota, the auto industry giant, successfully employ the virtual vertical integration model to gain competitive advantage in their respective industries.

The trick to successful virtual integration is to establish mutually beneficial business relationships that facilitate vertical transactions between companies. The main advantage of vertical integration stems from the direct link between the distributors, manufacturers, suppliers, and other players in the value chain. The direct link lets the different players of the value chain coordinate their activities efficiently. This direct link can be established because the different divisions of a vertically integrated firm can share their business information without restrictions such as different management styles, incompatible data systems, concern for competition, and corporate strategy secrecy.

In virtual vertical integration, a company builds strong and dependable partnerships with its suppliers and distributors and freely shares its information with them. Together, they form a direct link from one end of the value chain to the other end, which leads to reduced lead times, inventory costs, and returned goods. Virtual integration is based on cooperation rather than ownership. Hence virtual vertical integration allows a company to enjoy the benefits of vertical integration while avoiding the need to invest its assets in unfamiliar businesses. In a sense, virtual integration is similar to outsourcing, but it is unique in that companies share their business information, expertise, and profits across the value chain.

An example of the virtual integration model is Dell, Inc., a computer company that develops, manufactures, sells, and supports computers and related products. Dell has a direct business model, which means that it interacts with its customers directly. Customers place orders directly to Dell, and Dell manufactures and delivers the custom-made products directly to the customer. Because Dell does not make a product before it receives a customer order, it can keep its inventory costs very low.

Dell operates as if it is a vertically integrated structure that owns all the firms in the value chain (supplier, manufacturing firm, distribution firm, marketing firm, and support service). But in fact Dell depends on its business partners to deliver the final products. For example, to meet a personal computer order, Dell may assemble the central processing unit (CPU) while it gets the monitor from Sony and arranges support service through contracted service technicians. The different companies can work seamlessly because Dell, through its integrated information system, makes all the relevant information—hardware and software design, customer buying trends, inventory size, tracking information—available to them. By facilitating unrestricted information flow both ways through the value chain, Dell can link all the activities of the value chain to get the desired effect of vertical integration.

See Also: Acquisitions, Takeovers, and Mergers; *Keiretsu*; Strategic Alliance; Value Chain; Vertically Integrated Chain.

Bibliography. Joan Magretta, "The Power of Virtual Integration: An Interview with Dell Computer's Michael Dell," *Harvard Business Review* (March–April 1998); Andreas Zielke and Matthias Pohl, "Virtual Vertical Integration: The Key to Success," *McKinsey Quarterly* (v.3, 1996).

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Visa

A visa is a document issued by a country giving an individual permission to formally request entrance to the country during a given period of time and for certain purposes. It is usually stamped or glued inside a passport, or is sometimes issued as a separate piece of paper. In recent years, some countries (i.e., the United States, Canada, and some European nations) have issued plastic cards that contain biometric information on a magnetic strip on the back of the card.

The U.S. work visa is a document issued by the U.S. Citizenship and Immigration Service (formerly known as the Immigration and Naturalization Service [INS]) to foreign individuals who wish to enter the country to work and reside for a period of time. The most popular work visas in the United States are the H-1B, H-2B, L-1, L-2, E-1, E-2, TN, EB-2, EB-3, J-1, O-1, O-2, P, EB-5, R-1, and green cards.

A U.S. I-94 Arrival-Departure Form is a form denoting the arrival-departure record of particular foreigners and is used by the U.S. Citizenship and Immigration Services. Form I-94 must be filled out at the time of entry to the United States by the foreign citizens who are being admitted to the United States.

Citizens of the countries on the U.S. Visa Waiver Program list who are entering the United States for a short stay and who are not U.S. citizens or permanent U.S. residents must fill out form I-94W instead.

Types

The types of visas issued by various countries worldwide include the following:

- Transit visa, usually valid for five days or less, for passing through the country to a third destination.
- Tourist visa, for a limited period of leisure travel, no business activities allowed.
- Business visa, for engaging in commerce in the country. These visas generally preclude permanent employment for which a work visa would be required.
- Temporary worker visa, for approved employment in the host country.
- On-arrival visa, granted immediately prior to entering the country, such as at an airport or border control post.
- Spousal visa, granted to the spouse of a resident or citizen of a given country to enable the couple to settle in that country.
- Student visa, which allows its holder to study at an institution of higher learning in the issuing country.
- Working holiday visa, for individuals traveling between nations offering a working holiday program, allowing young people to undertake temporary work while traveling.
- Diplomatic visa (sometimes official visa) is normally only available to bearers of diplomatic passports.
- Courtesy visa issued to representatives of foreign governments or international organizations who do not qualify for diplomatic status but do merit expedited, courteous treatment.
- Journalist visa, which some countries require of people in that occupation when traveling for their respective news organizations.
- Marriage visa, granted for a limited period prior to intended marriage, based on a proven relationship with a citizen of the destination country.
- Immigrant visa, granted for those intending to immigrate to the issuing country.
- Pensioner visa (also known as retiree visa or retirement visa), issued by a limited number of countries (Australia, Argentina, etc.), to those who can demonstrate a foreign source of income and who do not intend to work in the issuing country.

Visa Refusal

The border-crossing authorities make the final determination to allow entry and may even cancel a visa at the border if the alien cannot demonstrate to their satisfaction that they will abide by the status their visa granted to them.

A visa may be denied for a number of reasons, including (but not limited to) if the applicant

- has committed fraud or misrepresentation in his/her application
- cannot prove to have strong ties to their current country of residence
- intends to permanently reside or work in the country he/she will visit
- does not have a legitimate reason for the journey
- has no visible means of sustenance
- does not have lodging in the destination country
- has not arranged his/her transportation
- does not have health/travel insurance valid for the destination and the duration of stay
- has a criminal record or has criminal charges pending
- does not have a good moral character
- is applying on short notice
- is considered to be a security risk
- had their previous visa application(s) rejected
- is a citizen of a country with whom the host country has poor or nonexistent relations
- has a communicable disease such as tuberculosis
- has previous immigration violations
- has a passport that expires too soon

Conditions of Issue

Some visas can be granted on arrival or by prior application at the country's embassy or consulate, or sometimes through a specialized travel agency with permission from the issuing country in the country of departure. If there is no embassy or consulate in one's home country, then one would have to travel to a third country (or apply by mail) and try to get a visa issued there.

Some countries have reciprocal visa regimes: If Country A requires citizens of Country B to have a visa to travel there, then Country B may apply reciprocity and require a visa from citizens of Country A. Likewise, if A allows B's citizens to enter without a visa, B may allow A's citizens to enter without a visa. One example is the Schengen countries.

Once in the country, the validity period of a visa or authorized stay can often be extended for a fee at the discretion of immigration authorities. Overstaying a period of authorized stay given by an immigration officer is considered illegal immigration even if the visa validity period is not over, and is a form of being "out of status." The offender may be fined, prosecuted, deported, or even blacklisted from entering the country again.

Entering a country without a valid visa or visa exemption may result in detention and removal (deportation or exclusion) from the country. Undertaking activities that are not authorized by the status of entry (e.g., working while possessing a nonworker tourist status) can result in the individual being deemed removable.

See Also: Brain Drain; Cross-Border Migrations; Expatriate; Host Country.

Bibliography. Jerrod F. Thormond, *Visa Issues: Policies and Waiver Programs* (Nova Science Publishers, 2008); U.S. Citizenship and Immigration Services, www.uscis.gov (cited March 2009); U.S. Department of State, "Temporary Workers," www.travel.state.gov (cited March 2009); Workpermit.com, www.workpermit.com (cited March 2009).

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Vision

One general and short definition of vision is the aspirations of an organization, namely, what the organization wants to become and intends to achieve in the future. In simple terms, the vision answers the question "Where does the organization want to go?" These aspirations are expressed in the vision statement, which was widely used in the late 1990s and early 2000s. The vision statement is often broad and states the aspirations only, without mentioning the ways that these aspirations will be achieved. Unlike the mission statement, the vision statement is mostly used for the employees of the company and not for external use (e.g., customers, suppliers, and other stakeholders).

The vision of the organization, in order to be successful, has to possess the following characteristics:

- It has to be short and succinct for everyone to remember it and be able to implement it in detail.
- It has to be precise and accurate so as not to create any misunderstandings among the members of the organization regarding its meaning and implementation.
- It has to be simple, clear, and straightforward so as to be understood and accepted by all members of the organization. Thus, employees will be able to participate in achieving the goals.
- At the same time, though, it should not be too detailed and specific, so as not to prevent individuals from expressing their own ideas and adopting innovative practices.
- It has to be inspiring so as to motivate employees toward a common goal.
- It has to create commitment and group cohesiveness and unite employees in such a way that they will be able to achieve that goal effectively, sharing common beliefs.
- It has to guide action so that employees can focus on implementing the strategic plans of the organization and maximizing performance.

Despite its importance, the emphasis on corporate vision has received many criticisms. These include the arguments that it neither motivates nor inspires employees, it does not provide guidance for future action, and it does not create consensus on the strategic goals of the organization. All these criticisms stem from a single argument against the use of visions: it is just a piece of paper on the wall. Opponents of the vision statement go on arguing that it is an internal marketing trick, a statement that is used to motivate employees, but it does not have any real value. To inspire, the opponents argue, the vision should be more than that.

The response to these criticisms is that the real value of it does not rest with the statement itself, but with its creation. During this process, the members involved should question every assumption and fact regarding the organization itself, the way of doing business, and their future plans. At that point, disagreements and conflicts are desirable because they reveal biases and problems in the strategic direction of the organization. In this way, the process of creating a vision statement constitutes a useful tool in identifying and solving organizational problems.

There are some steps that should be taken during the creation of the vision statement in order to possess the characteristics mentioned earlier:

- If possible, all employees, at all levels of the hierarchy, should participate, either directly or indirectly, offering ideas and reviewing the different versions of the vision statement.
- The employees involved should present and analyze the various forces operating in the external environment of the organization, namely, its competitors, customers, and suppliers.
- They should also analyze the internal environment of the organization, namely, its strengths, weaknesses, resources, and competences.
- They should correlate each of the external forces to each of the internal characteristics so as to identify how successful the organization is when dealing with its external environment.
- They should reflect on how the organization can become more efficient and effective in the future.
- When the employees involved prepare the initial version of the vision statement, they should send it to all the employees for comments, ideas, and suggestions.
- After receiving feedback, they can amend the initial version and repeat the procedure a few more times before preparing the final version.
- Once the final version is agreed upon, senior management should communicate the vision and the aspirations behind the vision to all the employees, at all organizational levels of the hierarchy, and actively support it in everyday activities and in the strategic orientation of the organization.

Finally, a successful vision statement does not have to be revised regularly. The means used to achieve the vision may change over time, but the vision itself may remain the same for several years. If, for any reason external or internal to the organization, the aspirations change and the vision statement is considered to be not applicable, unattainable, or obsolete, then the managers of the organization will start changing it and finding a new, more relevant one.

See Also: Corporate Change; Corporate Codes; Leadership; Management; Motivation.

Bibliography. Anitha Arunsimha, *Vision and Mission Statements: Concepts and Cases* (Icfai University Press, 2007); Aspatore, Inc., *Creating a Strategic HR Plan for Your Company: Leading HR Executives on Budgeting, Analyzing Financial Goals, and Developing a Companywide Vision* (Aspatore Books, 2006); Harvard Business School Press, *Keeping Strategy on Track* (Harvard Business School Press, 2009); Richard Lynch, *Corporate Strategy*, 4th ed. (Prentice Hall, 2006); Michael E. Raynor, "That Vision Thing: Do We Need It?" *Long Range Planning* (v.31/3, 1998); David J. Teece, *Dynamic Capabilities and Strategic Management: Organizing for Innovation and Growth* (Oxford University Press, 2009).

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Vodafone

Initially conceived as a subsidiary of Racal Electronics, the first mobile phone call was made on the Vodafone network in the United Kingdom (UK) in 1985. Following a demerger in 1991, Vodafone Group plc (VOD) was formed, taking its name from the phrase "voice and data services over mobile phones." With its headquarters in Newbury, England, Vodafone has predominantly grown through acquisitions, joint ventures, and partnerships to become one of the largest mobile telecommunications companies in the world. During this period, its original core business of mobile communications has evolved into integrated mobile and personal computer (PC) communication services with more than 200 million (direct and proportionate) customers worldwide.

The rapid development from the first UK mobile network provider to that of global corporation was driven by Sir Christopher Gent, the chief executive of Vodafone from 1997 to 2003. Key mergers, acquisitions, and joint ventures during this time included BellSouth, New Zealand (1998); AirTouch, United States (1999); Bell Atlantic Corporation, United States (1999); Mannesmann, Germany (2000); and J-phone, Japan (2001). In 2003 Arun Sarin took over as chief executive and maintained this expansive growth strategy with the notable acquisitions of Singlepoint, UK (2004), and Telsim, Turkey (2005). Of these developments, two are particularly worth highlighting: the joint venture with Bell Atlantic, which saw the creation of Verizon Wireless in the United States, and the hostile acquisition of Mannesmann of Germany.

Verizon Wireless was created in 1999 from a $70 billion joint venture between Vodafone and Bell Atlantic to create a new wireless business with a single brand and common digital technology. Despite building a profitable ($44 billion in 2007) business, the agreement has not been entirely to Vodafone's satisfaction. Vodafone is a minority shareholder (45 percent) and subsequently has had minimal brand exposure in the United States. Additionally, the network protocol used by Verizon Wireless remains different from that of Vodafone. Verizon uses the Code Division Multiple Access (CDMA) while Vodafone uses the European network standard Global System for Mobile (GSM). These incompatibilities mean that Vodafone has found it difficult to achieve economies of scale with its wider global networks.

The £112 billion ($180 billion) acquisition of Mannesmann was at the time the largest corporate merger in history; the market value of the combined company ($314 billion) also made it the largest British company and the sixth-largest company in the world. The early bids were met with public protests in Germany and Vodafone's initial offers were subsequently rejected. In the meantime and possibly as a defensive action, Mannesmann acquired the UK mobile operator Orange, thus bringing the company into direct competition with Vodafone. In April 2000, Mannesmann accepted a higher offer and following merger approval by the European Union (EU), the Mannesmann Group was acquired and disbanded. With the manufacturing operations sold off, the real prize of Mannesmann's "land-line" internet market was absorbed into Vodafone's portfolio.

In addition to Vodafone's aggressive expansion strategies, the company has extensively utilized the concept of "partner networks" to gain relatively inexpensive market entry to more than 50 national markets. The partnership arrangement provides access and therefore revenue to Vodafone's international services while providing increased brand visibility.

Vodafone's ordinary shares are listed on the London Stock Exchange (LSE), with Vodafone posting a total market capitalization of approximately £82 billion in April 2008. Vodafone operations have been profitable since conception despite, in 2005, reporting the largest corporate loss in British history (£14.9 billion). However, the underlying operating profit of the company at this time was still a healthy £9 billion. The primary reason behind the loss was the payment of £23.5 billion in charges resulting from the acquisition of Mannesmann five years earlier. In common with its competitors and to support its growth strategy, other significant debts have been incurred, for example, as a result of the purchase of multinational 3G licenses. The price of these licenses has now been recognized by Vodafone as being highly inflated; £6 billion was paid for the licenses in the UK alone.

Vodafone's "partner networks" bring inexpensive entry to 50-plus national markets. Above, the Vodafone brand in Romania.

In the rapidly developing and converging communications market, Vodafone has had to anticipate market trends and preempt technological changes. In 2004 Vodafone launched its 3G service in Europe, followed by television and radio streaming to the new technology in 2006 and the continued expansion of 3.5G broadband (High Speed Download Packet Access [HSDPA]) networks.

The convergence of mobile communications and the internet has seen widespread developments from voice, SMS, and MMS to partnership agreements enabling applications such as YouTube, Google Maps, eBay, instant messaging (IM), and MySpace to be used on mobile devices. With other mobile tools such as mobile payment services and global positioning system (GPS) coming of age and with new companies such as Google, Microsoft, and Apple entering the wireless market, the future remains unpredictable.

See Also: Acquisitions, Takeovers, and Mergers; Economies of Scale; Hostile Takeovers; Joint Venture; Microsoft; Subsidiary; Verizon Communications.

Bibliography. Kate Boothby, "Vodafone Limited Campaign: Welcome Call—The IDM Business Performance Awards 2006, Highly Commended," *Journal of Direct, Data and Digital Marketing Practice* (v.9/2, 2007); Peter Crush, "Line Engaged: Vodafone's Continued Growth, Innovation and Customer Focus Depends on a Better Engaged Workforce," *Human Resources* (March 1, 2008); *Economist*, "Vodafone: Calling for a Rethink," *Economist* (v.378/8462, 2006); *Economist*, "Vodafone: Wake-Up Call," *Economist* (v.379/8480, 2006); Christopher J. Ibbott, *Global Networks: The Vodafone-Ericsson Journey to Globalization and the Inception of a Requisite Organization* (Palgrave Macmillan, 2007); Irwin Mark Jacobs, Joseph McGeehan, and Robert Calderbank, *Lecture Series in Mobile Telecommunications and Networks: Transcripts of the First Three Lectures,* November 2005–June 2006 (Royal Academy of Engineering, 2006); Tegan Jones, "Sometimes You Have to Break the Rules to Succeed. Vodafone Had to Create Them From Scratch," *PM Network* (v.22/6, 2008); Vodaphone, www.vodaphone.com (cited March 2009); "Vodafone Sells Japanese Business," *Engineering & Technology* (v.23, 2006).

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Volkswagen

The Volkswagen Group, a German automobile manufacturer, offers a broad range of products, from middle-class to luxury cars and commercial vehicles. This company is one of the world's major producers of passenger cars and commercial vehicles, with sales revenue totalling €104.9 billion (2006). Best known from the 1960s onward for its popular Beetle model, the Volkswagen Group is today Europe's largest carmaker with vehicle sales in more than 150 countries.

The Volkswagen Group is divided into two divisions: Automotive and Financial Services. The Automotive Division deals with the development of vehicles and engines and the production of passenger cars, commercial vehicles, trucks, and buses. The Financial Services Division oversees the business fields of dealer and customer financing, leasing, insurance, and fleet business.

The business lines—Volkswagen brand group, Audi brand group, commercial vehicles, and remaining companies—are located under the umbrella of the Automotive Division. The Volkswagen brand group with its product line—VW passenger cars, Škoda, Bentley, and Bugatti—continues to be the business line with the highest sales revenue (€54.9 billion, 2006). However, the Audi brand group, with its Audi, SEAT, and Lamborghini vehicles, contributed more than 30 percent of the 2006 sales revenue. In 2006, taken together, the sales of the Volkswagen passenger cars brand increased by more than 10 percent.

In 2007, Porsche, having purchased $8 billion worth of stock, expanded its 20 percent investment (2005) in VW to a significant 31 percent. This was soon followed by an expression of intent by the Porsche supervisory board in early 2008 to increase its share in the lower Saxony carmaker to more than 50 percent. This brought the two companies together in an organizational amalgamation; the companies' common founder, who once dreamed of producing a "people's car" (*Volkswagen* in German), later gave his name to the production of the ultimate elite sports car, Porsche.

Competing in the Global Market

Volkswagen still achieves most of its sales from the European market. In South America and South Africa, sales figures were higher in 2006 than in the previous year, while negative operating results were reported in the North American and Asia-Pacific markets in 2006. Despite the conviction that higher sales revenue could be achieved in North America, the financial year ended with a significant loss because of higher sales promotion costs and unfavorable exchange rates. Volkswagen reports that because of exchange rates and increased local and international competition, the operating loss in this market showed an increase over the previous year.

A "People's Car"

Ferdinand Porsche's brainchild of a high-quality car for everyone began to be realized with the advent of Gesellschaft zur Vorbereitung des Deutschen Volkswagens mbH (founded in 1937) and its successor the Volkswagenwerk GmbH (renamed in 1938). Ferdinand Porsche became one of the latter's general managers. In 1939 the production of passenger cars was disrupted with the outbreak of World War II. After being integrated into the Nazi economy during the war years, the carmaker's focus switched to the production of munitions. With the increase in arms buildup, Volkswagen extensively used forced labor from abroad. Following the Allied occupation of Germany, the company was placed under the trusteeship of the British military government (1945–49).

By the end of 1945, Volkswagen had restarted the production of civilian vehicles. It was the start of the series production of the Volkswagen Type 1. In the following years, the organization restructured, reinvested, and reinvented; this period saw a significant increase in the production of passenger cars and the commencement of the production of commercial vehicles.

In the postwar period, Volkswagen quickly started to export cars abroad and to establish local subsidiaries and/or sales agencies. By October 1953, 44 percent of vehicle production constituted export business: Volkswagen epitomized the prosperity of the German economic miracle. Over time and with the production of the widely popular Beetle and its successful export to the United States, the Beetle soon vanquished earlier anti-German sentiment. It was to become a symbol of freedom and peace for a whole new generation.

See Also: BMW; Company Profiles: Western Europe; DaimlerChrysler; Fiat; Ford Motor; General Motors; Germany; Honda Motor; Mitsubishi; Nissan Motor; Renault; Toyota Motor; Volvo.

Bibliography. Gail Edmondson, "VW Wheels, Porsche Driver?" *BusinessWeek Europe* (October 23, 2007); Mark Landler, "Porsche and VW: One Happy Family?" *New York Times* (December 23, 2007); Martin Posth, *1,000 Days in Shanghai: The Story of Volkswagen: The First Chinese-German Car Factory* (John Wiley & Sons, 2008); Chad Thomas, "VW's Audi Forecasts Growth After Record 2007 Profit (Update 3)," www.bloomberg.com (cited March 2009); Steven Tolliday, "Enterprise and State in the West German Wirtschaftswunder: Volkswagen and the Automobile Industry, 1939–1962," *Business History Review* (v.69, 1995); Volkswagen Aktiengesellschaft, *Facts and Figures. Navigator 2007* (Volkswagen AG, 2007).

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Voluntary Export Restraints

A voluntary export restraint (VER) is a limit placed on exports by the exporting country, usually imposed because of political pressure from one or more importing trading partners. VERs are typically industry-specific, with prominent examples having been implemented by Japan in the automobile industry and by several Asian countries in the textile industry. VERs are rarely viewed as being truly voluntary because the alternative is usually the threat of tariffs or quotas that would accomplish the same objective that VERs are designed to achieve. An advantage to voluntary export restraints is that they can be removed at the discretion of the successful exporting country after the political aspects of the trading situation have moderated, whereas other tariff and nontariff barriers imposed by the importing country may not be so easy to remove once they are implemented.

In the early 1980s, the U.S. auto industry was facing stiff competition from more-fuel-efficient Japanese imports as the price of gas rose in the second Organization of Petroleum Exporting Countries (OPEC) oil price shock. A recession in the United States further depressed demand from auto buyers. Chrysler teetered on the verge of bankruptcy, and losses mounted at both General Motors (GM) and Ford. Intensive lobbying by the auto industry resulted in intervention by the U.S. trade representative's office and the eventual agreement of Japan to self-imposed voluntary export restraints on the import of automobiles to the United States. British automakers followed a similar strategy, and Japan also agreed to impose voluntary export restraints there as well. These VERs did not violate any agreements made under the General Agreement on Tariffs and Trade (GATT), and limited the total number of cars imported into the United States from Japan to 1.68 million in 1981. This cap was gradually raised to 1.85 million in 1984 and to 2.3 million in 1985.

The Japanese VER in automobiles did help U.S. automakers to increase their profits, but did so at the expense of American consumers. Japanese car prices increased by about 14 percent, and in many cases, U.S. consumers had to get on long waiting lists to buy imported Japanese cars—paying further premiums to dealers. Many buyers who might have otherwise purchased Japanese cars opted for less expensive U.S. models, boosting sales and profits at U.S. automakers. Profits also increased for Japanese manufacturers because of the premium pricing they were able to sustain in the face of curtailed supplies.

To get around the limitations imposed by the voluntary restraint agreement, Japanese manufacturers opened plants in the United States and invested heavily in U.S.-based production. Cars manufactured by Japanese firms in the United States were not subjected to the limits imposed by the VER. This activity, combined with a recession and softening demand for cars in the early 1990s, made the export restraints largely irrelevant. The program was terminated in 1994.

VERs have also been used in the textile industry as far back as the 1950s. Again, the original agreements originated because of competitive pressures felt in the United States by textile producers in Japan. After a restraint agreement was negotiated and agreed upon by Japan, textiles from other Asian nations such as South Korea and Taiwan began to flood the U.S. market. These nations also agreed to limit their exports to the United States rather than face more aggressive trade barriers. European textile companies also felt pressure from their Asian competitors, and the European Economic Community negotiated VERs with Asian exporters as well.

The trade situation in textiles became increasingly complex, resulting in significant attention being paid to the issue in GATT negotiations. In the early 1970s, this process resulted in the signing of the Multi-Fiber Agreement, which specified quotas from major exporters to major importers. Once the issue became part of multilateral trade negotiations, the export restraints were no longer "voluntary," resulting in an era of formally managed trade in textiles. Further agreements have subsequently phased out managed trade in textiles.

Voluntary export restraints, like many other trade barriers, protect less efficient producers in importing countries at the expense of consumers in those countries. Exporting firms sometimes get around the restrictions by shifting manufacturing to the countries that are the subject of the restraints, as occurred with Japanese automobile companies building plants in the United States in the 1980s and 1990s. GATT negotiations in the Uruguay Round resulted in an agreement to place limitations on the use of VERs. Based on that agreement, World Trade Organization (WTO) member countries must limit use of VERs to only one industry sector at a time.

See Also: General Agreement on Tariffs and Trade; Multi-Fiber Agreement; Tariff; Trade Liberalization; Trade Pact; World Trade Organization.

Bibliography. Ana Aizcorbe, "Japanese Exchange Rates, Export Restraints, and Auto Prices in the 1980s," *Monthly Labor Review* (v.130/2, 2007); Steven Berry, James Levinsohn, and Ariel Pakes, "Voluntary Export Restraints on Automobiles: Evaluating a Trade Policy," *The American Economic Review* (v.89/3, 1999); Chad P. Bown and Rachel McCulloch, *U.S. Trade Policy toward China Discrimination and Its Implications* (Brookings Institution, 2005); Brati Sankar Chakraborty, "Capital Inflow under Voluntary Export Restraint," *Metroeconomica* (v.59/4, 2008); Roberto A. De Santis, "Why Exporting Countries Agree to Voluntary Export Restraints: The Oligopolistic Power of the Foreign Supplier," *Scottish Journal of Political Economy* (v.50/3, 2003); William A. Kerr and James D. Gaisford, *Handbook on International Trade Policy* (Edward Elgar, 2007); Michael O. Moore, "VERs and Price Undertakings under the WTO," *Review of International Economics* (v.13/2, 2005); Masayuki Okawa, "Voluntary Export Restraints under Imperfect Competition," *Review of International Economics* (v.12/1, 2004); Kai-Uwe Seidenfuss and Yunus Kathawala, "Voluntary Export Restraint (VER) without Market Restraints? The Case Study of the Monitoring Agreement (1991–1999) between the Japanese Car Manufacturers and the European Union," *European Business Review* (v.17/3, 2005); Harry Stoffer, "Import Curbs Stimulated Honda's U.S. Growth," *Automotive News* (September 13, 2004).

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Volvo

One of Sweden's leading global brands, Volvo is known worldwide for the quality and safety of its transportation vehicles and equipment, particularly its automobiles. The best-known aspect of the Volvo brand is Volvo Cars, which is owned by the Ford Motor Company of the United States. This company is distinct from the Volvo Group, also known as A. B. Volvo, which remains a Swedish company. The Volvo Group builds trucks, buses, construction equipment, and other vehicles, and also maintains a financial services component. Currently, the Volvo-branded companies employ over 100,000 workers, mainly in Sweden, but also in Europe, the United States, and around the world. The headquarters of the auto operations is in Gothenburg, Sweden, as is the Volvo Group's headquarters. The Volvo Group is a publicly traded company listed on the Stockholm Stock Exchange, while Volvo Cars is wholly owned by Ford Motor, which is also a publicly traded company, headquartered in Dearborn, Michigan.

Volvo was originally founded in 1915 by ball-bearings maker SKF. In 1924 two SKF employees, Assar Gabrielsson and Gustaf Larson, began building cars. Volvo, which means "I go" in Latin, became independent in 1935. First specializing in autos, the company

After being acquired by Ford, Volvo's auto operations, which include a worldwide network of about 2,500 dealers, have held a very small but steady share of the world auto market of less than 1 percent.

grew impressively from the first hand-built model in the 1920s. By the 1960s, Volvo production reached over 100,000 cars, buses, and trucks at 13 facilities in Sweden employing 18,000 workers. The company's ethos was very conservative and focused on quality: Volvo had only 15 different vehicle designs in its history and offered only seven different color choices, yet one-tenth of its employees were involved with product inspection.

With the success of models such as the 140 Series, the Amazon, and the 200 Series, Volvo established a reputation for safety innovation. Styling was a secondary consideration as Volvo cars were considered utilitarian. Many common safety features, such as laminated glass, the three-point safety belt, and padded dashboards, were first developed by Volvo. Although the cars were often criticized for their appearance, they were also heralded for their durability. Volvo cars also gained public exposure through the company's decision to enter into certain motor car races, as Volvo joined the European Touring Car Championship in the 1980s with some success.

Volvo began expanding its global operations beginning in the 1960s, especially its car production. It opened a plant in Halifax, Nova Scotia, Canada, in 1963, the first non–North American plant to operate on the continent. In 1974 the company broke ground on a US$100 million plant in Virginia that was intended to produce 100,000 vehicles and employ 3,500 workers within two years. Yet by 1976, the partially completed plant was still not producing vehicles, a victim of the recession in the auto industry and increased prices for Volvo products that slowed sales. Nonetheless, Volvo cars are still made in Belgium, the Netherlands, Malaysia, and Thailand with worldwide production around 450,000 vehicles.

In 1999 the Ford Motor Company purchased the auto assembly operations of Volvo Cars from the Volvo Group. Volvo became part of Ford's Premier Automotive Group (PAG) and remains the last brand in PAG since the sale of Land Rover and Jaguar to Tata Motors of India by Ford in 2008. Since being acquired by Ford, Volvo's auto operations have maintained a very small (less than 1 percent) but steady share of the world auto market, with approximately 2,500 dealers worldwide. While maintaining its reputation for safety and quality, the company has expanded the range of vehicles it produces, launching sport utility vehicles, sports cars, and other types of vehicles. There has been speculation that Ford Motor will sell Volvo, given the parent company's financial difficulties since 2005, but this has not yet happened.

The remaining Volvo Group has itself since expanded, establishing a link with Renault Trucks, acquiring Mack Trucks from Renault S. A., and Nissan Diesel from Nissan. With the Mack acquisition, Renault became the largest shareholder of the Volvo Group.

See Also: Ford Motor; Nissan Motor; Renault; Sweden.

Bibliography. Christian Berggren, *The Volvo Experience: Alternatives to Lean Production in Sweden* (Cornell University Press, 1992); Pehr G. Gyllenhammar, *People at Work* (Addison-Wesley, 1977); Hong Liu, Lars-Uno Roos, and Robin Wensley, "The Dynamics of Business Orientation: The Case of the Volvo Car Corporation," *Industrial Marketing Management* (v.33/4, 2004); Ake Sandberg, ed., *Enriching Production: Perspectives on Volvo's Uddevalla Plant as an Alternative to Lean Production* (Avebury, 1995); Mosad Zineldin, "International Business Relationship and Entry Modes: A Case of Swedish Automotive Industry Scania and Volvo in Mexico," *Cross Cultural Management: An International Journal* (v.14/4, 2007).

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Wachovia Corp.

Wachovia (Wachovia Corporation) is a holding company providing commercial banking, retail banking, and trust services to its customers. It offers various banking and financial services through full-service banking offices. It is one of the largest banking groups in the United States with 13 million customers, and it has operations in 21 states through 4,100 financial centers and brokerage offices across the country. The company operates primarily in the United States, but also has operations in Latin America. Wachovia was incorporated in 1967 and employed around 108,000 people as of January 1, 2007. Wachovia is a North Carolina–based company headquartered in Charlotte. Wachovia is quoted in the New York Stock Exchange with the ticker symbol of WB. It had approximately 170,000 shareholders as of January 1, 2007. After suffering record losses largely from bad mortgages in the credit crisis of 2008, Wachovia merged with Wells Fargo on December 31, 2008.

Wachovia generates its revenues through five business divisions: general banking (52 percent of its revenues in 2006), corporate and investment banking (23 percent of its revenues in 2006), capital management (20 percent of its revenues in 2006), wealth management (4 percent of its revenues in 2006), and parent division (1 percent of its revenues in 2006). Wachovia's general bank division offers a broad range of banking products and services to individuals, small business, and commercial customers and government institutions. In addition, it serves mortgage customers and provides auto financing. Wachovia provides checking, savings, and money market accounts, home equity, residential mortgage, loans, debit and credit cards, mutual funds, and annuities to its retail customers; deposit, loan, and investment products and services to its small business customers; commercial deposit, lending, treasury management, dealer financial services, and commercial real estate products to its business banking and commercial customers.

Its corporate and investment bank division offers corporate lending, investment banking, advisory, capital raising, treasury services, and international trade finance services through its client relationship officers, product specialists, portfolio managers, and fixed-income and equity sales, trading and research professionals. The investment banking and the global markets businesses operate under the Wachovia Securities brand. The capital management division provides a range of proprietary and nonproprietary investment and retirement products and services to retail and institutional clients. The division includes Wachovia Securities, one of the three largest retail brokerage firms in United States. It also includes Evergreen Investments, a large and diversified company that provides asset management services.

The wealth management division offers private banking, personal trust, investment advisory services, financial planning, and insurance brokerage services to clients with $2 million or more in investable assets. The services are offered through relationship managers and specialty advisers, who provide sophisticated family wealth products to ultra-high-net-worth families. The parent division is responsible for all asset and liability management functions, such as managing the securities portfolio for liquidity and interest rate risk. This division also includes goodwill and other intangible assets, and related funding costs, certain revenues and expenses that are not allocated to the business segments.

Wachovia National Bank was founded in 1879 in Winston, North Carolina. Later, Wachovia Loan and Trust Company was established in 1893. The two companies merged in 1911 and formed Wachovia Bank and Trust Company, which later evolved into Wachovia Corporation. In 2001 Wachovia merged with First Union Bank, a large diversified financial services company chartered in 1908, which grew through mergers with more than 80 banks and other companies over many years. As a result of the merger, First Union changed its name to Wachovia Corporation. Following the merger, Wachovia continued to grow through various acquisitions.

The executive team of Wachovia, before the merger with Wells Fargo on December 31, 2008, included Lanty L. Smith (interim chief executive officer), Benjamin P. Jenkins (interim chief operating officer, vice-chairman), and Thomas J. Wurtz (chief financial officer). The board of directors included John D. Baker, Peter C. Browning, John T. Casteen, Jerry Gitt, William H. Goodwin, Maryellen C. Herringer, Robert A. Ingram, Donald M. James, Mackey J. McDonald, Joseph Neubauer, Timothy D. Proctor, Ernest S. Rady, Van L. Richey, Ruth G. Shaw, and Dona Davis Young.

There are many reasons for the success of Wachovia. First of all, it achieved strong market position in the competitive U.S. banking market. Wachovia's leading market position in various segments of the U.S. banking sector reflects its strong foothold and puts it at a competitive advantage against other players in the market. Another reason may be its broad service distribution network. By reaching masses of customers, Wachovia is able to cross-sell its products and services, which increases its revenues with less operational costs.

See Also: Bank of America Corp.; Citigroup; JPMorgan Chase & Co.; Wells Fargo.

Bibliography. Board of Governors of the Federal Reserve System, *Statement by the Board of Governors of the Federal Reserve System Regarding the Application and Notices by Wells Fargo & Company to Acquire Wachovia Corporation and Wachovia's Subsidiary Banks and Nonbanking Companies* (Federal Reserve System, 2008); U.S. Securities and Exchange Commission, www.sec.gov (cited March 2009); Wachovia, www.wachovia.com (cited March 2009); Wachovia Corporation, "Wachovia Completes Research of Predecessor Companies: Apologizes for Historical Ties to Slavery and Plans to Work with Community Partners to Increase Education and Awareness of African-American History" (Wachovia, 2005); Wachovia Corporation and History Factory, *Wachovia Corporation and Its Predecessor Institutions: Findings Report* (History Factory, 2005).

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Walgreens

Walgreens is a leading pharmacy chain, mail service, and pharmacy benefit manager, with specialty pharmacy operations in 49 states in the United States, the District of Columbia, and Puerto Rico. Walgreens is situated in 6,614 locations (as of April 30, 2008) and is one of the two largest drugstore chains in the United States. According to Walgreens, headquartered in Deerfield, Illinois, it served 5 million customers per day and filled 583 million prescriptions in fiscal year 2007, and expects to have 7,000 stores by 2010.

The Walgreens chain began as a drugstore owned by Charles R. Walgreen, Sr., in Chicago, Illinois, in 1901. By 1915, there were five Walgreens drugstores and several improvements were added to the stores, such as soda fountains and luncheon service. Walgreens also began to make its own line of drug products and was then able to control the quality of the items and sell them at lower prices. By 1916, 19 stores were in operation, all in Chicago.

Walgreens also established its own ice-cream manufacturing plants to match the demand for ice cream at that time. By the mid-1920s, there were about 65 stores with annual sales of $1.2 million. By 1930 there were 397 stores in 87 cities with annual sales of $4 million. By 1934 Walgreens was operating in 33 states with over 600 stores. After Charles Walgreen, Sr., died, his son Charles R. Walgreen, Jr., took over and ran the chain until his retirement.

Charles "Cork" R. Walgreen III took over after Jr.'s retirement in the early 1970s and brought the company through many modern initiatives, including the switch to a computer-based inventory system (bar code scanning). In 1995, Kevin P. Walgreen was made a vice president and promoted to senior vice president–store operations in 2006.

On July 12, 2006, David Bernauer stepped down as chief executive officer (CEO) of Walgreens and was replaced by company president Jeff Rein. Holding degrees in accounting and pharmacy from the University of Arizona, Rein was a pharmacist, store manager, district manager, and treasurer prior to being named CEO and chairman of the board. Greg Wasson, former president of Walgreens Health Services, was named president and chief operations officer.

Other Ventures

Walgreens owned Sanborns, the largest pharmacy chain in Mexico, purchased from Frank Sanborn in 1946, and sold to Grupo Carso in 1985, after a series of economic downturns resulting from the Mexican currency crisis (devaluation of the Mexican peso).

In the 1980s, Walgreens owned and operated a chain of casual family restaurants named Wag's, a belated attempt to compete with Woolworth's lunch counters. The Wag's restaurants were very similar in concept to Denny's. Walgreens sold most of these to Marriott Corp. in 1988, and by 1991, the restaurant chain had completely gone out of business.

See Also: CVS/Caremark; Target; Wal-Mart Stores.

Bibliography. "Aggressive: That's Walgreens' Approach to Growing the Business," *Drug Topics* (v.137/23, 1993); John U. Bacon, *America's Corner Store Walgreens' Prescription for Success* (Wiley, 2004); "Pharmacy Wars: CVS Is Fighting Walgreens for the Lucrative Prescription Business," *BusinessWeek* (3740, 2001); Walgreens, www.walgreens.com (cited March 2009).

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Wall Street

Among the most famous thoroughfares in the world, Wall Street is located in the southeast side of Manhattan in New York City. It is a narrow and relatively short street, running for 0.4 mile along nine blocks from a 19th-century church on Broadway down to South Street near the shore of the East River. Despite these geographic confines, Wall Street is lined with skyscrapers and historic buildings that signal the enormous influence and significance it has acquired over time in both American and international commerce. As a result of this historical evolution, Wall Street is not just a place, but it is also a symbol of everything connected to the operations of high finance in a global economic order.

What serves as the moniker of New York's financial district originated in 1653 as a path alongside which Peter Stuyvesant, the governor of what was then the Dutch colony of New Amsterdam, built a defensive wall made of sharpened logs. Designed to protect the budding colony from attacks by British settlers in New England, the wall proved useless, as the British attacked New Amsterdam by sea in 1664, bringing about its surrender and renaming it to New York. When the wall was subsequently torn down in 1698, the lane beside it was employed to carry traffic and christened as Wall Street.

Even though it developed into a dynamic commercial and trading precinct under British rule, Wall Street did not become a hub of financial activity—in which savers and investors supplying capital are brought together with the firms and governments demanding it—until the early days of the new American republic. The federal government was then the chief demander of capital, having decided to assume the debts incurred by the Revolutionary War. It initially issued $80 million in bonds and these, along with state bonds, constituted the most actively traded securities of the day. Banks and insurance companies

Wall Street and the Stock Exchange and Bankers Trust buildings in 1912, before the founding of the Federal Reserve.

soon joined the trading mart where transactions were negotiated in coffeehouses and outside along the curbs of the street.

One of the banks traded, the Bank of New York founded by Alexander Hamilton, became the object of Wall Street's first scandal. William Duer, a friend of Hamilton, sought to manipulate the price of Bank of New York stock, but ended up being ensnared by his own intricate machinations. In the wake of the scandal, a group of brokers met under a buttonwood tree, at what is now 68 Wall Street, to come up with an arrangement aimed at burnishing the image of the financial community. The result was the Buttonwood Agreement of 1792. In it, the brokers agreed to deal only with each other in the buying and selling of public securities at a fixed commission rate. This agreement constituted the foundation of the New York Stock Exchange (NYSE), the defining institution of Wall Street.

19th Century

The early 1800s witnessed the failure of two attempts to establish a central bank that could act as a "lender of last resort" to counteract a financial crisis on Wall Street. The first such attempt was the Bank of the United States, which operated for 20 years before its charter was revoked by Congress in 1811. Another effort was made five years later with the second Bank of the United States, but it also fell to political opposition fueled by a Jeffersonian suspicion of financial capitalism and federal concentration of power.

Much of the capital raising and trading during the 1800s was dominated by transportation issues, by which Wall Street enabled new markets to be opened and scale economies for ever-larger firms to exploit. Canal stocks, led by Erie Canal, excited investors and attracted capital from overseas, primarily Britain, whose London Stock Exchange would sway the financial tides on Wall Street for most of the 19th century. By the 1840s, railroad stocks came to the fore. To these were added mining shares, once the California gold rush gained momentum in the 1850s. After a fiat currency, the greenback, was instituted by the government to finance the Civil War, gold itself was traded, its price set in relation to greenbacks, the ratio varying with the fortunes of the Union cause on the battlefield.

Jay Gould, among a select coterie of audacious individuals who acquired notoriety on Wall Street for their speculative prowess, tried to corner this gold market. To forestall the U.S. Treasury from releasing its own gold reserves into the market, Gould actively schemed to ensure the conformity of government officials to his plans, even going so far as trying to coax the favor of President Ulysses Grant. The corner ultimately failed, but the stock manipulation and government corruption involved was symptomatic of the ethical morass that plagued Wall Street in the 19th century. Nor was it uncommon then for managers to use corporate treasuries as personal piggy banks, to engage in insider trading, and provide little in the way of proper accounting statements to investors.

As the 19th century drew to a close, industrial companies grew in prominence on Wall Street. In 1896, 12 of these companies were included in the Dow Jones Industrial Average (DJIA), published by the *Wall Street Journal,* now an internationally distributed daily that is Wall Street's newspaper of record. The stock index it originated, since increased to encompass 30 stocks, remains the best-known barometer of Wall Street's market movements, although investment professionals have come to prefer the Standard & Poor's 500 Index for its broader coverage of America's large capitalization firms.

20th Century and Beyond

Two events occurred in the opening third of the 20th century that would reverberate into the 21st. The first was the panic of 1907. Ignited by the failure of the Knickerbocker Trust Company, the public's loss of faith in the financial system led to a series of bank runs, generating a liquidity squeeze that spread to banks and brokerage firms. J. P. Morgan, the head of Wall Street's most influential bank, successfully piloted a rescue of the financial system through injections of liquidity. The lessons drawn from the panic overcame the century-old opposition to a central bank and in 1913 the Federal Reserve System was founded. Since then, particularly after World War II, the Federal Reserve's moves have been closely scrutinized worldwide as harbingers of market direction.

The second crucial event was the 1929 crash and the ensuing Depression of the 1930s. Driven by radio, auto, and airline stocks, along with rhetoric about a "new era" in economic conditions, a bull market swept Wall Street in the 1920s. The DJIA reached a high of 381.17 in September 1929, up almost 500 percent from its 1921 low. However, prices fell dramatically the next month, culminating in a spectacular two-day, 25-percent drop on October 28–29. While economists now generally agree that the crash did not cause the Depression—the Federal Reserve's tightening of monetary policy and the rise of trade protectionism are now commonly cited as the culprits—at the time, Wall Street was vilified for impoverishing the nation. Amid this hostility, the laissez-faire approach to Wall Street was ended with the establishment of the Securities and Exchange Commission (SEC). The fundamental rationale of this regulatory framework was, and remains, assuring that investors receive accurate and relevant information regarding public securities.

Not until the 1950s would Wall Street regain some of its luster, as the DJIA finally managed to overtake its 1929 high. By then, Wall Street had firmly displaced London as the center of international finance. Despite its role in deciding where and under what terms capital flows around the globe, Wall Street was not entirely impervious to international forces, as became evident in the 1970s, when higher oil prices triggered by the Organization of Petroleum Exporting Countries (OPEC) helped produce a stagflationary environment that saw the DJIA struggle to overcome the 1,000 milestone first breached in the mid-1960s.

Once the Federal Reserve successfully wrung inflation out of the U.S. economy with high interest rates in the early 1980s, Wall Street fully recaptured the exalted status it enjoyed in the 1920s, its practices and institutions emulated around the world, its capitalist ethos reinforced by the fall of Soviet communism. The DJIA finally broke through the 1,000 level in 1983 and continued to trend higher, ending the century above 10,000, making the October 1987 stock market crash appear as a mere blip on price charts. Indeed, toward the end of the 1980s–1990s bull market, the DJIA was overshadowed by the technology and internet stocks transacted on the NASDAQ exchange, an over-the-counter market that now seriously rivals the NYSE.

Although not facing the same degree of ill will as in the 1930s, Wall Street began the 21st century under a cloud of skepticism about its role in the economy. A severe bear market in 2001–02 uncovered a myriad of investment banking and corporate scandals that sent numerous executives to prison. The Federal Reserve's low-interest policy to combat the aftereffects of the late 1990s stock market bubble stoked a housing boom, which Wall Street helped finance with a slew of mortgage-backed securities. When the subprime segment of this market collapsed in 2007, Wall Street firms were forced to take huge write-downs, bringing about a credit crunch felt around the globe.

Wall Street currently faces a serious challenge from the City of London. The latter leads in foreign exchange trading, structured finance, new stock listings, and value of bonds traded. Wall Street, by contrast, continues to dominate in equities volume and the export of financial services.

See Also: Central Banks; City, The; Dow Jones Index; Financial Market Regulation; Mortgage Credit Crisis of 2008; S&P 500 Index; Securities and Exchange Commission; Subprime Loans.

Bibliography. Robert F. Bruner and Sean D. Carr, *The Panic of 1907* (Wiley, 2007); Edward Chancellor, *Devil Take the Hindmost* (Plume, 2000); David Colbert, *Eyewitness to Wall Street* (Broadway, 2001); Anne-Marie Fink, *Rules of the Moneymakers: What Wall Street Knows That CEOs Don't* (Crown Business, 2009); Charles R. Geisst, *Wall Street: A History* (Oxford University Press, 1997); John Steele Gordon, *The Great Game* (Simon & Schuster, 1999); Doug Henwood, *Wall Street* (Verso, 1997); Jeffrey B. Little and Lucien Rhodes, *Understanding Wall Street,* 4th ed. (McGraw-Hill Professional, 2004); Julie Sell, "Magnets for Money," *Economist* (September 15, 2007).

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Wal-Mart Stores

Wal-Mart is the world's largest corporation and private sector employer, with 1.9 million employees worldwide and 1.3 million employees in the United States. Its annual revenue in the fiscal year ending on January 31, 2008, was $375 billion, with weekly revenue topping $7 billion. In 2008 it operated more than 7,300 Wal-Mart stores and Sam's Clubs in 14 nations, reaching about 180 million customers each week. Its sales in the United States are larger than the next five largest retailers combined. More than 125 million U.S. consumers shop at Wal-Mart every week, and it is estimated that about 85 percent of Americans shop at Wal-Mart at least once in a given year. This vastness has raised concerns about Wal-Mart in some quarters, but most economists believe that its ability to reduce costs and to pass these savings along to consumers have been beneficial to the overall economy. Academic studies show that Wal-Mart has had a significant impact on the U.S. economy.

This gigantic corporation, headquartered in Bentonville, Arkansas, began in 1962 when Sam Walton opened the company's first discount store in Rogers, Arkansas. The company grew rapidly, reaching 24 stores in 1967, 125 stores in 1975, and 882 stores in 1985, becoming the nation's largest retailer in 1990, as it systematically spread its operations outward from its Arkansas base. It began international operations in 1991, moving into Mexico, and currently has operations in Argentina, Brazil, Central America, China, Japan, and the United Kingdom. It is the largest private employer in the United States, Canada, and Mexico.

Wal-Mart's growth and competitive advantages can be explained by its pioneering efforts to effectively use new technology. By the late 1970s, it had connected all its stores, distribution centers, and central headquarters to its computer network—well before competitors. It was an early adopter of bar codes in its distribution system. It completed a company-wide satellite communications network in 1989—linking all operating units with its Arkansas headquarters into what is now the world's largest private satellite communications network. In 1990 it introduced Retail Link software that connected its stores, distribution centers, and suppliers, providing detailed inventory data. It is currently in the forefront of utilizing radio frequency identification, which facilitates tracking shipments, inventory, and sales with tags on individual items that can be read by radio signal. Currently, its sheer size allows it to develop these systems more cheaply because it can spread their fixed costs over a greater sales volume—and to negotiate steep discounts from suppliers.

Wal-Mart has increased its productivity remarkably, increasing inflation-adjusted sales per worker by

With 7,300 stores, Wal-Mart has accounted for as much as 15 percent of U.S. imports from China in a single year.

about 55 percent from 1982 to 2002. The McKinsey Global Institute calculates that in the late 1990s, Wal-Mart's real value added per worker was more than 40 percent higher than for other general merchandise retailers. McKinsey estimates that one-eighth of the productivity growth for the entire nation in the last half of the 1990s was because of Wal-Mart.

Studies have concluded that Wal-Mart charges about 15 to 27 percent less than traditional grocery stores and supermarkets and about 23 percent less than drugstores. In addition, Wal-Mart forces its competitors to lower their prices, too—by about 10 percent. Adding together these direct savings and induced price drops elsewhere, research suggests that poorer families, female-headed households, and non-whites have gained the most. One study concludes that in 2003, the savings in the grocery sector alone equaled $782 per household per year—the equivalent of a 1.5 percent increase in income. Another estimate puts the overall savings to Wal-Mart's customers in 2007 at $109 billion, with savings of a similar magnitude for those who shop elsewhere.

On the other hand, economic studies suggest that Wal-Mart's impact on local employment has been fairly minor. Its compensation levels are similar to most other retailers, although its growth has forced unionized competitors to cut wages, resulting in a drop in general merchandise and grocery sector wages of a little under 1 percent. These major savings to consumers and minor impacts in the labor market may explain why 73 percent of professional economists in a recent survey agreed that a Wal-Mart store typically generates more benefits to society than costs, while only 15 percent disagreed.

Wal-Mart is the nation's biggest seller of groceries, toys, guns, diamonds, jewelry, CDs, apparel, dog food, detergent, sporting goods, video games, socks, bedding, and toothpaste—not to mention its biggest film developer and optician. It is also the largest customer of brand-name sellers such as Procter & Gamble, Kraft, Revlon, and Gillette. Wal-Mart began offering private-label brands in 1991, with the launch of Sam's Choice. Because price matters immensely to many of Wal-Mart's customers, its cut-rate house brands can substantially eat into sales by traditional suppliers. For example, Wal-Mart's Ol' Roy dog food, named for Sam Walton's English setter, has surpassed Purina as the world's top-selling brand. Approximately 40 percent of products sold in Wal-Mart are now private-label store brands. When Wal-Mart establishes a private label, it is often able to cut out the middlepeople and deal directly with overseas suppliers. In 2004 Wal-Mart bought 15 percent of American imports from China. If it were an individual economy, the company would rank as China's eighth-largest trading partner.

See Also: China; Company Profiles: North America; Distribution; Retail Sector; Safeway; Sears Holdings; Target.

Bibliography. Nora Ganim Barnes, *The Effects of Wal-Mart Stores on the Economic Environment of Counties in the Northeast* (University of Massachusetts Dartmouth, 1994); Emek Basker, "The Causes and Consequences of Wal-Mart's Growth," *Journal of Economic Perspectives* (v.21/3, 2007); Jason Furman, *Wal-Mart: A Progressive Success Story* (New York University Press, 2005); Michael J. Hicks, *The Local Economic Impact of Wal-Mart* (Cambria Press, 2007); Thomas J. Holmes, *The Diffusion of Wal-Mart and Economies of Density* (National Bureau of Economic Research, 2008); "Japan: The Wal-Mart Way," *BusinessWeek* (24, 2004); Nelson Lichtenstein, *Wal-Mart: The Face of Twenty-First-Century Capitalism* (New Press, 2006).

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Walt Disney

The Walt Disney Company was founded in 1923 as an animation studio by two brothers—Walt Disney and Roy Oliver Disney. It was originally called Disney Brothers Cartoon Studio. However, in 1926, the name was changed to the Walt Disney Studio, which was later changed to Walt Disney Productions in 1929. The company name was again changed in 1986 to Walt Disney Company. As of 2007 Walt Disney had a total workforce of 137,000 employees and total revenue of US$35.51 billion. It is one the three largest entertainment companies in the world, the two others being Time Warner and News Corporation.

Although it started as an animation studio, today the Walt Disney Company is a diversified global corporation operating in four business segments—Studio

Entertainment, Parks and Resorts, Consumer Products, and Media Networks. Each of the segments has multiple divisions and subdivisions. The Studio Entertainment unit is called the Walt Disney Studios and comprises Walt Disney Pictures, Walt Disney Studios Motion Pictures International, Walt Disney Studios Home Entertainment, Disney Theatrical Productions, and Disney Music Group. The Studio Entertainment business is the foundation on which the Walt Disney empire has been created.

The Parks and Resorts business started in 1952, when work on Disneyland Park in Anaheim, California, started. As of 2008, Walt Disney has 11 theme parks in five resort locations, two of which are in the United States (Anaheim, California, and Lake Buena Vista, Florida), and the other three in Japan, France, and Hong Kong. The Parks and Resorts segment also operates a cruise line, guided travel around the world, and eight Disney vacation clubs, which have more than 100,000 members.

Disney Consumer Products is the merchandising arm of Walt Disney and comprises Disney Consumer Products and Affiliates (DCP), Disney Publishing Worldwide (DPW), Disney Interactive Studios, and dineyshopping.com, the official online portal of Walt Disney. The DCP division itself comprises Disney Toys, Disney Apparel, Accessories & Footwear, Disney Food, Health & Beauty, Disney Home, and Disney Stationery. The DPW division is the world's largest publisher of children's books and magazines. The Media Networks segment comprises some of the newer segments in which Walt Disney has made an entry. Three main divisions in the fold of Media Networks are Disney-ABC Television Group, ESPN, and the Walt Disney Internet Group. In addition, this segment also performs the marketing, research, and communication-related functions for the company.

Since its inception in 1923, Walt Disney has had only seven chief executive officers (CEOs), resulting in stability and continuity in decision making. For the first 50 years, the company was run by Walt Disney and his elder brother Roy O. Disney. After both Disney brothers died, the company has been run by a team of highly professional managers, even though Roy O. Disney's son Roy E. Disney has been a major shareholder and an important person for the company. He led two campaigns against the top management, first in 1984 and the second in 2004. Roy E. Disney was critical of the management style of the CEO, which led to the CEO resigning in both cases.

Walt Disney has several milestones to its credit including the only nomination that an animated movie—*Beauty and the Beast*—has received for the Academy Award for Best Picture. Part of the reason for the outstanding success of Walt Disney can be attributed to a very careful strategy of diversification into businesses that derive their competitive advantages from each other. Walt Disney started diversification as early as the 1930s, when it started the Mickey Mouse Club. Over the years, the Disney brand name has become synonymous with animation-related entertainment. Walt Disney not only uses its corporate image across all the affiliated businesses, but also makes sure that the success achieved in any segment is replicated across all other segments. It has also pursued a very careful acquisition strategy, focusing on firms that complement its existing line of businesses. Although there has been some criticism of Walt Disney's acquisition of ABC Television Network, having a control over the distribution channel for its product was a very logical step for Walt Disney. The synergy that Walt Disney has achieved through such integrated diversification efforts has been difficult for competitors to imitate.

See Also: Branding; Brand Loyalty; Company Profiles: North America; Time Warner.

Bibliography. J. Michael Barrier, *The Animated Man: A Life of Walt Disney* (University of California Press, 2007); Valerie Bodden, *The Story of Disney* (Creative Education, 2009); James B. Stewart, *Disney War* (Simon & Schuster, 2006); J. P. Telotte, *The Mouse Machine: Disney and Technology* (University of Illinois Press, 2008); Walt Disney Company, corporate.disney.go.com (cited March 2009).

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Warranties

A warranty is a guarantee by a seller or manufacturer that a good will work as designed, advertised, and explicitly or implicitly promised, and that it will do so for a particular period of time. In conventional usage in North America, “warranty” usually refers specifically to a repair, replace, or refund guarantee, built into the cost of the product; when such a warranty is extended for an additional fee, it will often cover such circumstances as are beyond the fault of the manufacturer, including repairs necessitated by consumers’ errors. From an accounting perspective, a warranty is a contingent liability: an expense that might be paid; companies usually have a good sense of what each warranty costs them, when averaged out.

Express Warranties

Express warranties are those that are explicitly spelled out, whether extended or otherwise. They explain the terms under which they are honored: the conditions under which a return can be made, the period of time during which a return can be made, and the process and results of return. Depending on the warranty and the reason for the return, returned items may be exchanged for a working copy of the product, repaired, or refunded wholly or in part. Some items can be returned to the store, where they were purchased, others must be returned to the manufacturer. Generally a warranty can be expected to cover defects of manufacture and damage incurred in transit or in the store. Warranties generally do not cover consumer disappointment, which seems obvious, but the line between a defective product and a disappointing one can be narrow. An impressive knife advertised on television and shown cutting tin cans in half is defective if it arrives with the blade nicked or the handle broken; if it arrives, is put to use, and cuts a tin can in half but is useless thereafter, it’s only disappointing.

In American law, certain types of statements in advertising and promotional materials are protected from being read as express warranty—the legal term is *puffery*. Improvable superlatives or subjective truths are puffery—if a candy bar is not “the world’s best” candy bar or a consumer dislikes the soft drink that the advertisement said taste tests favored, the company is not bound to grant a refund. Statements made as testimonials fall under the umbrella of puffery as well, as do portrayals of a product having clearly impossible effects: such as deodorant spray causing women to chase its users down the street. The claims that must be substantiated, and which count as express warranty, are those that could be proven quantifiably. A disposable razor with “the most blades of any razor in the world” must indeed have more than its competitors, and “the most caffeinated soft drink” must have the federal maximum amount of caffeine per ounce. Legal departments in companies or their advertising agencies often examine the wording of any advertisements to keep their ducks in a row.

Implied Warranties

Implied warranties are those assurances that can be “taken as a given” even when they are not spelled out. In most countries this includes the warranty of fitness for a particular purpose and the warranty of merchantability, which are very similar: the principle of both is that, whether the seller says anything about the product or not, the buyer is reasonable to assume that a product by its nature is appropriate for some certain end.

A knife, whether or not it can cut a tin can, is meant to cut something. Tires are meant to bear the weight of automobiles and the friction of the road without falling apart. DVD players are meant to play DVDs. These items must fulfill those purposes whether or not any advertising or promotional material or packaging has said anything about them, because of their nature. In the United States, the warranty of merchantability holds products to a higher standard than the warranty of fitness does, but applies only to professional sellers, while fitness is applicable to all goods sold. For housing, there is an additional implied warranty, that of habitability—that is, no one putting an apartment up for lease can claim to be surprised that the lessee intends to live in it; the apartment must meet habitable standards.

An implied warranty can be disclaimed. The disclaimer must be specific—stores, especially secondhand stores, may specify that items are sold “as is,” which is more common than the older and less appealing “with all faults.” The federal Uniform Commercial Code in the United States requires that the implied warranty of merchantability can be disclaimed only explicitly—and must use the word “merchantability” in the disclaimer in order to leave no doubt as to its intent. Some states further restrict a seller’s ability to disclaim implied warranty. Doing so does not necessarily prevent a sale; a car that does not run can be sold as parts, changing the nature of what the warranty of merchantability implies, rather than trying to get around it.

Repair is a less common remedy than it used to be. Rare are the neighborhood shops that trafficked in little more than repair work, collecting their fee from the customer for repairs not covered by warranty and from the manufacturer for repairs that were. Rare, too, are the manufacturers that repair their own products, outside of the automobile and computer hardware industries; should a DVD player fail during its warrantied period, it will likely be replaced with a working model.

Extended Warranties

Extended warranties are sometimes called service agreements or service plans, which reflects their nature. They are usually offered for computers, home electronics, and expensive appliances. While an ordinary warranty promises a product of a certain quality, an extended warranty is essentially a form of insurance for the consumer, with the premium paid up front in a lump sum. Should anything go wrong with the product, the issuer of the extended warranty will fix or replace it. Extended warranties cover, in general, damage or defects that result in the course of normal use; misuse, such as using a microwave oven as an aquarium, may invalidate an extended warranty.

Extended warranties are often offered by third parties—sold at the store level, such as chain electronics and department stores, rather than at the manufacturer level. The cost can be as much as half the cost of the item but is usually closer to one quarter. Extended warranties may cover parts, labor, or both, and may or may not require the product to be mailed in to a service center.

See Also: Accountability; Advertising; Financial Reporting; Quality; Quality Control; Service Expectations; Service Level.

Bibliography. Melvin Aron Eisenberg, *Contracts* (Gilbert Law Summaries, 2002); Phyllis H. Frey and Martin A. Frey, *Essentials of Contract Law* (Delmar Cengage Learning, 2000); Robert A. Hillman, *Principles of Contract Law* (West, 2004).

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Wells Fargo

Wells Fargo, as a diversified financial holding company, provides retail, commercial, and corporate banking services to its customers through its subsidiaries. It offers various banking and financial services through full-service banking offices. It is one of the largest banking groups in the United States with over 20 million customers and has operations in 24 states through 6,000 offices across the United States. The company primarily operates in the United States, but also has operations in Canada and Latin America. Wells Fargo was incorporated in 1929. Today, the company employs around 158,000 people (as of January 1, 2007). Wells Fargo is a California-based company. It is headquartered at 420 Montgomery Street, San Francisco, California. Wells Fargo is quoted in the New York Stock Exchange with the ticker symbol WFC. It has approximately 90,000 shareholders (as of January 1, 2007).

Wells Fargo primarily conducts its operations through three business segments: community banking, wholesale banking, and Wells Fargo Financial. The community banking segment provides various banking and diversified financial products and services to consumers and small businesses across the United States. It also offers investment management, wealth management insurance, and securities brokerage. This division provides mutual fund products, personal trusts, and agency assets as well as different types of loans. This division also provides receivables financing, inventory financing, equipment leases, real estate financing, small business administration financing, cash management, payroll services, and retirement plans. The division serves customers through a wide range of channels, including traditional banking stores, in-store banking centers, call centers, business centers, automated teller machines (ATMs), and internet branches.

The wholesale banking division mainly provides commercial, corporate, and real estate banking products and services, including traditional commercial loans and lines of credit, letters of credit, asset-based lending, equipment leasing, mezzanine financing, international trade facilities, foreign exchange services, treasury management, investment management, institutional fixed income, and equity sales. The wholesale banking division also offers construction loans for commercial and residential development, land acquisition and development loans, secured and unsecured lines of credit, interim financing arrangements for completed structures, rehabilitation loans, affordable housing loans and letters of credit, permanent loans for securitization, commercial real estate loan servicing, and real estate and mortgage brokerage services.

The Wells Fargo Financial segment provides consumer financing and auto financing. The consumer finance subsegment provides direct consumer loans and real estate loans to retail clients. Also, it purchases sales finance contracts from retail merchants scattered in the United States, Canada, and some other countries in Latin America. Auto financing subsegment operations specialize in purchasing sales finance contracts directly from automobile dealers. Wells Fargo Financial also offers credit cards, lease agreements, and other commercial financing.

Wells Fargo was founded in 1852 as Wells, Fargo & Company by Henry Wells and William G. Fargo, the two founders of American Express Company, to provide express (rapid delivery of gold and anything else valuable) and banking services (buying gold and selling paper bank drafts as good as gold) in the western United States during the California gold rush era. In 1905 Wells Fargo separated its banking and express operations. In 1929 the company registered as Northwest Bancorporation and the name later changed to Norwest Corporation in 1983. The company, in its current form, was formed in 1998, following a merger between Norwest Corporation and Wells Fargo & Company. As a result of the merger, the new enterprise was named Wells Fargo & Company. Following the merger, Wells Fargo continued to grow through various acquisitions.

Wells Fargo is regarded as a successful company in many aspects. One of the reasons may be its advantage of owning a well-established distribution network. The company enjoys a leading position in the highly competitive U.S. banking sector because of its wisely decided investments, such as having the largest telephone banking network in North America. On the contrary, one of the most critical disadvantages for Wells Fargo might be its high exposure to real estate investments. Given the American subprime mortgage crisis in recent years, Wells Fargo is facing decreasing revenues from its overfocused real estate business. On December 31, 2008, Wells Fargo merged with Wachovia Corporation, which had experienced even more crippling losses in the subprime mortgage crisis.

See Also: Citigroup; JPMorgan Chase & Co.; Mortgage Credit Crisis of 2008; Subprime Loans; Wachovia Corp.

Bibliography. Pat Allen, "Wells Fargo Payments Strategist on Electronification, Risk and Competition," *Banking Strategies* (v.82/3, 2006); Robert J. Chandler, *Servant of the People: Wells Fargo in Old Town San Diego, 1852–1870* (Douglas McDonald, 2006); Philip L. Fradkin, *Stagecoach: Wells Fargo and the American West* (Simon & Schuster Source, 2002); Sesil Watson, "The Business of Customer Experience: Lessons Learned at Wells Fargo," *Interactions* (v.15/1, 2008); Wells Fargo, www.wellsfargo.com (cited March 2009).

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Western Europe

The United Nations defines western Europe as nine countries that include Austria, Belgium, France, Germany, Liechtenstein, Luxembourg, Monaco, the Netherlands, and Switzerland. The Western European Union adds the United Kingdom, Portugal, Spain, and Greece to this list, from which the organization excludes Switzerland, Monaco (considered holding special status within France), Austria, and Liechtenstein. For global business interests, western Europe consists of a quantity of markets that are consolidated into market groupings of different natures. These market groupings are characterized by partly harmonized market conditions. The most advanced group is the European Union, in Europe and in the world, in terms of degree of economic integration that spills over into such fields as social policies and politics. Western Europe is therefore a particularly interesting example for business in today's world.

The European Union

Western European markets and business interests benefit from a long-term process of integration that spans the past 60 years, from historical postwar understandings to harmonized policies. Because the European Union is both deeply integrated and counts numerous members, the legal business environment includes many national, regional, and European authorities, and it lays the basis of the role of the EU internationally. The fundamental treaties of Paris and Rome, signed in the 1950s and 1960s, defined the institutional structure and policy objectives of the European Communities in the areas of coal and steel (European Coal and Steel Community [ECSC]), atomic energy (European Atomic Energy Community [EAEC]), and economic integration (European Economic Community [EEC]).

Europe has elaborated its market conditions into a single market of now more that 500 million consumers. The Single European Act of 1986 made the customs union evolve into this single market, extended the scope of qualified majority vote in European decision making, and cleared the way to facilitate the Europeanization of business across Europe. The 1992 Maastricht Treaty changed the denomination of this unique organization to the "European Union," expanded former treaties allowing for the simplification of cross-border business further, introduced a codecision procedure, and flexible cooperation mechanisms for the member states that use the EU institutions to decide upon common goals and conditions. In 1999 the Amsterdam Treaty prepared the widening of the union through enlargement, that is, the integration of yet more members into its single market, and deepened the free circulation of people, goods, services, and capital. Each treaty has made the European business environment more efficient and more accessible as an entity. While constitutional efforts appear difficult at this stage, the 2008 Lisbon Treaty attempts to simplify a market grouping that has yet to adapt its institutional framework to the great breadth and depth of its own integration.

Treaties establishing the single market and its numerous common rules and policies have deepened the integration of members. At the same time, the market is geographically enlarging. The most extensive enlargement of the European Union took place in 2004: For the first time, former Soviet-ruled countries joined the community. This fifth EU enlargement had thus taken a strategic dimension that is prolonged through the accession of Romania, Bulgaria in 2007, and further members from this region applying for accession. Member states of the European Union since 2007 are Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom, of which Belgium, Italy, Luxembourg, the Netherlands, France, and Germany are the six founding members.

European Union Institutions

The institutions governing the European Union find their roots in the Treaty of Rome, establishing the European Communities (EC) in March 1957, enforced on January 1, 1958, among six western European countries. The European decision-making process is mainly dependent on the actions of three institutions: the European Commission, the European Parliament, and its Council. The European Commission (Commission of European Communities [CEC]) is the driving force and executive body of the structure; the European Parliament (EP) is the only directly elected body, elected by the people of the member states, and is gradually experiencing an increase in power. The Council of the European Union represents the governments of the member states. The Court of Justice guarantees compliance with the law, while the Economic and Social Committee has a main role in the representation of opinions of organized civil society on economic and social issues.

Other institutions, agencies, and bodies complete the structure that operates on three alternative decision-making modes, depending on the policy area and issue that is to be decided. The consultation, assent, or codecision procedures shape the legislative tools that the EU is in charge of and that regulate the business environment for both European and non-European firms in the single market, as well as international affairs of the EU. The EU budget is an essential tool in the management of the given EU objectives. It is sustained by value added tax (VAT), agricultural levies, customs duties, and its own resources, and benefits the business environment through, for instance, sector and regional spending and funds.

Business Environment

The European business environment has been subject to a rapid transformation ever since the mid-1990s. The introduction of a common currency in 1999, the extension of the single market rules to new areas such as e-commerce, and the ongoing trend toward supranational business taxation regulations are evolutions that have largely contributed to the construction of an increasingly harmonized business environment. On the business side, these evolutions have led to a diversification of firm structures: a Europeanization where more and more multinationals evolve into European transnational companies that compete worldwide, from a sound and vast home market. Small and medium-sized enterprises (SMEs) frequently operate on a European scale (as micro-multinationals) and are locally, nationally, and internationally exposed to large-scale competition and market harmonization rules formulated for all actors within the single market. Some of these structures are "born European," that is, they fully benefit from economic integration and Europeanization advantages from their start-up origins in terms of structure, markets, and operations, and can be created under European (rather than national) company law.

European integration has increased the pace of developments throughout Europe and its neighboring countries; in a similar fashion to that of globalization, it has created a rising compression of the time and space factors that rule the business environment. For a better understanding of this compression, consider the following example: During the Cold War era it was difficult, if not virtually impossible, to export goods, services, or capital from western Europe, already integrating, to some eastern and central European countries, still under oppression from the Soviet system—politically, logistically, and also culturally. Given the developments during the 1990s and the enlargements of the EU, politically and culturally the member states have become closer than ever, while logistically both virtual and real means of transport and infrastructures seem to have reduced distances dramatically and take less time. Mapping the business environment as "European" has the clear advantage of an EU-scale communication to the world level: along the lines of power that result from a "unity in diversity." A filtering or screening of its diversity (virtually or by means of maps) through specific search parameters allows any given corporation to target specific market opportunities.

Europeanization

The Europeanization of the business environment is based on the effects of globalization as well as geohistory and geoeconomic evolutions. International trade theory makes a strong case for the internationalization of firms that can obtain important advantages from going abroad. Also, the theories sustain the argument that integration is beneficial for the competitiveness of a nation or, in the case of Europe, a market grouping. The European business environment has been subject to major harmonization, liberalization, and deregulation efforts that are illustrated in the common policies that govern important policy areas and their outcome on an EU basis (in agricultural, industrial, competition policy, and numerous other fields). Nevertheless, income distribution is not equal, and the EU promises huge potential if harmonization efforts continue.

The dynamic though streamlined corporate sectors in the single market prove that Europeanization increases business efficiency and effectiveness. Most governments sustained their "national champion" expansion with nontariff trade and investment barriers directed against foreign competitors and strong borders protecting national markets. However, these policies failed and caused low growth, unemployment, and inflation after the first oil shock in 1973. The European Commission then decided to work on an integration program to eradicate the main trade and investment burdens.

The Single Market Program implemented in 1987 had a positive effect especially from the mid-1990s onward. The manufacturing industry was the main target of EU initiatives; this focus shifted toward the service industry around 2000. Consequently, "national champions" and championing governments had to adapt to a focus on becoming European leaders. Over the period of 1987–97, competition became EU-wide. Firms with a high dispersion of their activities at the outset benefited more than the others from the single market by rationalizing and concentrating their operations on the EU market. In all other cases, the EU's role is to monitor and stimulate competition and fair trade. This includes, for example, the fair access to third (i.e., non-EU) markets.

Globalization

Altogether, the globalization phenomenon has evolved in three consecutive steps: first, the internationalization of trade (particularly in the 1950s); second, the transnationalization of capital flows (in the 1980s); and third and more recently, the globalization of information flows. The development of the information society has become a reality with the installation of global digital networks, in particular throughout the 1990s. Technology developments especially in communication improve the productivity of all sectors of activity in the manufacturing and in the services industries.

The 2000s have brought major evolutions in innovation and competitiveness convergence through the European Lisbon/Gothenburg agenda that set the objectives (dimensions) for research and innovation to help the EU catch up in sectors in which it is not sufficiently competitive. For example, EU corporations outperform the United States in telecommunications, social protection, and sustainable development, but are outperformed by the United States in seven out of eight Lisbon dimensions, in particular research and development (R&D) and start-up conditions for SMEs. Compared to Asia-Pacific, western Europe excels in chemicals, pharmaceuticals, and services, but is outperformed in most manufacturing sectors (in particular office equipment and multimedia manufacture).

The development of multinationals under these market forces enhances competition. An international corporate structure and an externalization of productions are phenomena that are well founded in the evolution of both globalization and Europeanization. The very performance and nature of the business environment constructed in Europe is motivation to companies worldwide in their call for more regional integration. In the area of business management, this market holds many cultural differences but also some degree of similarities: a European strategy makes sense as long as it is not based entirely on standardization and in which diversity management holds an important place.

The Euro

European economics are characterized by the harmonization of rules that attempt to maximize the benefit gained from trade and financial integration through risk sharing (the main traditional argument for cross-border asset trade), spillover of macroeconomic fluctuations as well as product and consumption co-movements. A main step toward common measures was the introduction of the single currency in 1999 that provided the Eurozone members with a unique chance for economic cohesion. Also, it stimulated financial flows in an unprecedented manner. In regard to cross-border equity flows, geographical proximity is a strong stimulation factor, increasing flows even if informational asymmetries may increase transaction costs, and vice versa. Proximity affects asset holdings across borders because trade in goods has a significant impact on asset portfolios and stimulates their engagement. This confirms that institutional and cultural proximity affect cross-border bilateral asset holdings positively. It appears therefore that financial Europeanization and globalization is financially beneficial.

Unsurprisingly, western Europe shows some extent of convergence of the European finance sector, with some significant impact on the economy and corporate activity. Following the argument that investments and movements of financial assets are more frequent and intense when conditions of economic and political proximity grant stability, two main phenomena can be observed in the 2000s: On the one hand, national interests—of governmental income, of electorate considerations, and of social policy—have a significant impact on the willingness to negotiate the consolidation of financial markets and harmonized market conditions. On the other hand, public and private initiatives and interests across Europe drive a Europeanization for compatibilities that increase balance of payments (BOP) stability; it enhances the liquidity of financial markets in Europe. Also, a European approach in monetary, fiscal, and financial policy altogether can hamper economic and financial crises under the condition that it preserves the flexibility necessary in times of recession.

This has an impact in which the single currency, harmonization and convergence efforts, and diversity influence the purchase and sales of products and services in western Europe and on European marketing. The introduction of the single currency and the relative harmonization of financial management tools illustrate an increasingly competitive EU market. Transparencies, thanks to easier price comparisons, have increasing impact on pricing strategies and marketing investment. The need to excel through innovation and creativity, in the goal to differentiate one's product, is a determinant force of marketers in Europe. It is reflected in communication and brand-building strategies. Harmonization and diversity in Europe establish paradigms in marketing that are shaped on the basis of European-wide strategy and on the opportunities of standardization versus niche positions. These strategies depend on, in a similar fashion as in international marketing, the definition of the product, the market, and timing.

European Marketing

European marketing has been recognized as different from the typical "international marketing" theory. Marketers are positioning their product or service into a highly integrated market, facing Europe-wide levels of competition. All developments in the political economy and in the frame of business transactions and relationships in the market have a direct consequence on the work of marketers. This concerns marketing departments, advertising agencies, and market-research companies on a level that encompasses all European Economic Area (EEA) countries (in which we find three of the four European Free Trade Area [EFTA] member states: Iceland, Liechtenstein, and Norway, but also all EU member states) and Switzerland (linked to the other western European states through EFTA and Swiss-EU bilateral agreements), whether the concerned firms or products be of European origin or not—covering thus all of western Europe.

European marketing translates into far-ranging, long-term marketing strategies in which diversity management and strategic partner relationships are key. Also, the high rates of adoption of new communication technologies in Europe force the marketing manager to reinvent or readapt strategies in accordance to Europe-wide adoptions. For example, the internet and third-generation telephoning have significantly altered the panoply of marketers' tools in advertising and promotion, and also for the management of commercial transactions. A European market study is the collection of information on a market that is particularly diversified, but that also benefits from market group similarities for efficient marketing. These advantages are based on EU integration as well as on conditions that shape the perception of people in Europe, including politico-legal, economic, demographic, and sociocultural conditions. These conditions help the marketer identify opportunities and challenges according to a product's or service's needs, to demand, and to the environment.

The situational analysis of the European environment, customers, other actors such as distributors, suppliers, competition, opportunities, and threats can be based on a multitude of freely accessible data. The main challenges for market studies may be language barriers for in-depth studies in some of the newer member states. In accordance with the firm's internal objectives, strengths, and weaknesses, a segmentation of target markets may be undertaken or a standardized European-wide marketing strategy adopted. The latter option is certainly the most cost-efficient but applies to only a relatively few products and services. Among them, we have found those characterized by strong cross-border brand images and internet services that allow for high mobility and flexibility. Also, when logistics are unimportant and European harmonization is required, an EU-wide strategy makes sense.

In conclusion, the leakage effects of traditional marketing approaches in a European context make national approaches less effective, but still somewhat useful because of important diversities in perceptions by European peoples. Any corporation is well advised to market its goods or services on the European level, because the flows of trade, investment, and sourcing in the EU reduce the specific advantages that a firm would achieve from outsourcing or foreign supply. Marketing can, hence, be an underpinning of a sound European strategy wherever possible in terms of adapted product or service. Because all efficient marketers use the possibilities that the single market provides (on a regional or EU-wide basis), only those firms that still act only locally lose out on these opportunities.

Opportunity Networks

European business and international corporations from non-EU countries have recognized the importance of institutional opportunity networks at the EU level. These opportunity networks can be defined as more or less loosely organized relations among business and governmental authorities that are potentially beneficial to the involved parties. These networks play an important role in the search for sustainable competitiveness. In western Europe, the most efficient and recognized ways of how a business's voice may be "heard" focus on lobbying in Brussels, and to some extent in Strasbourg and Luxembourg, that is, in the locations of the three main decision-making institutions in European politics. This is a key to the essential competitive advantages for any firm that is doing business in Europe. Efficient multinetworked public affairs management is part of doing business in today's world and has grown in impact and size in Europe during the past two decades. It helps corporations reduce risk and uncertainty in the political economy that they are part of and recognize the strategic importance of Europeanization, vis-à-vis the traditional exclusively national focus on the political economy.

Any firm operating anywhere in western Europe is regulated by an increasing number of actors, on a state level as well as multilaterally, in the competition of the two for power through the expression of redistributive welfare, and hence, among others, the benefits from wealth creation through corporate activity. Each wave of European integration has given rise to ever-more EU-level lobbying activity, at the speed at which the EU public policy and the power of institutions have expanded. The landmarks of European integration incrementally fostered lobbying activity, in 1986 with the Single European Act, in 1992 with the Treaty of European Union at Maastricht, with the 1997 Amsterdam Act, and in particular through the waves of enlargement.

The Europeanized business environment and management have increased corporate awareness of the opportunities that lobbying can bring. Corporations need to build a message and transfer this message with the help of other actors in the arena. This happens through, at a minimum, replies to consultations, and at a maximum, EU lobbying that has to be committed to the EU process, procedures, and objectives. The EU policy network consists of national and EU institutions and nongovernmental actors. It is also heavily influenced by non-EU international organizations and foreign governments that exercise power. Hence, the lobbying activity involves interaction at different levels with directly or indirectly concerned state actors, policy professionals and experts, companies, and interest groups of different kinds.

In Europe, lobbying means simply that a person or a group of people tries to influence legislators so that an individual's or organization's point of view is represented in the government. A lobbyist is a person who is, most of the time, paid to influence legislation and public opinion. Most large corporations hire professional lobbyists to help promote their activities as agents, or open their own representation in Brussels, and their main objective is to maintain a positive regulatory environment for their organization, along codes of conduct established by the European Parliament. The many access points in the European opportunity structure offer the possibility for all actors to lobby the arena, whether directly or indirectly, whether individually or through partnerships and federations, whether in Brussels or at any other location in Europe, or where the European actors are represented, and finally, whether European or from a third country.

Altogether, western Europe is a fast business environment that is strongly integrated, deeply harmonized, and yet characterized by diversity and a "single" market only on the level of free flows of market conditions and common policies. The area is strongly integrated with the rest of Europe and a great variety of partners on bilateral, multilateral, and market group level in trade. In particular, the Euro-Mediterranean partnership ("Barcelona process") and relations with the Association of Southeast Asian Nations (ASEAN) and African, Caribbean, and Pacific Countries (ACP), and Gulf Cooperation Countries (GCC) underline European political, economic, and business directions for the future.

See Also: Company Profiles: Western Europe; Eastern Europe; Euro; European Coal and Steel Community; European Monetary Union; European Union; International Marketing Research; Legal Environments; Lobbying; Maastricht Treaty; Regional Integration; Regulation; Treaty of Rome.

Bibliography. Alberto Alesina and Francesco Giavazzi, *The Future of Europe: Reform or Decline* (MIT Press, 2006); T. Iván Berend, *An Economic History of Twentieth-Century Europe: Economic Regimes from Laissez-Faire to Globalization* (Cambridge University Press, 2006); Karel Davids, Greta Devos, and Patrick Pasture, *Changing Liaisons: The Dynamics of Social Partnership in Twentieth Century West-European Democracies* (Peter Lang, 2007); Barry J. Eichengreen, *The European Economy Since 1945: Coordinated Capitalism and Beyond* (Princeton University Press, 2007); Roland Erne, *European Unions: Labor's Quest for a Transnational Democracy* (Cornell University Press, 2008); Euromonitor PLC, *Major Market Share Companies, Western Europe* (Euromonitor International, 2008); Marek Jarociński, *Responses to Monetary Policy Shocks in the East and the West of Europe: A Comparison* (Oesterreichische Nationalbank, 2006); Charles P. Kindleberger, *A Financial History of Western Europe* (Allen & Unwin, 2006); John L.

Mahoney, *Business Ethics in a New Europe* (Kluwer, 1992); Gianni de Nicoló and Alexander F. Tieman, *Economic Integration and Financial Stability: A European Perspective* (International Monetary Fund, 2006); Alari Paulus and Andreas Peichl, *Effects of Flat Tax Reforms in Western Europe on Equity and Efficiency* (FiFo, 2008); Martin Sajdik and Michael Schwarzinger, *European Union Enlargement: Background, Developments, Facts* (Transaction Publishers, 2008); Kaare Strom, Wolfgang C. Müller, and Torbjörn Bergman, *Cabinets and Coalition Bargaining: The Democratic Life Cycle in Western Europe* (Oxford University Press, 2008); Wayne C. Thompson, *Western Europe, 2008* (Stryker-Post Publications, 2008); *Western Europe 2009* (Routledge, 2009); George K. Zestos, *European Monetary Integration: The Euro* (Thomson/South-Western, 2006).

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Wholesale Capital Markets

Wholesale capital markets are international exchanges, formal and informal, where banks, nonbank financial intermediaries, and other large institutions such as multinational corporations borrow from and lend funds to one another; also referred to as wholesale credit and wholesale funds markets and distinguished from retail capital markets where individuals and small entities transact a similar but much more fragmented trade, largely through financial intermediaries.

There are two major ways in which entities of any size raise capital: debt or equity. Debt refers to any agreement that obligates a borrower to repay a lender principal borrowed, along with a charge for borrowing the money, typically interest on the principal. Equity refers to the issuance of shares in a business enterprise that promises no fixed principal or interest payments but which entitles the shareholder to the value of the portion of the enterprise that it owns. Debt and equity might be issued either in primary markets (also referred to as original issue markets) in which case they are being issued and offered for exchange for the first time; or in secondary markets in which the original issues trade beyond the initial seller and buyer. Wholesale investors are the almost exclusive players in primary markets.

Debt may be short term (i.e., less than a year in duration for borrower and lender, with the short-term markets referred to as money markets) or long term (longer than a year where such markets are referred to as capital markets, the context of usage usually indicating whether this more precise meaning of the term applies). The most formal method of raising wholesale debt capital is issuance of large blocks of debt such as bonds. If floated openly on secondary markets available to both small and large buyers, the large denominations of individual debt issues will make the issuance de facto wholesale because only large investors can afford to buy the debt.

There are many different types of wholesale debt instruments. One example of a money market instrument is when large corporations issue short-term large denomination bonds called commercial paper, which are sold at a discount to par (i.e., a markdown from face value or principal amount) and typically have maturities of 90 days or less. For longer-term needs, corporations may issue corporate bonds with interest and principal repayment schedules. Banks may go to market short term or long term by issuing interest-bearing jumbo certificates of deposit (CDs), which are like retail CDs (essentially time deposits) offered to individuals but which have denominations of US$100,000 or more. Debt instruments may be privately placed, that is, issued by individual borrowers and then offered directly to selected individual buyers; have a limited placement, that is, offered to a subset of the potential buyers; or as mentioned above, placed on open markets.

Another popular debt instrument is the repurchase agreements (repos), which are agreements entered into by a borrower and lender (technically referred to as party and counterparty) in which one institution will give some sort of collateral such as a government bond for a set price to another and then buy back that collateral at a higher price at some agreed-upon later date. The difference between the sell and buy prices represents the implicit interest cost of the borrowing and if the borrower defaults, the lender gets to keep the collateral.

Institutions may borrow and lend directly to one another without issuing a tradable financial instrument. There are many examples of such markets; for example, there is a large short-term interbank funds market in which banks borrow from and lend unsecured funds to each other through formal and informal networks. In the United States, the U.S. Federal Reserve Bank maintains the Federal Funds Market in which banks can exchange overnight funds with each other (the benchmark borrowing rate being the Federal Funds Rate set by the Federal Reserve). In the United Kingdom and Europe, banks can transact through the London market, where the London Interbank Borrowing Rate (LIBOR), devised by the British Banking Association, is the benchmark rate.

As for equity, in the wholesale context this method of capital raising can take many forms, some of it off formal secondary share exchanges like the New York Stock Exchange. Private equity, in which large blocs of capital are raised from individuals and firms and then invested in business enterprises, either new or existing, is one example. Block share trading, in which institutional investors trade positions in their respective trade portfolios through secondary equity markets, is another example. Hedge funds, which raise capital and take speculative financial positions mostly in derivatives markets, are a third example.

Capital markets in general are global and very large in terms of annual financial flows. The International Monetary Fund estimates that in 2003 the value of the world's financial assets (including stocks, bonds, and other instruments) was more than $119 trillion, amounting to over three times the world's annual gross domestic product (GDP) (although it is not possible to break down this number by wholesale or retail markets as these are not formal but practical terms). The flow of funds moving into and out of markets is even larger than the value of assets at a point in time because it represents turnover of assets. For flows between banks alone considering only cross-border flows (i.e., across international borders), the Bank for International Settlements (BIS) estimated such flows at $28.5 trillion for the first quarter of 2007. This considerable number does not include domestic bank flows or nonbank flows.

In general, these large capital movements are salutary, providing necessary liquidity and financing for the world economy, but there are a number surrounding them. In particular, international regulation of wholesale financial markets to ensure stability and efficiency is an ongoing concern. Some institutions, such as banks, are heavily regulated by national central banks in their own country of domicile, with an international regulatory framework established through the BIS. There is also generally strong oversight of most share exchanges. But other entities such as hedge funds or private equity conduct largely unregulated large-scale transactions. There is some debate about whether financial regulation is productive or counterproductive, but the general issue of soundness of financial markets is perennial and most agree on the need for some sort of oversight.

Another issue is securitization, which refers to the process of issuing a financial instrument that is based on another, original underlying financial instrument. Securitization in general can allow institutions to generate more return on a given set of financial instruments by creating new tradable obligations to offer to the market. But this process by definition involves leveraging existing leverage (e.g., a mortgage loan, still outstanding, then put into a pool of mortgages with slices of that pool sold again offering principal and/or interest to the new security buyers), which increases risk as well as reward. In the "subprime crisis" in the United States, mortgage loans were packaged in various ways into other financial instruments, many of which turned out to be ultimately very volatile in terms of value and liquidity. The pricing and assessment of this risk has been a major problem in the subprime crisis and continues to be an issue studied by analysts in the field.

See Also: Bank for International Settlements; Capital Adequacy; Central Banks; Cross-Border Trading; Debt-for-Equity Swaps; Debt (Securities); Discount Rate; Equities; Financial Market Regulation; Financial Markets; LIBOR; Retail Capital Markets; Securitization; Subprime Loans.

Bibliography. Bank for International Settlements, *BIS Quarterly Reports* (BIS, September 2007); International Monetary Fund, *Global Financial Stability Report* (IMF, 2006); Maurice Obstfeld and Alan M. Taylor, *Global Capital Markets: Integration, Crisis, and Growth* (Cambridge University Press, 2004); N. E. Weiss, *Government Interventions in Financial Markets: Economic and Historic Analysis of Subprime Mortgage Options* (U.S. Congressional Research Service, 2008).

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Wholesale Sector

Wholesaling bridges the gap between manufacturers and retailers or companies processing goods further, such as food producers. Wholesalers offer services similar to those of retailers but do not serve the end customer. For manufacturers, wholesalers offer access to the markets for selling goods and services, many by offering physical distribution facilities including sophisticated delivery logistics. Wholesalers operate in almost all industries, even distributing gas and electricity as well as package holidays. The main advantages for customers (in comparison to buying from manufacturers directly) are as follows:

- A high level of availability, enabling the reduction of own stock and quick responses to demand shifts
- A wide range of products
- Specialized pricing schemes frequently based on discounts according to monthly or annual buying volume
- Technical support and technical instruction of the customers' employees

Different wholesale formats have emerged in the course of time with varying degrees of importance all over the world:

- General merchandisers offer product assortments relevant to smaller retailers and convenience stores not affiliated with a powerful chain.
- Specialty merchandisers sell a narrow but deep assortment of goods, that is, they offer few categories but a wide range within those categories—for instance, screws and fasteners of all types and sizes, and pet food catering to all breeds and nutritional requirements, in addition to pet accessories, such as collars, leashes, and toys—and focus on certain types of clients. Mostly, wholesalers are well known within their industry and offer additional product-related services.
- Cash-and-carry wholesalers run their core business through selling foods to clients who need to pay immediately (e.g., pub owners or street traders) and handle the delivery on their own. In addition, the cash-and-carry outlets usually offer a wide range of nonfood assortments.
- Truck wholesalers are still common in some parts of the world. They visit their customers regularly in an assigned geographical territory. In contrast to sales representatives, they deliver their products immediately to the business customers.
- Rack jobber wholesalers are similar to truck wholesalers, but rack jobbers are responsible for managing a particular space in the outlets of their clients, for example, in-house magazines or the floor space of a supermarket.
- Drop shippers or brokers do not engage in the physical distribution process but take ownership of the products or services they provide. Drop shippers act as the interface between the customer and the supplier, receiving orders from the former and placing them with the latter, who deliver directly to the customer. Their services are used mostly for large orders to cut down on transportation and handling costs. Brokers, on the other hand, bring buyers and sellers together in a single transaction, do not take ownership of the goods, and are paid on a commission basis.

Drop shippers and brokers base their business on exploiting information not accessible to their clients. Thus, their business models are threatened by the digital information diffusion e-commerce offers . Customers could bypass the wholesale level of the supply chain, but of course, wholesalers aim to broaden their business scope by adding their own internet-based facilities. Interestingly, the concept of wholesaling was developed and the leading wholesale companies were founded in times of the brick-and-mortar business.

More formally speaking, the existence of the wholesale sector is justified by reducing the contact costs, known as the Baligh-Richartz effect. Theoretically, one might even justify several wholesale levels in the distribution chain, if there are enough vendors and customers and if contact costs are substantial. Digital information processing reduces the contact costs. It is worth noting that modern wholesaling is not restricted to exploiting information but adds a new quality of information available to other agents in the markets. The rationale behind the phenomenon is traced back to the assembling of products from different manufacturers. Because the perceived quality of the whole assortment might be tarnished by offering one low-quality item, wholesalers are motivated to strive for just one quality product. Consequently, the fact that the products of a manufacturer are listed or not listed in wholesalers' assortments provides the markets' own quality of information.

Assessment of the most important wholesalers is difficult because different criteria (turnover, number of employees, value of stock shares, etc.) lead to conflicting results. Moreover, some of the criteria are subject to substantial fluctuations (e.g., turnover in different currencies, value of stock shares) and the bigger companies are also engaged in retailing. However, according to the Fortune 500 ranking (in terms of turnover) and the *Financial Times* ranking (in terms of the values of stock shares), wholesalers like Metro AG (Germany), Costco Wholesale (United States), and Cardinal Health (United States) are among the world's leading companies. Moreover, some retail trusts operate wholesale outlets, which are not their core business, for example, Prodirect, Promocash of Carrefour (France), and Wal-Mart (United States). This is common practice in Western-type markets, and currently in eastern European transition economies as well, but the Japanese distribution system has a higher complexity and separates wholesalers rigorously from the final customer.

The warehouse clubs in the United States, for example, Costco, Sam's Club, and BJ's Wholesale Club, are not wholesalers according to the above definition but serve every client willing to be a member of the club—making no distinction between the final customer and the business customer. The clubs charge an annual membership fee. Therefore, they are not relevant for the majority of final customers. Particularly in Europe, general merchandisers and cash-and-carry wholesalers face competition from the discount retail chains, for example, Aldi and Lidl, offering similar or even better value-for-money ratios, but no delivery service related to grocery products.

One of the main strengths of modern wholesalers is their logistic infrastructure, advancing them to an essential element of the supply chain in many industries. By offering a logistics platform, smoothing the demand by accumulating orders from different regions, and providing a sophisticated information processing capacity, they are often the central partner in supply chain management. Information processing is important to avoid an out-of-stock situation and the "bullwhip effect" occurring in markets with volatility of demand because the variance of retailers' orders might be higher than the variance of their sales. Moreover, bar codes and radio frequency identification (RFID) tags increased both the data quality for wholesalers' control of the supply chain and the employees' productivity in the wholesale sector.

See Also: Cardinal Health; Carrefour; Distribution; Electronic Commerce; METRO; Retail Sector; Supply Chain Management; Supply Chain Risks; Wal-Mart Stores.

Bibliography. N. Aldin and F. Stahre, "Electronic Commerce, Marketing Channels and Logistics Platforms—A Wholesaler Perspective," *European Journal of Operational Research* (v.144/2, 2003); H. H. Baligh and L. E. Richartz, "An Analysis of Vertical Market Structures," *Management Science* (v.10/4, 1964); H. L. Lee et al., "Information Distortion in a Supply Chain: The Bullwhip Effect," *Management Science* (v.50/12, 2004); National Retail Federation, *Stores 2008 Global Power of Retailing: Standing out from the Crowd* (Deloitte, 2008); J. Nishimura, "The Linkage of Trades in Terms of Wholesale Business Formats in Japanese Distribution Systems," *Journal of Global Marketing* (v.18/1–2, 2005); R. Wagner, "Contemporary Marketing Practices in Russia," *European Journal of Marketing* (v.39/1–2, 2005).

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Women in Business

While we define women's work as paid and unpaid labor, whether at home, in the community, or in the formal or informal economy, not all work is captured by statisticians. The United Nations Statistics Division does capture both full-time and part-time paid employment. According to the United Nations Development Fund for Women (UNIFEM) 2000 study, by 1997 women comprised over 40 percent of the labor force in eastern and southeastern Asia, sub-Saharan Africa, the Caribbean, and the developed regions, approaching that of men. The largest increase

The country ranking highest in proportion of women in executive positions is France, with 34 percent, a rate that may be related to its strong public child care sector and long school days.

occurred in Latin America, where women constituted little more than a quarter of the labor force in 1980 but made up a third of the labor force in Central America and nearly two-fifths in South America by 1997.

From 1980 to 1997, the proportion of women in the labor force also grew in western Europe and the other developed regions, but remained the same in eastern Europe. While women's labor force participation rates have been increasing in most parts of the world, this is not true of the transitional economies of eastern and central Europe, where employment rates for both men and women have dropped since 1990, as well as in the Middle East and north Africa. As of 2008, the UN Statistical Division data show that women's share of the labor force overall and share of part-time employment have generally continued to increase.

Transitional Economies and the Middle East

While the growth of women's opportunities in the labor market is attributed to economic, social, and institutional forces, the decline of women's opportunities in transitional economies like the Russian Federation or China and in patriarchal societies like those of the oil-producing countries of the Middle East is explained by the same forces. For example, in the Russian Federation, many women have moved from active participation in the formal labor market to the unpaid work of the household. Galina Gvozdeva and Elena Gvozdeva found that young women between the ages of 20 and 29 left the labor force in larger numbers than young men, not to have children or because husbands are insisting they stay home, but because of a lack of suitable jobs. They also found a marked difference in employment levels between urban and rural areas. In rural areas, the number of women who do not work outside the home is 1.6 times higher than in urban areas, and the numbers have increased since 1994 from 22 to 30 percent. The tight job market in rural areas obliges people to be more active in household private farming.

Yuping Zhang et al. looked into the market reforms in China that have brought important changes to employment, most notably replacement of the socialist job placement system with a competitive labor market, the emergence of a private sector and privatization of state-owned enterprises, and the wholesale appearance of the profit motive as an organizing feature in personnel decision making. Their study links gender gaps in employment and earnings to family status. It is only married women and mothers who face significant disadvantages because wives and mothers spend much more time than husbands and fathers doing household chores.

Michael Ross argues that women in the Middle East (as well as women in Azerbaijan, Botswana, Chile, Nigeria, and Russia) are underrepresented in the workforce and in government not because of the strictures of Islam, but because of a culture built around oil and mineral production. He argues that oil production affects gender relations by reducing the presence of women in the labor force, leading to higher fertility rates, less education for girls, and less female influence within the family. Furthermore, he argues that women's absence from the workforce has far-reaching political consequences: when fewer women work outside the home, they are less likely to exchange information and overcome collective action problems; less likely to mobilize politically and to lobby for expanded rights; and less likely to gain representation in government. This leaves oil-producing states with atypically strong patriarchal cultures and political institutions.

Ross's argument challenges a common belief about economic development, namely that growth promotes gender equality, suggesting instead that different types of economic growth have different consequences for gender relations: when growth encourages women to join the formal labor market, it ultimately brings about greater gender equality; when growth is based on oil and mineral extraction, it discourages women from entering the labor force and tends to exaggerate gender inequalities. Furthermore, he suggests that oil extraction has even broader consequences than previously recognized: it not only affects a country's government and economy, but it also affects its core social structures. His argument has potentially important implications for Western energy policies.

Globalization and Democratization

Where women's employment opportunities have grown, this growth has been attributed to globalization and advancing democratization, both of which have encouraged governments to adopt a set of economic policies—from trade liberalization, deregulation, privatization of services to a reduction in state-paid services and employment—which have had an impact on job opportunities available to both men and women.

Dong-Sook Gills and Nicola Piper point to the central role of the state as a political actor facilitating social inclusion and exercising a powerful influence over domestic outcomes, such as unemployment and capital controls, as some governments in east Asia demonstrated during the Asian financial crisis. They argue that democratization is shifting the balance of forces in favor of the political inclusion of popular movements, expanding and enhancing the importance of a progressive program and bringing about the empowerment of new social forces, whether they participate in electoral politics or even the party system, by emphasizing autonomy, self-determination, and direct action. Such democratization demands the prioritizing of social equity over economic growth or private commercial interest. It also requires the will of the state to accept public accountability for the role of protection of societal interests from the depredations of private capital and economic interests. This viewpoint is supported by United Nations Development Fund for Women (UNIFEM) 2000 where the argument is made that women's ability to engage in paid employment is dependent on state policies that encourage or constrain their participation through the provision of affordable healthcare and child care and through the availability of service sector employment in health, education, and welfare.

Demographic Trends

Demographic trends also affect women's work, including fertility, aging, and migration. While the proportion of the working-age population increased slightly between 1950 and 2005 from 61 percent to 63 percent, UNIFEM 2000 estimates a decline to 52 percent is expected by 2050, and in less-developed regions, the proportion of the working-age population is expected to decline slightly, from 61 percent in 2005 to 59 percent in 2050. These trends have implications for employment, for the provision of paid and unpaid health and welfare services, and for unpaid care work.

Developing regions must somehow create jobs for the growing working-age population, while developed regions must find a way to support the care needs of growing numbers of older people. Even developing regions will also face the challenge of an aging population in the not-too-distant future. Even China, with 1 billion people (one-sixth of the world's population), is undergoing rapid demographic change marked by a rapidly aging population as well as exceptionally low fertility. The transition to a market economy has occasioned both rapid economic growth and widespread unemployment. The "one child" policy means that the unemployed older generations have a limited number of children to support them. There is also a marked gender imbalance in the children who are currently being born, based on a preference for sons, with boys significantly outnumbering girls. Among other problems, this will place great strain on the care-giving responsibilities of decreasing numbers of women—unless men become more active providers of care.

Some developing countries have experienced reversals in the demographic transition, mainly because of the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) pandemic. Over the last two decades, life expectancy has decreased dramatically in some sub-Saharan African countries; in South Africa, for example, life expectancy at birth fell from over 60 years in the mid-1990s to slightly over 40 years by 2010. In sub-Saharan Africa, the HIV/AIDS virus affects women in greater numbers and at a younger age than it affects men.

Worldwide, the growing number of young people also has implications for employment creation. The International Labour Organization estimates that unemployment among the young was twice as high or more as unemployment in the total labor force in all regions in 2003. It also estimates that there will be over 500 million new entrants into the global labor force between 2003 and 2015.

Education

International comparisons have demonstrated that female labor force participation is high in low-income countries and highly developed countries, and relatively low in middle-income countries, creating a U-shaped relationship between national income and female participation. J. Sinha first suggested a U-shaped female participation curve, observing that very poor countries have high female participation, which tends to fall during early stages of development. Middle-income countries have relatively low female participation. At the other extreme, highly developed countries also have high levels of female participation. Sinha attributed the downward portion of the U-shaped curve to a decrease in female agricultural work during shifts to urbanization and nonagricultural production. The upward portion of the U-shaped curve occurs when women return to the labor force at advanced stages of development to fill service sector jobs. Theorists have attributed this relationship to changes in labor market structure, social norms regarding the nature of women's work, and cultural factors such as religion, social mobility, and family structure.

A study by Jane Lincove focuses on the important intervening effect of female education in the relationship between economic growth and female labor force participation. In the past 30 years, developing countries have invested significant resources to expand female schooling. Since girls' education is a preferred policy strategy to promote development, Lincove argues that it is important to examine how investment in education influences labor markets. If female education results in greater productivity at home, investments may accelerate the decline in female participation. Alternatively, if female education increases labor market opportunities for women, investments may counteract the negative effects of initial economic growth.

Lincove's study adds to the understanding of the role of women in developing countries over time by integrating theories of education, labor, and growth in longitudinal analysis. Her results support previous conclusions about the U-shaped relationship between wealth and female labor force participation. However, controlling for country-specific fixed effects, the negative effect of initial economic growth is small, and female schooling is positively related to female labor force participation over time. If expansion of female education accompanies economic growth, developing countries will most likely see little or no decline in female labor force participation as growth progresses. Simulations suggest that low-income countries are likely to see increases in female participation when economic growth is accompanied by investments in girls' education.

The effects of female schooling are particularly important for policy makers because promoting girls' education is a central development strategy to increase household productivity by reducing fertility and improving child health, as well as a strategy to build the labor force. For many countries, female education has changed dramatically during periods of economic growth. Female primary school enrollment rates in developing countries have increased from 52 percent 30 years ago to 88 percent today. Growth in individual countries from all regions has been very impressive.

To cite a few examples provided by Lincove, Algeria increased girls' secondary enrollment from 6 percent in 1970 to 73 percent in 2000; Brazil increased from 26 percent in 1970 to full enrollment in 2000; South Korea increased from 32 percent in 1970 to 94 percent in 2000, the result of explicit policies to increase girls' education. Mexico's Programa de Educación, Salud y Alimentación (PROGRESA) program, which provides stipends for school attendance, is credited with increasing girls' primary completion by 15 percent; a scholarship program for girls in Bangladesh is credited with almost doubling female enrollment; and Indonesia has reached 90 percent enrollment for girls through a program with a focus on building new schools that meet the specific educational needs of girls. Countries that have not invested in girls' education have experienced limited growth. Girls' secondary enrollment remains below 20 percent in Pakistan, Cambodia, and many sub-Saharan African countries.

National Institutional Context

Becky Petit and Jennifer Hook examine whether and how the demographic and economic causes of women's employment vary with the national institutional context. Their argument suggests that national institutional arrangements affect the wage-labor exchange for specific subgroups of women, and thus influence the propensity to engage in paid labor. They investigate the utility of thinking about maternity leave, parental leave, and publicly supported child care as separate institutional arrangements that may influence the labor market decisions of women. Rather than focus on overall policy packages or welfare state typologies, they attempt to disentangle how different policy conditions and configurations influence the employment patterns of different groups of women.

While generous maternity leave policies may be associated with continuous attachment to the labor force after the birth of a child and the costs of leave taking are shared across social and demographic groups, in contrast, costs are highly individualized in countries without maternity leave provisions. In countries such as the United States and Australia, with no national paid maternity leave and very little publicly provided child care, the costs of having children are highly individualized as families negotiate private solutions for balancing work and family. In other countries, even though spending on family policy may be relatively generous, the configuration of benefits reinforces the traditional breadwinner-homemaker model. Extensive parental leaves, particularly in the absence of public or private supports for child care, may encourage women to stay out of the labor force and combine work and family sequentially rather than simultaneously. Extensive parental leave coupled with few other child care options may encourage women to stay at home to care for children while men work in the paid labor force.

Since 1990, almost 95 percent of eligible women in Austria take advantage of parental leave, and only a minority of mothers who take parental leave return to work immediately after taking leave. At the same time, there are few public child care facilities for very young children and sizable geographic variation in child care availability. Similarly, through the 1980s and 1990s, legislation had extended the length of parental leave available to West German parents and by 1989, parents were entitled to 12 months of parental leave with job protection. Parental leave has since been extended to more than two years, but despite generous parental leave policies, there is a substantial shortage of publicly and privately funded child care in the former West Germany so the birth of a child often necessitates one parent, usually the mother, to exit the labor force and provide at-home care. Hungary and the Czech Republic provide additional examples of countries that also combine relatively long parental leaves of three and four years, respectively, with low levels of public child care provision.

Structural accounts of women's labor force decisions suggest that the presence of children will be negatively associated with the probability of employment. The presence of children raises the costs associated with women's employment largely because of the need for child care during work hours. Public provision of child care not only reduces the financial burden of child care for mothers with preschool children, but it also reduces the costs of finding care, and indicates the social acceptability of nonmaternal or parental child care and shifts the financial burden of child care from individual mothers to all workers.

Several countries in Petit and Hook's data set provide generous child care in support of working women. Denmark has historically placed a premium on providing publicly funded child care. Publicly funded day care is regarded as a public responsibility and a necessity for maintaining high employment. France's universal approach to child care and early childhood education is long-standing and based on a pragmatic approach that supported women's labor force participation. From a theoretical standpoint, the Petit and Hook research suggests that there is clear evidence in support of the effects of parental leave and public child care provision on the employment decisions of women.

Egalitarian Wage Structures, Family Policies, and Earnings Disparities

In their study of 20 countries, Hadas Mandel and Moshe Semonyonov found that earnings disparities between male and female workers are less pronounced in countries with developed family policies, but it is not the family policies but their more egalitarian wage structures that lower earnings differentials between men and women in developed welfare states. In general, the earnings gap between men and women tends to be more pronounced in the liberal market economies of English-speaking countries than in the corporatist economies of continental Europe and Scandinavia.

As compared with liberal market economies, the corporatist economies tend to be characterized by more generous social policies (which protect workers' social rights), by more developed family policies (which support mothers' economic activities and employment rights), and by more comprehensive coverage of collective agreements (which protect workers' earnings and work conditions). Long parental leaves, reduced working hours, and tolerance toward absenteeism from work all are examples of family policies that, while increasing female participation and strengthening women's ties to the labor market, can also harm their economic attainments either directly by lowering their labor market experience and time devoted to paid work or indirectly by encouraging employer discrimination. Although the main objectives of family policies are to facilitate women's employment and to protect their rights, long absence from paid employment may reduce women's earning capacity by lowering their employment continuity and work experience. Mothers, not fathers, are most likely to use parental leaves and to reduce time devoted to paid work when children are young. Hence, long parental leaves are likely to lower women's work experience and undermine their earnings capacity.

Women and Advancement

In a study of work/life balance programs in Europe and their impact on women's career advancement, Caroline Staub finds that although women have made great strides in the job market, their increased employment has not reduced vertical gender segregation within the organizational hierarchy. On average, women, for all countries she studied, held 32 percent of manager positions and only 20 percent of executive positions.

Countries ranking above the average for women managers are France, Austria, Spain, Sweden, the United Kingdom, Ireland, and Finland, whereas countries ranking below the average are Germany, Italy, Greece, the Netherlands, Denmark, and Portugal. The proportion of executive positions filled by women is also above average in Finland, the United Kingdom, Ireland, France, Greece, and Italy, and below average for Portugal, Denmark, Spain, Austria, Belgium, the Netherlands, and Germany. Except for Austria, the United Kingdom, Ireland, and Germany, there was a big gap between the percentage of female managers and female executives.

In the case of Austria, women hold 39 percent of manager positions but only 15 percent of the executive positions. This might indicate a strong male-biased corporate culture hindering women's advancement. Another explanation might be that well-educated women do not stay long enough in the pipeline to be selected for executive positions in these countries. Although Italy and Greece are traditionally based on the model of men as breadwinners and women as caregivers, they show high percentages of women executives. This may be explained by the fact that these countries lack well-educated employees. Therefore, well-qualified women are in high demand. In addition, these countries are known for their strong family structure and cheap domestic services, both of which lighten the burden of child care and household tasks. This, in turn, may make it easier for women to spend more time on their jobs and strive harder for career success.

While Germany, Austria, and the Netherlands have high rates of women university graduates, they have the lowest share of women in executive positions. It seems that these countries still retain the traditional gender roles in which men are expected to be breadwinners and women to be housewives. This suggests that stereotyping based on gender may be higher in these countries, affecting selection, performance evaluation, training procedures, and overall corporate cultures. As a result, women are put in less strategic positions. Moreover, these countries are known for their lack of state support in child care, which can penalize women in their careers. The Nordic countries such as Finland, Sweden, and Denmark do not, contrary to expectations, possess significantly higher percentages of management and executive positions filled by women. Findings for France show a high percentage of women managers and a high percentage of women executives in companies. In fact, France ranks first for the proportion of women in executive positions (34 percent). Hence, one might conclude that France's strong public child care sector and its long school days seem to be extremely successful in promoting women's career advancement.

Staub's results suggest a number of avenues of further research. First, dramatic economic and social changes in eastern Europe and policy shifts in much of western Europe suggest the need to investigate how changes in the economy and public policy affect women's employment. Her paper has investigated the relationship between macroconditions and women's employment in the cross-section, but important variation over time could be exceptionally revealing. Additional research should further investigate the role of social and political organizations such as the presence of unions and bargaining centralization on the determinants of women's employment. Finally, future research should investigate the relative importance of structural and institutional conditions on women's involvement in part-time work, occupational sector, and earnings. Initial research suggests that a more thorough accounting of the relationship between structural and institutional determinants of women's labor force participation is necessary for understanding cross-national variation in women's economic progress.

See Also: Cross-Cultural Research; Culture-Specific Values; Economic Development; Family Leave; Maternity Leave; Self-Employed Women's Association, India; Stereotyping; Working Hours; Work/Personal Life Balance.

Bibliography. Dong-Sook S. Gills and Nicola Piper, *Women and Work in Globalizing Asia* (Routledge, 2002); Galina Gvozdeva and Elena Gvozdeva, "Women's Path in the Transitional Economy of Russia: From Unpaid Work to Business," *Canadian Woman Studies* (v.21,22/4,1, 2002); Jane Arnold Lincove, "Growth, Girls' Education and Female Labor: A Longitudinal Analysis," *Journal of Developing Areas* (v.41/2, 2008); Hadas Mandel and Moshe Semyonov, "Family Policies, Wage Structures, and Gender Gaps: Sources of Earnings Inequality in 20 Countries," *American Sociological Review* (v.70/6, 2005); Jane L. Parpart et al., *Rethinking Empowerment: Gender and Development in a Global/Local World* (Routledge, 2002); Becky Petit and Jennifer Hook, "The Structure of Women's Employment in Comparative Perspective," *Social Forces* (v.84/2, 2004); Michael L. Ross, "Oil, Islam and Women," *American Political Science Review* (v.102/1, 2008); Caroline Straub, "A Comparative Analysis of the Use of Work-Life Balance Practices in Europe; Do Practices Enhance Females' Career Advancement?" *Women in Management Review* (v.22/4, 2007); United Nations Development Fund for Women (UNIFEM), *International Status Report* (UNIFEM, 2000); Yuping Zhang et al., "Gender-Based Employment and Income Differences in Urban China: Considering the Contributions of Marriage and Parenthood," *Social Forces* (v.86/4, 2008).

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Working Hours

Working hours refers to the time spent by individuals in paid market work. Differences in working hours across populations arise from difference in the share of individuals that are employed (the extensive margin) and the number of hours worked by each employed individual (the intensive margin). Over recent decades in industrialized nations, average hours of work per person have tended to rise. The increase in average working hours has been the result of growth in the share of the population employed, particularly the rise in women's rates of employment. The number of hours worked per employee has changed less, and in some nations, average hours of work per employee have declined.

Average annual working hours in the United States at present exceed those in European countries by about 50 percent. This is a relatively recent development. In the early 1970s, western Europeans worked more on average than Americans. Since then, the increase in employment rates in the United States has outpaced that in western Europe, and American working hours have significantly overtaken those in Europe. The productivity per hour of American workers remains similar to that of European workers. Much of the explanation for the greater per capita output of the United States compared to many European workers therefore lies in the greater number of hours worked per year by Americans.

Changes Over Time

In the United States, average weekly hours worked per person declined about five or six hours per week on average over the 20th century. Hours worked per worker declined more, about 16 hours per week, but this was offset by an increase in the rate of employment. Most of the decline in the hours worked per person has been concentrated among the young and the old, with the hours worked per person of prime-age individuals (those between 25 and 54 years of age) remaining roughly constant from 1900 to the present.

Despite the decline in the average hours worked by those employed in the United States, the notion of "overwork" arises frequently in popular and academic discourse, for example, in Juliet Shor's widely cited book *The Overworked American*. One possible explanation is the growing share of dual-earner and single-parent families. In the United States, the share of couples in which both husband and wife work rose from roughly one-third in 1970 to more than half by the year 2000. Single-parent and dual-earner families with children are more likely to experience challenges in balancing the demands of work against those of family.

In recent decades, the average hours worked by men has declined while the average hours worked by women has risen. A growing share of men is opting for earlier retirement. This, along with an increase in education levels, which delays men's entrance into the labor force, has reduced the hours that men work over the life span. Women, on the other hand, have increased their working hours over the life span. Women's labor force participation rates rose steadily over the course of the 20th century. The increase in the labor force participation rates of married women has been particularly marked since 1960.

Factors Affecting Working Hours

Several factors contribute to the difference in working hours across nations and individuals. Higher wages increase the incentive to work. Real wages in the United States, for example, increased roughly ninefold over the 20th century. While some economists, such as Keynes, predicted that increases in wages and productivity would enable individuals to increase their leisure time, it appears that despite higher hourly wages, Americans do not choose to significantly reduce their time spent in paid employment.

Higher marginal income tax rates are thought to decrease the incentive to participate in paid work and are cited as one explanation for lower hours of work in Europe relative to the United States. Retirement benefit policies have a significant effect on decisions regarding employment. National policies regarding vacation time and hours of work, such as the French 35-hour week, contribute to cross-country difference in working hours. Unionization and consequent regulations regarding pay and hours of work impact working hours. The presence of children as well as child care policies have a significant impact on employment rates, particularly among women. Education levels affect time in employment, with higher education levels associated with longer working hours.

See Also: Compensation; Holidays; Salaries and Wages; Women in Business; Work/Personal Life Balance.

Bibliography. Tito Boeri, Michael C. Burda, Francis Kramarz, and Pierre Cahuc, *Working Hours and Job Sharing in the EU and USA: Are Europeans Lazy? or Americans Crazy?* (Oxford University Press, 2008); Orsetta Causa, *Explaining Differences in Hours Worked among OECD*

Countries: An Empirical Analysis (OECD, 2008); M. Coleman and J. Pencavel, "Changes in Workhours of Male Employees, 1940–1988," *Industrial and Labor Relations Review* (v.46/2, 1993); M. Coleman and J. Pencavel, "Trends in Market Work Behavior of Women Since 1940," *Industrial and Labor Relations Review* (v.46/4, 1993); Institute of Directors, *Flexible Working: The New World of Work*, IoD Policy Paper (Institute of Directors, 2008); J. Jacobs and K. Gerson, "Overworked Individuals or Overworked Families?: Explaining Trends in Work, Leisure, and Family Time," *Work and Occupations* (v.28/1, 2001); E. McGrattan and R. Rogerson, "Changes in Hours Worked Since 1950," *Federal Reserve Bank of Minneapolis Quarterly Review* (v.22/1, 1998); Kim Miller, Fred Danner, and Ruth Staten, "Relationship of Work Hours with Selected Health Behaviors and Academic Progress among a College Student Cohort," *Journal of American College Health* (v.56/6, 2008); G. Paull, "Children and Women's Hours of Work," *The Economic Journal* (February 2008); E. Prescott, "Why Do Americans Work So Much More Than Europeans?" *Federal Reserve Bank of Minneapolis Quarterly Review* (v.28/1, 2004); Henry Saffer and Karine Lamiraud, *The Effect of Hours of Work on Social Interaction* (National Bureau of Economic Research, 2008).

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Changing roles for men and women have complicated the management of work/personal life balance in recent decades.

Work/Personal Life Balance

Managing the demands of both work and personal life has become an important challenge facing most people today, and there has emerged a growing focus on workplace policies geared toward enhanced work/personal life balance. During the span of the past quarter to half century, rapid change in the composition of the family unit, the nature of work, and the function of the worker have together made the concept of work/personal life balance increasingly popular. Yet, settling on a universal or decided definition of work/personal life balance has proven to be an elusive goal of researchers, managers, and employees. This is because the term *balance* does not necessarily indicate that equal amounts of time and effort are dedicated to the demands of both areas of responsibility. Defining what effectively constitutes work/personal life balance has nevertheless become the source of much inquiry throughout the workplace and among the workforce.

One reason for this relatively recent phenomenon is that work life and personal life had been historically treated as independent areas of study. Plenty of social science, business, and related literature regarded work and personal life, or "home life," as two separate domains in which an individual could function productively in one domain without undue influence from or on the other domain. But by the mid-to-late 20th century, this concept was increasingly eroded by theories that argued for a link between thoughts, feelings, and behaviors in people's work and personal lives.

Although there exist various models of work/personal life balance, they generally accept that work has an impact on home life and vice versa. Among one strand of assumptions is that what occurs in one domain can positively or negatively influence—or "spill over" to—the experiences, behaviors, and attitudes in the other domain. A similar, though separate, set of research proposes that any needs, experiences, pleasures, and the like that lack in one domain could be compensated for in the other domain. An additional model advocates that one domain is a means by which to facilitate or obtain effects in the other domain. This model finds its philosophical underpinnings in the works of John Dewey, Émile Durkheim, and Robert Merton, who largely claimed that a certain environment or things within an environment can be used as tools to achieve an outcome or solve a problem in another environment. For instance, work could serve as a means to achieving a certain standard of living or quality of life. Examples aside, yet another model views work/personal life balance as a "conflict." This suggests that the norms of both highly demanding domains are incompatible to a point that the individual must make sacrifices in one domain to satisfy requirements in the other domain.

While such models of work/personal life balance differ to some extent, they each seek to provide an understanding of the relationships and causes and responses that result in whatever balance between the work and home-life domains. But where research to support these propositions exists, the efforts to confirm or refute such models have not yielded consistent results because application of each model is rather contingent on the range of individual and situational factors within the numberless workplaces. So it is that another branch of literature, which has examined the boundaries between work and personal life, could contribute to a better understanding of work/personal life balance. The frameworks from this body of knowledge convey the substance of the many roles that an individual is likely to juggle between work and personal life.

Today, many individuals conceive the border between work and personal life across a personally established continuum. Some people choose to allocate most of their time and effort to work whereas others focus more on personal life; a good many seek to invest highly in both roles. Different workplaces have their own sets of cultures, patterns, and processes, which means they each give varying degrees of purpose and respect to the employee. For example, one workplace may reward long hours and self-neglect, while the values of its competitor may be diametrically opposed; such dimensions could well be the case even among departments in the same organization. Yet, even in places where the demands of work-related tasks and responsibilities are clear, formal lines between work and personal life remain ambiguous. For instance, when does commuting time to and from work fall under the work domain versus the personal life domain? When does reading a newspaper constitute a work or personal life activity? When does volunteer work in the local community correspond to one's work rather than personal life pursuits?

The growing confusion over the work/personal life relationship has been attributed to a number of social transformations, including a marked increase in the number of dual-earning families and an increase in the number of single-parent households. Much of contemporary society has in numerous ways shied away from the traditional family life in which males gave precedence to work over home-life demands, leaving the female partner to tend to home-life demands and to adapt any career pursuits accordingly. Such relatively new social factors have had a permeable and significant impact on the global workforce, and have led to an upheaval in the establishment and management of work/personal life boundaries.

That there tends to be an effective incompatibility between the frequency, intensity, and time commitment across people's work and personal life roles means achieving a precise definition of work/personal life balance is a stable and complex challenge. Although research and insight into this and similar workforce issues is being consistently developed throughout the world, what is already known underscores the importance of considering individual differences in the context of balancing work and personal life.

See Also: Compensation; Family Leave; Holidays; Maslow's Hierarchy of Needs; Maternity Leave; Motivation; Women in Business; Working Hours.

Bibliography. J. T. Bond et al., *The 2002 National Study of the Changing Workforce* (Families and Work Institute, 2002); J. E. Champoux, "Perceptions of Work and Nonwork: A Reexamination of the Compensatory and Spillover

Models," *Sociology of Work and Occupations* (1978); James G. Clawson, *Balancing Your Life Executive Lessons for Work, Family and Self* (World Scientific, 2009); P. F. Drucker, *The New Realities* (Transaction Publishers, 2003); R. M. Kanter, *Work and Family in the United States: A Critical Review and Agenda for Research and Policy* (Russell Sage Foundation, 1977); "Work-Life Balance: Readers Opine on How to Get a Life," *BusinessWeek* (v.36, 2008); S. Zedeck and K. Mosier, "Work in the Family and Employing Organization," *American Psychologist* (v.45/2, 1990); R. Zemke et al., *Generations at Work: Managing the Clash of Veterans, Boomers, Xers, and Nexters in Your Workplace* (American Management Association, 2000).

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World Bank, The

The World Bank has more than 60 years of experience in aiding developing countries and is a primary institution in governing the globalization process. In 2007 the World Bank provided US$23.6 billion for 279 projects in developing countries all over the world. The bank is currently involved in more than 1,800 projects in virtually every sector and developing country. The projects cover a very wide spectrum such as providing microcredit in Bosnia and Herzegovina, raising acquired immunodeficiency syndrome (AIDS)–prevention awareness in Guinea, supporting female education in Bangladesh, improving healthcare delivery in Mexico, and helping East Timor rebuild upon independence and India rebuild Gujarat after a devastating earthquake.

The World Bank's headquarters is in Washington, D.C., and its staff is composed of approximately 10,000 employees. The World Bank was established on July 1, 1944, during the Bretton Woods conference. Its resources come from all developed countries, considering their national wealth. The fact of being part of the globalization process does not reduce the role of the Bank. It has shown its ability to adapt to changes in the international financial system. The flexibility of the institution is its main advantage in maintaining a position of leadership among multilateral organizations.

The origins of the World Bank, its organization, and its interventions are the three main aspects to understanding this institution. The original core of the World Bank was composed of the International Bank for Reconstruction and Development (IBRD), which was created together with the International Monetary Fund (IMF) and became operative in 1946. The IBRD was created with the dual goal of aiding the reconstruction of countries that were damaged by World War II and promoting the progress of developing countries. Since the second half of the 1950s, the sound economic growth of western European countries and Japan and the end of colonialism had rapidly moved the center of the action of the Bank. In fact, the organization directed its attention from the financing of postwar reconstruction to aid toward developing countries. The first loans were at a market rate but with long terms of expiration. These loans mainly financed investment projects with the aim of increasing capital accumulation. Only in the 1960s and with the increasing number of recently independent countries that were poor both in capital and in technology did the World Bank start to give technical assistance alongside financing.

During the first years of activity, it became evident that the investments in high-cost infrastructures could not be done at market conditions. Therefore, in 1960, the need to finance at favorable conditions was realized by the International Development Agency (IDA), which together with the IBRD is part of the World Bank Group.

The goal of financing the private sector is forbidden to the World Bank by its statute. However, those limits were avoided by the creation of the International Finance Corporation (IFC) in 1956. Ten years later, the International Center for the Settlement of Investment Disputes (ICSID) was created with the aim of protecting direct investments to developing countries in disputes with multinational corporations and national governments. In its entirety, the World Bank is a financial conglomerate active in many fields from loans at market conditions to governments (IBRD), interest-free loans (IDA), to the private sector (IFC) and the settlement of investment disputes (ICSID).

For the last 60 years, the focus of the activity of the World Bank has been concentrated in two domains: technical consultancy and lending. Technical assistance and analysis of development policies are closely

The World Bank's more than 1,800 projects worldwide, such as the financing of this manioc-processing cooperative in rural northeast Brazil, aim to encourage economic development and reduce poverty through a variety of approaches.

related. The selection of priority areas toward which the limited resources of the Bank are allocated is the result of the study of development strategies at a global, regional, and national level. The simulation of long-term perspectives of the integration of the world economy (global economic prospect) shows a typical analytical contribution of the Bank in the selection and evaluation of development policies. For example, the effects of stopping aid to sub-Saharan Africa is considered to cause a reduction of more than 0.5 percent of economic growth and it justifies the concentration of aid in that region. The global nature of the members of the Bank and the long tradition of analysis of development are the main reasons why the Bank is considered a center of excellence whose studies are a point of reference in the debate on the reduction of poverty. The analysis is basically operative and its goal is to identify effective development policies to close the gap between rich and poor countries.

The activity for which the Bank was originally established is the financing of countries that do not have access to capital markets. Thanks to the commercial and financial liberalizations, capital markets have been growing in the last 40 years. During the financial crises at the beginning of the 1980s and at the end of the 1990s, financial and multilateral institutions had a stabilizing role compensating in part the interruption of financial flows to developing countries. On the contrary, in the last three years, the expansion of global liquidity has sustained the growth of direct investments. This fact has led many countries to an early closing of their position with the World Bank and the IMF. Furthermore, the Bank contributes to the stabilization of financial flows to developing countries protecting the poorest countries from the volatility of capital markets. Recently, the Bank has been gradually reducing its financial role of supporting developing countries. However, it is not possible to conclude whether it is a cyclical or structural phenomenon because of the current situation in the international financial markets.

Fighting poverty requires a relevant intervention both in terms of infrastructures and in terms of legal norms. The cost for the construction of roads, schools, and hospitals is as relevant as that of training teachers, physicians, and bureaucrats. The necessary means are often insufficient for poor countries and, therefore, the international community provides them through interest-free credits and grants. Of the entire amount of aid to developing countries, almost 70 percent comes directly from rich countries (bilateral assistance), while 30 percent is given by international institutions such as the United Nations or the World Bank (multilateral assistance). At the same time, the World Bank increases its capital with the emissions of bonds on financial markets.

The financial flows of development assistance have constantly grown in the last 10 years and in 2005 reached US$105 billion. However, only 64 percent of this amount is for investments, while the rest counts as debt cancellation. The World Bank tries to coordinate development aid due to the fragmentation and proliferation of funds, that is, there are more than 230 international organizations whose main activity concerns development.

See Also: Bretton Woods Accord; Bretton Woods Institutions; Development Assistance; Globalization; International Monetary Fund.

Bibliography. Varouj A. Aivazian and Eric Santor, "Financial Constraints and Investment: Assessing the Impact of a World Bank Credit Program on Small and Medium Enterprises in Sri Lanka," *Canadian Journal of Economics* (v.41/2, 2008); Patricia Clarke Annez, Gwénaelle Huet, and George E. Peterson, *Lessons for the Urban Century: Decentralized Infrastructure Finance in the World Bank* (World Bank, 2008); Ariel Buria, *The IMF and the World Bank at Sixty* (Anthem Press, 2005); "Finance and Economics—Economics Focus—How Good Is the World Bank's Research?" *Economist* (v.382/8511, 2007); Devesh Kapur et al., *The World Bank: Its First Half Century* (Brooking Institution, 2005); The World Bank, *Global Economic Prospect* (The World Bank, 2007).

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World Customs Organization

The World Customs Organization (WCO) is an intergovernmental organization that helps members (governments usually represented by customs administrations from 173 countries) communicate and cooperate on customs issues. It was established in 1952 as the Customs Cooperation Council, and it adopted its current name in 1994. The WCO is now recognized as the voice of the global customs community.

The WCO is particularly noted for its work in areas covering the development of global standards, the simplification and harmonization of customs procedures, trade supply chain security, the facilitation of international trade, the enhancement of customs enforcement and compliance activities, anticounterfeiting and piracy initiatives, public-private partnerships, integrity promotion, and sustainable global customs capacity-building programs. The WCO also maintains the international harmonized system goods nomenclature, and administers the technical aspects of the World Trade Organization (WTO) agreements on customs valuation and rules of origin.

Headquartered in Brussels, Belgium, the WCO has established an international standard classification of commodities called the Harmonized Commodity Description and Coding System, which is used to classify goods for tariff (taxes) purposes and the application of tariffs. The WCO has 170 members and the current secretary general is Michel Danet (1999–present) from France.

The WCO's activities and mission can be summarized as follows:

- The WCO is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of customs administrations.

- The WCO represents 173 customs administrations across the globe that collectively process approximately 98 percent of world trade.
- The WCO's governing body—the Council—relies on the competence and skills of a secretariat and a range of technical and advisory committees to accomplish its mission. The secretariat comprises over 100 international officials, technical experts, and support staff of some nationalities.
- As a forum for dialogue and exchange of experiences between national customs delegates, the WCO offers its members a range of conventions and other international instruments, as well as technical assistance and training services provided either directly by the secretariat or with its participation.
- The WCO combats fraudulent activities internationally.
- The WCO's mission is to enhance the protection of society and national territory, and to secure and facilitate international trade.

The following historical time line covers many of the major developments in the WCO's history:

1947 WCO activities began when the 13 European governments represented in the Committee for European Economic Cooperation agreed to set up a study group. This group examined the possibility of establishing one or more inter-European customs unions based on the principles of the General Agreement on Tariffs and Trade (GATT).

1948 The study group set up two committees—an Economic Committee and a Customs Committee. The Economic Committee was the predecessor of the Organisation for Economic Co-operation and Development (OECD); the Customs Committee became the Customs Co-operation Council (CCC).

1952 The convention formally establishing the CCC came into force. The Council is the governing body of the CCC and the inaugural session of the Council was held in Brussels on January 26, 1953.

1953 The inaugural session of the CCC Council was held in Brussels on January 26 in the presence of representatives of 17 European countries. This date is now celebrated annually as International Customs Day.

1974 The International Convention on the Simplification and Harmonization of Customs procedures (Kyoto Convention) entered into force on September 25.

1980 The Convention on Mutual Administrative Assistance in the Prevention, Repression, and Investigation of Customs Offences (Nairobi Convention) entered into force on May 21.

1988 The WCO's International Convention on the Harmonized Commodity Description and Coding System (HS Convention) entered into force on January 1.

1993 The WCO Council adopted the Arusha Declaration on Customs Integrity.

1994 The Council adopted the working name World Customs Organization.

1999 The WCO Council adopted the revised International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention).

2002 The WCO celebrated its 50th anniversary and was honored with a visit by King Albert II of Belgium accompanied by Didier Reynders, the Belgian deputy prime minister and minister of finance.

2003 The WCO Council adopted the Convention on Mutual Administrative Assistance in Customs Matters (Johannesburg Convention) in July.

2005 The WCO Council adopted the Framework of Standards to Secure and Facilitate Global Trade.

2006 The WCO launched the Columbus Program, the largest-ever customs capacity-building initiative committed to support implementation of the Framework Standards to Secure and Facilitate Global Trade. The Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures entered into force.

2007 The 2007 version of Harmonized System entered into force on January 1.

See Also: General Agreement on Tariffs and Trade; Organisation for Economic Co-operation and Development; World Bank, The; World Trade Organization.

Bibliography. Philip Damas, "Global Security Controls on Supply Chains: World Customs Organization Adopts International Security Standards That Complete U.S.-Led Bilateral Initiatives," *American Shipper* (v.45/8, 2003); "Going Global with Security: The World Customs

Organization's Leadership Believes Industrialized Countries Have an Obligation to Lend a Hand to the Customs Administrations of Developing Nations That Want to Improve the Security of Cargo Crossing Their Borders," *American Shipper* (v.48/1, 2006); P. L. Hsieh, "Facing China: Taiwan's Status as a Separate Customs Territory in the World Trade Organization," *Journal of World Trade* (v.39/6, 2005); T. T. Matsudaira, "Trade Facilitation, Customs and the World Customs Organization Introduction to the WCO Trade Facilitation Instruments," *Global Trade and Customs Journal* (v.2/6, 2007); John Raven, "Customs at the Frontier Crossroads: World Customs Organization and Its Management Are Taking on Greater Importance for Governments, Businesses," *American Shipper* (v.45/2, 2003); D. Rovetta, "The European Community Joins the World Customs Organization: Time to Create a WCO Dispute Settlement Mechanism?" *Global Trade and Customs Journal* (v.3/1, 2008); World Customs Organization, www.wcoomd.org (cited March 2009); World Trade Organization, www.wto.org (cited March 2009).

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World Health Organization

Established on April 7, 1948, the World Health Organization (WHO) is an agency of the United Nations (UN), with its headquarters in Geneva, Switzerland. It inherited the mandate and also the resources of its predecessor, the Health Organization, which had been an agency of the League of Nations. At the International Health Conference that took place in mid-1946, an interim commission had been established, and the UN General Assembly agreed on the transfer of these operations to the WHO. The WHO agenda involves six objectives: promoting development; fostering health security; strengthening health systems; harnessing research, information, and evidence; enhancing partnerships; and improving performance. Its symbol is the official United Nations emblem with the rod of Asclepius, the traditional symbol of medicine, and it uses Arabic, Chinese, English, French, Russian, and Spanish as its official languages.

The first director-general of the WHO was Brock Chisholm from Canada, who remained in office until 1953. The second director-general, Marcolino Gomes Candau from Brazil, held office from 1953 until 1973. During the tenure of these first two directors-general, the WHO was involved in operating throughout the world in the eradication of diseases such as malaria and polio. It was also heavily involved in the campaign against smallpox, with mass inoculations around the world that saw the WHO being able, in 1980, to finally declare that the disease had been totally eradicated, making it the first disease ever to be totally eliminated by human work. The WHO is now planning to concentrate on polio.

The next five directors-general were Halfdan T. Mahler from Denmark (1973–88), Hiroshi Nakajima from Japan (1988–98), Gro Harlem Brundtland from Norway (1998–03), Lee Jong-wook from South Korea (2003–06), and Anders Nordström from Sweden (2006). The current director-general is Margaret Chan from Hong Kong, who took up the position on January 4, 2007.

The role of the directors-general has been to continue the advances that led to the eradication of smallpox, and they have worked on helping to reduce the proliferation of human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), severe acute respiratory syndrome (SARS), and other diseases and infections through the distribution of vaccines and greater health education. They are also involved in undertaking and sponsoring clinical trials on medical procedures and medication including problems that might arise from electromagnetism from the use of cell phones and the increasing prevalence of obesity in the world. Other ongoing projects of the WHO include the International Classification of Diseases with the provision of a database to assist doctors, other medical practitioners, and patients. In addition, the WHO has produced numerous reports on the influence of tobacco smoking on disease and other epidemiological studies.

Currently, there are 193 member states in the WHO, which includes all UN member states with the exception of Liechtenstein. It also has a few entities with observer status such as the Holy See (Vatican City) and the Palestine Liberation Organization. Niue and Cook Islands, even though they are not independent (both are self-governing in association with New Zealand), are members of the WHO. For administrative purposes, the WHO is divided into six regions: Africa, run from Brazzaville, Congo; the Americas, run from Washington, D.C.; the Eastern Mediterranean, run from Cairo, Egypt; Europe, run from Copenhagen, Denmark; Southeast Asia, run from New Delhi, India; and the Western Pacific, run from Manila, the Philippines.

Economic Role

The importance of the WHO in the global economy can be measured for a number of reasons. On the very basic level, the WHO purchases vast supplies of pharmaceuticals and clinical equipment, employing directly or indirectly tens of thousands of doctors, nurses, researchers, and other medical industry professionals who study, document, and tabulate problems, and also treat people in the form of inoculations or provide other treatment. This is particularly important in poorer countries, especially in Africa and parts of Asia and Latin America where much of the provision of preventive medical care comes from the WHO. The provision of WHO statistical information system (WHOSIS) provides access to 70 core indicators on mortality, risk factors, and health systems, among other things, which has helped planning for the problems facing particular places. Much of this information is now available on the WHO internet site along with the global health atlas and extensive regional statistics.

However, the role of the WHO is far more important, as it helps promote particular forms of healthcare, either through its actions or its reports. These have been influential in providing the basis for medical research around the world and also detailing guidelines that many countries have followed in the introduction of preventive campaigns. Although such activities should not be measured in economic terms, the better health of so many people around the world has vastly helped with the global economy and increased the world population and provided hope to so many previously impoverished people. Indeed, the WHO has seen itself as being in the forefront of promoting development around the world—health being an important measure of socioeconomic progress—and as part of the Millennium Development Goals, the treatment of chronic diseases and also many tropical diseases is important in helping many poor countries in the world.

See Also: Bayer; Development Assistance; Economic Development; GlaxoSmithKline; Millennium Development Goals; Roche Group; Sanofi Aventis.

Bibliography. Cath Senker, *World Health Organization* (Hodder Wayland, 2005); M. Simon, "Bush Supersizes Effort to Weaken the World Health Organization," *International Journal of Health Services: Planning, Administration, Evaluation* (v.35/2, 2005); Patricia Wood, *World Health Organization: A Brief Summary of Its Work* (Australian Government Publishing Service, 1988); World Health Organization, *Four Decades of Achievement: Highlights of the Work of WHO* (World Health Organization, 1988); World Health Organization, *The World Health Organization: A Decade of Health Development in South-East Asia 1968–1977* (Regional Office for South-East Asia, WHO, 1978); World Health Organization, www.who.org (cited March 2009).

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World Systems Theory

World systems theory is a theory of economic development that views the world as one complex social system driven by economic activity. From this theoretical perspective, economic development is to be understood in terms of the positions of and roles played by nations in the highly interactive global economic system. Arguably the greatest contribution of world systems theory to the understanding of economic development is its consideration of what are called semiperipheral nations and the important roles they play in the global economic system. An understanding of world systems theory is instrumental in appreciating the complex systemic nature of both today's global economy and, within this context, regional and national economic development.

Origins and Foundational Contentions

World systems theory is influenced by early Marxist thought on imperialism and capitalist exploitation. However, it is based most directly on the work of Immanuel Wallerstein in the 1970s and 1980s. The central focus of world systems theory differs significantly from that of other major theories of economic development (e.g., dependency theory and modernization theory). It does not, for example, focus on regional or national stages of development—most typically toward the standard of the United States. It also does not concern itself primarily with the level of control wealthy, highly developed, and heavily industrialized core nations hold over poor, underdeveloped, and largely unindustrialized peripheral countries. Instead, world systems theory focuses on the developmental implications of the particular positions nations occupy—and the roles they play—within a closed, interactive global social system driven by economic activity.

World systems proponents hold that this focus on the global system and the positions nations occupy within it is necessitated by the fact that there is but one world economy within which exists but one (global) division of labor. World systems theorists do recognize that the regions and nations of the world have separate and unique histories and developmental trajectories and states. However, world systems theorists contend that these histories and developmental trajectories and states cannot be meaningfully understood without first situating analysis of them in the context of the complex, interactive global system of economic activity.

The Semiperiphery

One of the main criticisms of dependency theory (of economic development) is that it grossly oversimplifies the nature of global economic activity by focusing on only two types of nations. The first type consists of affluent, heavily industrialized, highly developed, core countries from which emanates the bulk of global economic activity (e.g., the United States, Japan, Germany, and the United Kingdom). The second group of countries includes poor, unindustrialized, underdeveloped, inwardly focused peripheral nations (e.g., Burundi, Rwanda, Tanzania, and Zambia). World systems theory overcomes this alleged deficiency via development of the notion of the semiperiphery and in-depth analysis of the roles played by semiperipheral nations (e.g., Brazil, Mexico, India, Canada, China, South Korea, Australia, and South Africa) in the global economic system.

From the world systems perspective, semiperipheral nations exist between the core and the periphery and are seen as important to global system functioning for both political and economic reasons. Politically, the semiperiphery serves as a form of "middle-class social buffer," lessening the possibility of mass rebellion by the oppressed peoples of the world. This reasoning is based on the assumption that members of civil society in the (heavily populated) semiperiphery are not likely to join in rebellion with their counterparts in the periphery because they tend to see themselves as better off than the poorest of the—peripheral—poor rather than worse off than persons living in core nations. Economically, semiperipheral nations are important to global system functioning mainly because they often serve as low-wage, (foreign direct) investment-friendly export platforms for (core-based) manufacturing organizations. Here, the semiperiphery produces products that are consumed by people worldwide.

Today, semiperipheral nations play key roles in the global economic system for another reason not emphasized in original conceptualizations of world systems theory. As semiperipheral nations develop economically—as a result, for example, of more and more people moving from self-sufficiency in rural areas to relatively well-paid urban manufacturing jobs—they increasingly become viable consumer markets for an expanding range of products (produced both in the semiperiphery and elsewhere). This is particularly important given the large populations of many semiperipheral nations.

See Also: Core; Dependency Theory; Economic Development; Periphery.

Bibliography. Lauren A. Benton, "From the World-Systems Perspective to Institutional World History: Culture and Economy in Global Theory," *Journal of World History* (v.7/2, 1996); Peter Evans, "Beyond Center and Periphery: A Comment on the Contribution of the World System Approach to the Study of Development," *Sociological Inquiry* (v.49/4, 1979); Gary Gereffi, "The International Economy and Economic Development," in *The Handbook of Economic Sociology,* N. J. Smelser and R. Swedberg, eds. (Princeton University Press, 1994); Terence K. Hopkins and Immanuel Maurice Wallerstein. *World-Systems Analysis: Theory and Methodology, Explorations in the World-Economy* (v.1, 1982); Immanuel Wallerstein, *The Capitalist World-Economy* (Cambridge University Press, 1979);

Immanuel Wallerstein, "The Present State of the Debate on World Inequality," in *World Inequality: Origins and Perspectives on the World System,* I. Wallerstein, ed. (Black Rose Books, 1975); Immanuel Wallerstein, "The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis," *Comparative Studies in Society and History* (v.16/4, 1974).

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World Trade Organization

The General Agreement on Tariffs and Trade (GATT), which was created on October 30, 1947, gave way to the World Trade Organization (WTO) on January 1, 1995. It came into existence after the 1986–94 Uruguay Round talks, which aimed at doing away with quotas, lowering of tariffs, reforming agricultural trade, and focusing on intellectual property rights. After the meeting at Marrakesh, Morocco, on April 15, 1994, the 123 participating nations decided to replace the GATT and set up the WTO. An international organization for resolving differences among member states on global trade, the WTO also caters to the needs of consumers.

The WTO has 151 members along with 31 nations having observer status. The nations enjoying the observer status should take steps to become full members within five years. The Vatican is the only exception. Afghanistan, Iran, Iraq, the Russian Federation, and so forth, still send representatives as observers. The WTO functions from Geneva, Switzerland, with a staff of 635 and a budget of about US$141 million.

Organization

The top decision-making body is the Ministerial Conference meeting biennially and its policy decisions are implemented by a General Council, which also looks after administration. The Dispute Settlement Body looks after trade disputes, whereas the Trade Policy Review Body reviews trade policies. The present director-general of the WTO is former European commissioner for trade Pascal Lamy. The regional economic integration of countries has resulted in groups and associations speaking with one voice in the WTO. The European Union (EU) is the most forceful voice having member status in the WTO. The Association of Southeast Asian Nations (ASEAN), the African, Caribbean, and Pacific Group (ACP), the Latin American Economic System (SELA), and so forth, are examples of associations by which the member countries increase bargaining power in WTO meetings.

There had been phenomenal trade growth in the last five decades. The WTO sets norms for trade between nations and endeavors to lower trade barriers. The multilateral trading system emerged with agreements signed by countries, which were ratified in respective parliaments. By these contracts, the signatories formulate trade policies with some trading rights.

Criticism

The talks between nations have been a constant feature of the workings of the WTO. Agreements are reached in areas such as lowering of import duties, antidumping measures, information technology, agriculture, and intellectual property rights. The WTO has not always had smooth sailing. There is mutual bickering and the developed nations are targets of much criticism from the developing and underdeveloped nations.

The developing countries feel that they have agreed on intellectual property protection and liberalization of trade, but the developed countries are not reciprocating in a major way. It becomes difficult for the developing countries to gain access in a substantial way in the agricultural markets of developed nations. The Doha Round of talks held in Potsdam (June 2007) broke down as India, Brazil, the European Union, and the United States did not reach an agreement on tariff and farm subsidies. The WTO also has become an object of criticism, protest, and anger from different environmental and labor groups. Trade liberalization as such has not increased inequality. Rather, various studies undertaken by the World Bank have proven that it helps in eradicating poverty.

See Also: Antiglobalization Movement; Banana Wars; Doha Round; General Agreement on Tariffs and Trade; Globalization; International Monetary Fund; Subsidies; Tariff; Trade Liberalization; Uruguay Round; World Bank, The; World Customs Organization.

Bibliography. Daniel C. K. Chow and Thomas J. Schoenbaum, *International Trade Law: Problems, Cases, and Materials* (Aspen, 2008); David A. Deese, *World Trade Politics: Power, Principles, and Leadership* (Routledge, 2008); John Head, *Losing the Global Development War: A Contemporary Critique of the IMF, the World Bank and the WTO* (Brill, 2008); Gary J. Hytrek and Kristine M. Zentgraf, *America Transformed: Globalization, Inequality, and Power* (Oxford University Press, 2008); Saman Kelegama, *South Asia in the WTO* (Sage, 2008); World Trade Organization, www.wto.org (cited March 2009).

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Yemen

Yemen, a country on the southwestern corner of the Arabian Peninsula, has been the center of commerce in the region since ancient times when it was a source of myrrh, frankincense, and spices. As a result, the ancient Egyptians started expeditions to the region in the 25th century B.C.E., and interest in the region continued so much so that the Roman emperor Augustus tried to take the region, and the Ethiopian kingdom of Aksum held it from about 520 C.E. until 570 C.E., when the Sassanian Persians took it. After the emergence of Islam, the region came under the control of the Arab rulers and was run by the Ottoman Turks. The famous Chinese admiral Zheng He (Cheng Ho) made a point of visiting Yemen in 1421.

Because of its geographical position, in 1839 the British occupied Aden, a natural port at the southern end of the Red Sea. It grew in importance after the opening of the Suez Canal in 1869, and the British continued to hold Aden, making it a major port in the global economy. Heavily garrisoned by the British, most non-French passenger ships going through the Red Sea and Suez Canal stopped at Aden (the French used Djibouti). During the British period of running Aden, a number of important trading companies were based there including Beese, with British Petroleum having a refinery in Aden, and there were also many companies supplying British troops and providing supplies for passengers passing through the port. With a massive upsurge in nationalist attacks on the British, they were finally forced to withdraw in 1967. With the decline in the use of passenger ships by the early 1970s, the importance of Aden dramatically declined. Yemen was divided between North Yemen and South Yemen until they were formally reunited on May 22, 1990.

In 1970 South Yemen was renamed the People's Democratic Republic of Yemen. It was a communist, centrally planned economy and had close political ties to Nasser's Egypt, the Soviet Union, and the People's Republic of China. This led to its isolation from the world community. North Yemen—the Yemen Arab Republic—was largely Royalist until reunification. In addition to Aden, the unified country now has a number of important ports including Al Hudaydah, Al Mukha, Salif, and Ra's Kathib, all on the Red Sea, and Al Khalf and Nishrun on the Gulf of Aden.

Economically, Yemen remains poor. It relies heavily on remittances from Yemenis working abroad and also from foreign aid. The problems with the economy from 1990 were complications that arose from the integration of the communist and the noncommunist system exacerbated by some 850,000 Yemenis returning from the Gulf States after the Iraqi invasion of Kuwait. Yemen sought help from the International Monetary Fund (IMF), and from 1995 with the support of the IMF and the World Bank, it drew up its First Five-Year Plan, which lasted from 1996 until 2000. The Yemeni government has subsequently embarked on many economic and regulatory reforms and has gained praise from the World Bank. A growing number of foreign multinationals have started operating in the country.

In 2008 Yemen had a gross domestic product (GDP) of $2,400 per capita. As much as 63 percent of the workforce remains working in the agriculture sector, although in 2008 it accounted for under 10 percent of the country's GDP. Eleven percent of the workforce is in industry, generating 52 percent of the 2008 GDP, and 26 percent work in services, resulting in 38 percent of Yemen's 2008 GDP. The major exports of the country are crude oil from refineries that operate in the country, coffee, and dried and salted fish. The major export destinations are Thailand and China (29 percent each) and India. Imports include food, live animals, machinery, and equipment, with 17 percent coming from the United Arab Emirates, and the other two main sources being Saudi Arabia and Kuwait.

See Also: Communism; International Monetary Fund; Kuwait; Middle East; Saudi Arabia; United Arab Emirates; World Bank, The.

Bibliography. Leonard Binder, *Rebuilding Devastated Economies in the Middle East* (Palgrave Macmillan, 2007); Kiren Aziz Chaudhry, *The Price of Wealth: Economies and Institutions in the Middle East*, Cornell Studies in Political Economy (Cornell University Press, 1997); Margarita Dobert, "Development of Aid Programs to Yemen," *American-Arab Affairs* (v.8, 1984); Kamil A. Mahdi, Anna Würth, and Helen Lackner, *Yemen into the Twenty-First Century: Continuity and Change* (Ithaca Press, 2007); Ragaei El Mallakh, *The Economic Development of the Yemen Arab Republic* (Croom Helm, 1986).

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Z

Zaibatsu

The term *zaibatsu* refers to the conglomerate business groups that became prominent in Japan during the Meiji Restoration (1868–1912), although some had roots going back to the Edo Period in the 1600s and earlier. The groups survived through the first half of the 20th century until they were forcibly disbanded after the end of World War II. They have transitioned in form since then to the *keiretsu*, which retain many, but not all, of their features. A notable difference between the two organizational forms is that zaibatsu had a vertical chain of command under one family, while linkages in keiretsu are generally horizontal in nature. Some important zaibatsu whose business names remain influential today include Mitsui, Mitsubishi, Yasuda, and Sumitomo (known collectively as the Big 4 zaibatsu), among others.

In the early 1850s, Japan was forced to open its borders by the United States under the leadership of Commodore Perry, ending a self-imposed isolation that had lasted since the 1630s with very limited exceptions, primarily for trading in select ports. During the early stages of the Meiji Restoration, the Japanese rulers sent scholars to study leading institutions around the world in an effort to incorporate Western ideas into Japanese society so that Japan could effectively participate in the world economic system. Along with resulting changes to societal institutions (e.g., a new constitution and education system), these leaders provided preferential treatment to prominent, well-connected families to develop industries deemed necessary for the advancement of the Japanese economy. Some of these initial advantages came during a mass privatization of government-owned companies that occurred in 1880, and allowed these family firms to expand into numerous new lines of business; these firms became known as the zaibatsu. While precise definitions of the term *zaibatsu* vary, they are generally defined in terms of a pyramidal group of firms under the leadership of a family-owned company.

The zaibatsu were generally organized as a combination of industrial firm(s) and a bank(s), which were controlled by a family-owned holding company that maintained ownership over each of the participant companies. The industrial (manufacturing) firms were responsible for producing products for consumption in Japan and export, while the bank handled financing for the conglomerate. In addition, the zaibatsu generally contained trading companies, which were responsible for selling merchandise overseas. Because Japan had been closed off from the rest of the world for centuries, the role of the trading company was particularly crucial in providing intelligence regarding the various markets where products would be sold, what types of products would be desired by those markets, and the existence of local competition. By maintaining trading offices in major cities around the world, the zaibatsu were able to gain a stronger grasp of the world market from which Japan had been isolated for so long.

From the late 1800s through World War II, the zaibatsu helped build the Japanese economy, such that it quickly became an economic power. While estimates vary, it is clear that the zaibatsu controlled a major portion of the economy. For example, one estimate states that by the mid-1930s, the Big 4 zaibatsu alone controlled one-third of all bank deposits in Japan as well as one-third of all foreign trade. The zaibatsu were also known for their strong association with political parties during the early 20th century and, as such, were closely tied to the military buildup of Japan during this period. In particular, both Mitsui and Mitsubishi were associated with major political parties, with Mitsui also maintaining strong ties with the Imperial Japanese Army, while Mitsubishi maintained ties with the Imperial Japanese Navy. At times, tensions existed between the zaibatsu and Japanese leaders over the level of zaibatsu influence on government, although efforts to limit zaibatsu power were often unsuccessful.

After World War II, during the occupation of Japan by the United States under the leadership of General Douglas MacArthur, the zaibatsu were initially targeted for dissolution to prevent a recurrence of their previous role in the buildup of the Japanese military. However, they were later allowed to reappear under the form of the modern-day keiretsu, largely for strategic reasons, so that Japan could help counter what was considered a growing communist threat in Asia.

See Also: Chaebol; Japan; *Keiretsu*; Mitsubishi; Mitsui; Sumitomo Mitsui Financial Group.

Bibliography. Conan Paul Grames, *The Japanese Zaibatsu: Its Dissolution, Revival, and Role in the Reconstruction of the Japanese Economy* (Grames, 1972); Randall Morck, ed., *A History of Corporate Governance Around the World* (NBER, 2005); Hidemasa Morikawa, *Zaibatsu: The Rise and Fall of Family Enterprise Groups in Japan* (University of Tokyo Press, 1992).

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Zimbabwe

Zimbabwe is a landlocked southern African country sharing borders with Botswana, Mozambique, South Africa, and Zambia, with a land mass of approximately 386,000 sq. km. The population is 98 percent African, 1 percent mixed and Asian ethnicities, and less than 1 percent white. Although English is the official language, Shona and Ndebele are the prominent African languages spoken by the majority of people. Approximately 50 percent of the population practice a blend of Christian and indigenous religions, 25 percent practice Christianity, 25 percent indigenous religions, and 1 percent Islam. It is home to the world's largest waterfall, Victoria Falls, a popular tourist destination, although because of the crises in Zimbabwe, visitors view the falls from neighboring Zambia.

The country is endowed with various mineral resources, which have replaced agriculture as the primary export, including gold, platinum, diamonds, nickel, asbestos, tin, iron, chromite, copper, and coal. Among Zimbabwe's industrial products are iron and steel, cement, foodstuffs, machinery, textiles, fertilizer, and consumer goods. It imports machinery and transport equipment, other manufactures, chemicals, and fuels primarily from South Africa, Zambia, and China. Its major export partners are South Africa, the Democratic Republic of the Congo, Japan, Botswana, the Netherlands, China, and Italy. Its agricultural products include corn, cotton, tobacco, wheat, coffee, sugarcane, sorghum, peanuts, soybeans, and valuable hardwoods, including teak and mahogany.

British colonization began in the 1850s, establishing the territory of Rhodesia, which remained a self-governing colony until 1965, when the white-minority government, led by Prime Minister Ian Smith, unilaterally declared its independence from Britain. Increasingly violent guerrilla warfare, international economic sanctions, and the withdrawal of South African military aid led to a 1978 power-sharing agreement between Smith's government and African leaders of the black majority. In 1980 the country witnessed the first multiracial elections, bringing Robert Mugabe of the Zimbabwe African National Union (ZANU) to power as prime minister, as well as formal independence under the name Zimbabwe. Mugabe has been in power ever since, becoming president in 1987, thanks to rigged elections enforced by the militia and Zimbabwe High Court, including the most recent in 2008, with a challenge from Morgan Tsvangirai, the leader of the Movement for Democratic Change. However, just before the runoff election, Tsvangirai withdrew, accusing Mugabe of supporting violence against him and his opposition party. International condemnation and economic sanctions by the United States followed. Mugabe and Tsvangirai then negotiated to end the political violence and engaged in talks to form a unified government. They reached an agreement in February 2009 that led to Mugabe remaining president and Tsvangirai becoming prime minister.

Mugabe's authoritarian rule and disastrous economic policies have severely crippled the country. A corrupt and chaotic land reform program beginning in 2000 drove white commercial farmers from their land without compensation, leading to a sharp decline in agricultural production—51 percent between 2000 and 2007—traditionally the source of Zimbabwe's exports, foreign currency, and jobs. Consequently, Zimbabwe faces shortages of food and other consumer goods, which were exacerbated by 2007 price controls, leading to a thriving black market. The currency shortage and fiscal deficit financed by prolific printing of money has led to hyperinflation, estimated by private analysts at over 100,000 percent in 2007. Meanwhile, the official exchange rate fell from approximately 1 (revalued) Zimbabwean dollar per U.S. dollar in 2003 to 30,000 per U.S. dollar in 2007.

Further contributing to the economic crisis was Operation Murambatsvina ("Operation Drive Out Trash") in 2005 with the aim of redistributing people from urban to rural areas to combat illegal housing, crime, and sexually transmitted diseases. However, the destruction of homes and businesses of mostly poor supporters of Mugabe's opposition, leaving thousands homeless, unemployed, and starving, led to allegations that the purge was politically driven.

By all measures, the country is devastated: a decrease in the population of 4 million people between 2002 and 2006 because of the economic crisis, political repression, and acquired immunodeficiency syndrome (AIDS); a 40 percent decline in gross domestic product (GDP) between 2000 and 2007; 2007 unemployment rate and percent living in poverty rate around 80 percent; a doubling of the infant mortality rate since 1990; an increase in human trafficking because of the increasing vulnerability of the population; and an average life expectancy of 40 years, among the lowest in the world, primarily because of the AIDS adult prevalence rate, which has declined from 25 percent in 2001 to 15 percent in 2007. As a consequence of the country's meltdown, between 1998 and 2007 direct foreign investment fell by 90 percent and little government money has been spent on improving the infrastructure, capital, and human investment, including education.

See Also: Africa; Botswana; South Africa.

Bibliography. J. Chikuhwa, *A Crisis of Governance: Zimbabwe* (Algora, 2004); CIA, "Zimbabwe," *World Factbook*, www.cia.gov (cited March 2009); Raymond Gilpin, *Depoliticizing Zimbabwe's Economy Solutions for Two Million Percent*, USIPeace Briefing (United States Institute of Peace, 2008); Global Health Facts, www.globalhealthfacts.org (cited March 2009); "Let's Talk Again, Maybe," www.economist.com (cited March 2009); Tafataona Mahoso, "Focus on Zimbabwe: How Sanctions Are Making Zimbabwe's Economy Scream," *New African* (v.462/108, 2007); M. Martin, *Mugabe: Power, Plunder, and the Struggle for Zimbabwe's Future* (PublicAffairs, 2007); "Middle East and Africa—Zimbabwe—Blackening the Economy," *Economist* (v.384/8546, 2007); Andrew T. Price-Smith, *Contagion and Chaos: Disease, Ecology, and National Security in the Era of Globalization* (MIT Press, 2009); Elizabeth Spiers, "The Long and Short of It—How Zimbabwe's Ruler Ruined an Entire Economy—And Why It Will Bring Him Down," *Fortune* (v.158/3, 2008).

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Zurich Financial Services

Zurich Financial Services is a well-established insurance-based financial institution founded in 1872. Its initial 19th-century activities rapidly extended to Austria, Germany, Denmark, Sweden, and Norway. Currently, the organization encapsulates a global web of subsidiaries, which deliver a wide range of general (property and causality cover for individual and business customers) and life insurance products, called assurance in recognizing that the protection is provided against an event that is certain to take place. Zurich Financial Services' business model also includes annuities and a range of sophisticated investment policies, risk management, and risk solutions to customers in over 170 countries.

Insurance is a contract to pay a premium in return for which the insurer will pay compensation arising from legitimate claims; these can be substantial. Following the events at the World Trade Center, damage caused by Hurricane Katrina, and successive European floods, Zurich Financial Services was inundated with claims, which caused substantial, but temporary, challenges to the company.

The headquarters of the group are located in Zurich, Switzerland, which is a well-known leading banking center. Zurich is a city fundamental to the international brand identification of the company, the "Z" logo being one of the world's most recognizable images in the financial and insurance sectors. The group instills a local/global organizational culture promoted through the "Zurich Way," which presents a "one Zurich" mindset, encouraging the promotion of a consistent experience based on superior service. This philosophy is embedded in the business activities of the group and is prominent in the organization's literature.

Zurich Financial Services is consistently featured in the Fortune Global 500; its position on the list should be maintained by the strategic objective of rapidly increasing its life insurance business. This acceleration will likely be achieved through Zurich's vast network of international financial advisers, insurance agents, and insurance broking channels, which support expansion programs and growth within the group.

Recent criticism of the company following several high-profile claims of poor business practice damaged the international reputation of the group (a "one Zurich" operational model being vulnerable to the emergence of specific problems that garner media attention). Nonetheless, the wide-ranging response to a challenging international business environment has seen compliance procedures tightened within the group to improve sensitive areas in the business model, primarily in hedge funds, which are ironically noted for high risk and the absence of transparency in marketing and operation. Elsewhere, the relative absence of openness in the pricing of some established products (a feature potentially disguising noncompetitive products) has been remodeled to rebuild customer and client confidence.

Zurich Financial Services expanded aggressively through a well-targeted merger and acquisition program that has seen the group expand into challenging markets such as Russia. This expansion builds on experience in China, where the group, following approval from the China Insurance Regulatory Commission, became the first foreign-registered insurer to establish a presence in the Chinese capital Beijing.

Zurich Financial Services' cross-border organizational network combines global operations with local expertise (a practicing set of local/global linkages with the ability to offer a range of solutions and products to meet diverse risks). This approach provides a degree of protection for the boom and circle notable in the insurance industry (a feature that also impacts negatively, however, on human resource management issues with the arrival and departure of certain functions such as customer contact services in various cities and countries).

Evolving risk environments stemming from the natural (earthquakes), the political (conflict), the economic (credit crunch), and the social (demographic) are generating new risks in international and local insurance environments. Zurich Financial Services has established an International Advisory Council to advise on emerging threats and the impact on sustainable growth. In anticipating and responding to the ever-changing nature of risk, Zurich Financial Services is well placed, using established industry experience and global operations to maintain and evolve its position in a challenging market, a scenario conditional on product integrity and coherent sustained performance.

See Also: Allianz SE; AXA; Gnomes of Zurich; Risk; Risk Management.

Bibliography. P. L. Bernstein, *Against the Gods: The Remarkable Story of Risk* (Wiley, 1998); "Close-Up—Stuart Gillard, Internal HR Consultant at Zurich Financial Services, on How the Firm's 'Challenger' Talent Management Programme Is Developing High-Potential Staff," *People Management* (v.14/14, 2008); R. Cornejo, ed., *The Guide to Understanding the Insurance Industry* (Booksurge, 2007).

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Glossary

A

Absolute Advantage: An absolute advantage exists when a nation or economic region is able to produce a good or service more efficiently (using the same amount of resources) than a second nation or region.

Accelerated Tariff Elimination: An increased rate of reduction of import duties at a faster rate than what was originally planned or decided upon.

Accounting Exposure: Changes in a corporation's financial statements as a result of changes in currency values. Also known as translation exposure.

Acquisition of Assets: In an acquisition of assets, one firm acquires the assets of another company.

Acquisition of Stock: In an acquisition of stock, one firm buys the equity interest of another firm.

Acquisition Premium: In a merger or acquisition, the difference between the purchase price and the preacquisition value of the target firm.

Active Fund Management: An investment approach that actively shifts funds either between asset classes (asset allocation) or between individual securities (security selection).

Active Income: In the U.S. tax code, income from an active business as opposed to passive investment income.

Activity-Based Costing (ABC): An accounting method that allocates costs to specific products or services or activities.

Adjusted Present Value: A valuation method that separately identifies the value of an unlevered project from the value of financing side effects.

Ad Valorem Tariff: A tariff assessed as a percentage of the value of an import.

Advance Payment: Trading method in which the buyer pays for the goods before they are shipped to the buyer.

Adventure: It is also called "marine adventure." It is a term of art in the marine insurance business. All insured cargo owners and every shipper on that vessel are part of the adventure.

Advising Bank: Bank, usually in the country of the seller, whose primary function is to authenticate the letter of credit and advise it to the seller.

Advisory Capacity: Used to indicate that a shipper's agent or representative is not empowered to make definitive changes or adjustments without approval of the group or individual represented.

African, Caribbean, and Pacific Countries (ACP): The African, Caribbean, and Pacific Group of States (ACP) is an organization created by the Georgetown Agreement in 1975. It is composed of African, Caribbean, and Pacific states signatories to the Georgetown Agreement or the Partnership Agreement between the ACP and the European Union.

African Developmental Bank Group (ABD Group): The ABD Group is one of four major regional developmental banks currently operating in the global economy; it is headquartered in Abidjan, Côte d'Ivoire.

African Union (AU): The African Union is an organization for regional, social, and economic cooperation. It consists of 53 member nations in Africa and was derived from the OAU (Organization of African Unity). Its goal is to unify Africa and promote peace, security, and stability on the continent through social and economic cooperation.

Agency Costs: The costs incurred to ensure that agents and managers act in the best interest of the principal.

Agent: Someone who represents another. In corporate governance terminology, management is the agent of the principal stakeholders in a principal-agent relationship.

Aggregate Demand: The total demand of all potential buyers of a commodity or service. Includes all individuals and organizations that have the ability, willingness, and authority to purchase such products.

Agreement on Textiles and Clothing (ATC): The Agreement on Textiles and Clothing (ATC) and all restrictions thereunder terminated on January 1, 2005. The expiry of the 10-year transition period of ATC implementation means that trade in textile and clothing products is no longer subject to quotas under a special regime outside normal WTO/GATT rules but is now governed by the general rules and disciplines embodied in the multilateral trading system.

Air Waybill: A nonnegotiable instrument of domestic and international air transport that functions as a bill of lading.

All-in-Cost: The percentage cost of a financing alternative, including any bank fees or placement fees.

Allocational Efficiency: The efficiency with which a market channels capital toward its most productive uses.

Allocation-of-Income Rules: In the U.S. tax code, these rules define how income and deductions are to be allocated between domestic-source and foreign-source income.

Allowance: An amount paid or credited by sellers to the buyers on products due to one or more reasons that did not meet buyers' specifications such as late shipment and faulty packaging.

Alternative Tariff: A tariff that has two or more rates for the same product, trading to and from the same points, with the authority to use one that produces the lowest charge.

American Option: An option that can be exercised anytime until expiration (contrast with European option).

American Shares: Shares of a foreign corporation issued directly to U.S. investors through a transfer agent in accordance with SEC regulations.

American Terms: A foreign exchange quotation that states the U.S. dollar price per foreign currency unit (contrast with European terms).

Andean Community (CAN): The Andean Community or Comunidad Andina de Naciones in Spanish (CAN) is made up of Bolivia, Colombia, Ecuador, Peru, and Venezuela. It is a series of bodies and institutions that work to bring Andean subregional integration, promote external projection, and reinforce the actions connected with the process.

Andean Pact: A regional trade pact that includes Venezuela, Colombia, Ecuador, Peru, and Bolivia.

Annuity: A level stream of equal dollar payments that lasts for a fixed time. An example of an annuity is the coupon part of a bond with level annual payments.

Annuity Factor: The term used to calculate the present value of the stream of level payments for a fixed period.

Antidumping Laws: Laws that are enacted to prevent dumping—offering a price in the overseas market that is lower than that at which a product is sold in its home domestic market.

Appellate Body (AB): The Appellate Body is a World Trade Organization (WTO) entity, which was established in 1995 under Article 7 of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU). Its purpose is to hear appeals and reports issued by panels in disputes between WTO members. It is composed of a standing body of seven people and has the power to uphold, modify, or reverse the legal findings and conclusions of a panel. These rulings must be accepted by the parties of the dispute. The Appellate Body has its seat in Geneva, Switzerland.

Appreciation: An increase in a currency value relative to another currency in a floating exchange rate system.

Arab Maghreb Union (AMU): A regional alliance seeking economic and political unity in northern Africa. Members are Algeria, Libya, Mauritania, Morocco, and Tunisia.

Arbitrage: The process of purchasing and selling the identical products, such as foreign exchange, stocks, bonds, and other commodities, in several markets intending to make profit from the difference in price. Arbitrage is generally seen as a "risk-less" transaction.

Arbitrage Pricing Theory (APT): APT is a theory used in finance to find the prices of assets and is typically used in stock pricing. Its asset pricing model assumes a linear relation between required return and systematic risk as measured by one or more factors according to Rj = mj + b1jF1 + ... + bKjFK + ej.

Asian Development Bank (ADB): The Asian Development Bank (ADB) is a multilateral development financial institution owned by 67 members (48 from the region and 19 from other parts of the globe). Its goal is to improve the welfare of the people in Asia and the Pacific. ADB is headquartered in Manila, Philippines. It is one of four major development banks around the world.

Asia-Pacific Economic Cooperation (APEC): A forum designed to promote economic growth, cooperation, and integration among member nations. APEC has also worked to reduce tariffs and other trade barriers across the Asia-Pacific region. Its vision is based on the "Bogor Goals" adopted in the 1994 meeting in Bogor, Indonesia.

There are 21 member economies including Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; Republic of the Philippines; Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America; Vietnam.

Ask Rates: The rate at which a market maker is willing to sell the quoted asset. Also known as offer rates.

Asset Allocation Policy: The target weights given to various asset classes in an investment portfolio.

Assets in Place: Those assets in which the firm has already invested (compare to growth options).

Association of Southeast Asian Nations (ASEAN): An economic and geopolitical affiliation formed in 1967 that includes Singapore, Brunei Darussalam, Malaysia, Thailand, the Philippines, Indonesia, Myanmar (Burma), Laos, Cambodia, and Vietnam.

Attachment: The legal seizure of a property or a person before the judgment is made in order to secure compensation if awarded. The prosecutor can request the court to issue an order to seize a property.

At-the-Money Option: Option with an exercise price that is equal to the current value of the underlying asset.

Autarky: In models of international trade, a situation in which there is no cross-border trade.

Aval: A guarantee of the buyer's credit provided by the guarantor, unless the buyer is of unquestioned financial standing. The aval is an endorsement note as opposed to a guarantee agreement.

Avalization: Payment undertaking given by a bank in respect of a bill of exchange drawn.

Average Accounting Return (AAR): Average project earnings after taxes and depreciation divided by the average book value of the investment during its life.

B

Back Order: A customer order for materials, goods in process, or finished goods that is not currently in stock but is to be delivered when it becomes available.

Backward Innovation: Building a more basic version of an existing product for a lesser-developed market.

Balanced Economy: In national finances, it is when exports are equal to imports.

Balance of Payments: The International Monetary Fund's accounting system that tracks the flow of goods, services, and capital in and out of each country.

Balance of Trade: The difference between a country's total imports and exports over a set period.

Balance Sheet: A statement showing a firm's accounting value on a particular date. It reflects the equation, Assets = Liabilities + Stockholders' Equity.

Bank-Based Corporate Governance System: A system of corporate governance in which the supervisory board is dominated by bankers and other corporate insiders.

Banker's Acceptance: A time draft drawn on and accepted by a commercial bank.

Banker's Draft: A payment instrument used to make international payments.

Bank for International Settlements (BIS): An international organization that promotes international monetary and financial cooperation among nations by fostering the cooperation of world central banks.

Bank Release: A document issued by a bank authorizing the delivery of goods.

Bankruptcy: The status of an individual or a legal entity that does not have sufficient resources to pay its debts as they become due.

Bargain Purchase Option: A lease provision allowing the lessee to purchase the equipment for a price predetermined at lease inception, which is substantially lower than the expected fair market value at the date the option can be exercised.

Barter: Trade in which merchandise is exchanged directly for others without use of money or the involvement of a third party.

Basel Convention: An international treaty concerned with restricting the movement of hazardous wastes between countries, especially from developed to underdeveloped countries.

Basic IRR Rule: Accept the project if the (Internal Rate of Return) IRR is greater than the discount rate; reject the project if IRR is less than the discount rate.

Basis: The simple difference between two nominal interest rates.

Basis Point: Equal to 1/100 of 1 percent.

Basis Risk: The risk of unexpected change in the relationship between futures and spot prices.

Basis Swap: A floating-for-floating interest rate swap that pairs two floating rate instruments at different maturities (such as six-month LIBOR versus 30-day U.S. T-bills).

Bearer Bonds: Bonds that can be redeemed by the holder. The convention in most west European countries is to issue bonds in registered form (contrast with registered bonds).

Benchmarking: A systematic procedure of comparing a company's practices against the best practice and modifying actual knowledge to achieve superior performance.

Beneficiary: A party who receives a legal benefit.

Beta: A measure of an asset's sensitivity to changes in the market portfolio (in the Capital Asset Pricing Model) or to a factor (in the APT). The beta of an asset j is computed as bj = rj,k (sj/sk), where k represents a market factor (such as returns to the market portfolio in the CAPM).

Bid Bond: A type of bond that guarantees the fulfillment of an offer or bid if it is accepted.

Bid-Offer Spread: The difference between the interest rates at which the bank borrows money and lends money.

Bid Rate: The rate at which a market maker is willing to buy the quoted asset.

Bilateral Investment Treaty (BIT): A treaty between two countries to ensure that investments between the two countries receive the same treatment as domestic or other international investments.

Bilateral Trade Agreement: A commercial agreement between two countries, often detailing what specific quantities of what specific goods can be exchanged.

Bill of Lading (BOL): A document that establishes the terms and conditions of a contract between a shipper and a shipping company under which freight is to be moved between specified points for a specified charge.

Blank Endorsement: The method whereby a bill of lading is made into a freely negotiable document of title.

Blanket Bond: A bond that covers a group of people, articles, or properties.

Blanket Contract: A long-term contract in which the supplier promises to resupply the buyers as needed at agreed-upon prices over the contracting time.

Blanket Rate: A rate that is applied broadly over different articles or entities.

Blockade: The act of seizing commercial exchange with a particular country. Such act is common during wartime.

Blocked Funds: Cash flows generated by a foreign project that cannot be immediately repatriated to the parent firm because of capital flow restrictions imposed by the host government.

Bogor Goals: The Bogor Goals were created by the Asia-Pacific Economic Cooperation (APEC) in Bogor, Indonesia, in 1994, with the intention of increasing economic unity among Asian Pacific nations by increasing trade.

The goals are to have free trade and investment in developed nations by 2010 and in developing nations by 2020.

Bonded Exchange: Foreign exchange that cannot be freely converted into other currencies.

Bond Equivalent Yield: A bond quotation convention based on a 365-day year and semiannual coupons (contrast with effective annual yield).

Bond of Indemnity: An agreement relieving the party to whom the bond is issued of responsibility in a situation in which the party would normally be liable.

Break-Even Analysis: Analysis of the level of sales at which a project would make zero profit. The term can also be used for sales of financial instruments.

Bretton Woods Agreement: An agreement made at Bretton Woods, New Hampshire, near the end of World War II to promote exchange rate stability and facilitate the international flow of currencies.

Bretton Woods Conference: An international conference held in 1944 at Bretton Woods, New Hampshire with representatives from 43 countries. The conference established the International Monetary Fund and the World Bank.

Buffer Stock: Goods set aside and reserved for sale specifically to balance out the market in the case of a shortage of that good. In the case of a surplus, more of the good would be bought and set aside.

C

Call Option: The right to buy the underlying currency or security at a specified price and on a specified date from the option writer/seller.

Calvo Doctrine: A foreign policy doctrine that states that the country in which an investment is located has jurisdiction over that investment.

Cap: In banking and finance, when the interest on borrowed funds is tied to the market rate, an upper limit or a cap can be negotiated and agreed upon, so that even when the market rate is higher than the stated level, no premium will be paid.

Capital Account: A measure of change in cross-border ownership of long-term financial assets, including financial securities and real estate.

Capital Asset Pricing Model (CAPM): An asset pricing model that relates the required return on an asset to its systematic risk.

Capital Budgeting: Planning and managing expenditures for long-lived assets.

Capital Formation: The process of increasing the amount of capital goods—also called capital stock—in a country.

Capital Gain: The positive change in the value of an asset; a negative capital gain is a capital loss.

Capital Goods: Manufactured goods that are used for production, such as machine tools.

Capitalism: An economic system that is based on private ownership; economic development is proportionate to and dependent upon the accumulation and reinvestment of profits.

Capital Market Line: The line between the risk-free asset and the market portfolio that represents the mean-variance efficient set of investment opportunities in the CAPM.

Capital Markets: Markets for financial assets and liabilities with maturity greater than one year, i.e., long-term loanable funds, such as long-term government and corporate bonds, preferred stock, and common stock.

Capital Rationing: The case where funds are limited to a fixed dollar amount and must be allocated among the competing projects.

Capital Structure: The mix of the various debt and equity capital maintained by a firm. Also called financial structure. The composition of a corporation's securities used to finance its investment activities; the relative proportions of short-term debt, long-term debt, and owners' equity.

Caribbean Community and Common Market (CARICOM): CARICOM consists of Antigua & Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & The Grenadines, Suriname, and Trinidad & Tobago. Its purpose is to provide a continued economic linkage after the dissolution of the West Indies Federation for English-speaking countries in the Caribbean.

Carrier: An individual or entity that transports persons or goods for compensation under the contract of carriage.

Cartage: The delivery of goods with short distance.

Cartel: An agreement among, or an organization of, suppliers of a product to limit production in order to minimize competition and maximize market power.

Cash Against Documents (CAD): Payment for goods where a commission house or other intermediary transfers title documents to the buyer upon payment in cash.

Cash Cover: In a letter of credit transaction, money deposited by the applicant with the issuing bank.

Cash Flow: Cash generated by the firm and paid to creditors and shareholders. It can be classified as (1) cash flow from operations, (2) cash flow from changes in fixed assets, and (3) cash flow from changes in net working capital.

Cash in Advance (CIA): Payment for goods in which the price is paid in full before the shipment is made. This type of payment is usually only made for very small shipments or when goods are made to order.

Cash With Order (CWO): Payment for goods in which the price is paid at the time the order is placed.

Central America Free Trade Agreement (CAFTA-DR): CAFTA-DR is an extensive trade agreement between Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and the United States.

Central Bank: The sole institution of a nation that has the authority to issue bank notes and set monetary and credit policies. It manages the rate of exchange of the nation's currency and determines the internal and external monetary stability of the currency.

Centrally Planned Economy: An economy in which the government, rather than free-market activity, controls the allocation of resources.

Certificate of Acceptance: Term used in leasing. A document whereby the lessee acknowledges that the equipment to be leased has been delivered, is acceptable, and has been manufactured or constructed according to specifications.

Certificate of Analysis/Certificate of Inspection: Documents that may be asked for by the importer and/or the authorities of the importing country, as evidence of quality or conformity to specifications.

Certificate of Manufacture: A statement that is usually notarized in which the producer of goods certifies that the goods have been produced and are now available to the buyer.

Certificate of Origin: Documents that may be asked for by the authorities of the importing country, as evidence of the country of manufacture of the goods.

Certificate of Product Origin: A document required by certain foreign countries for tariff purposes, certifying the country of origin of specified goods.

Change in Net Working Capital: Difference between net working capital from one period to another.

Characteristic Line: The line relating the expected return on a security to different returns on the market.

Chattel: An item of movable personal property.

Chill a Sale: The collusion of buyers or bidders in a sale to check competition in order to obtain goods or properties below fair value.

Civil Law: A body of law created by the legislation of a state or nation, and based upon written statutes, for its own regulation.

Civil Society Organizations (CSOs): Nongovernmental and nonprofit groups that work to improve society and the human condition.

Clean Bill of Lading: A receipt for goods issued by a carrier that indicates that the goods were received in apparently good order and without damage.

Clean Collection: Collection in which only the financial document is sent through the banks.

Clearance: The completion of customs entry requirements that results in the release of goods to the importer.

Clearing: The settlement of a transaction, often involving exchange of payments and/or documentation.

Clearing House Interbank Payments System (CHIPS): Financial network through which banks in the United States conduct their financial transactions.

Closed-End Fund: A mutual fund in which the amount of funds under management is fixed and ownership in the funds is bought and sold in the market like a depository receipt.

Closed-End Transaction: A credit transaction in which the time for repayment and amount are fixed.

Codex: Codex Alimentarius Commission (a world food standards body).

Collar: An agreement that fixes the interest rate between a lower and an upper boundary, regardless of the market rate.

Collecting Bank: The bank that acts as the agent of the seller to collect payment(s) from the buyer and then transfer the payment(s) to the remitting bank (seller's bank).

Collection Order: In a collection, the document in which the seller instructs the banks as to how the collection is to be conducted.

Collective Mark: A trademark or service mark for a cooperative, association, or a collective group to indicate membership in this collective group.

Collectivist Society: A society in which people feel more comfortable thinking and acting in groups.

Collusion: An agreement (usually secret) among mostly oligopolistic competing firms in an industry to control the market, raise the market price, and otherwise act like a monopoly.

Command Economy: An economy based on government ownership and/or control of society's resources; during the 20th century, the dominant form of command economy was communism.

Commercial Bank: A bank whose primary function is to accept demand deposits (which can be withdrawn upon depositories' demand), and grant short-term and long-term loans.

Commercial Credit: A letter of credit that assures the seller that buyer will pay for the goods being sold. Such letter is usually issued by a bank upon client's request.

Commercial Document: General term for documents describing various aspects of a transaction, e.g., commercial invoice, transport document, insurance document, certificate of origin, certificate of inspection, etc.

Commingling: Method of packing a shipment in which various goods subject to differing duties are grouped together. Because of this, the value of each type of item is difficult to determine.

Commodity Price Risk: The risk of unexpected changes in a commodity price, such as with oil.

Commodity Swap: A swap in which the (often notional) principal amount on at least one side of the swap is a commodity such as oil or gold.

Common Carrier: An organization that transports persons or goods for a fee.

Common Law: The body of law based on customs, usages, and court decisions rather than statutory laws.

Common Market: A common market is a group of countries that have common external tariffs against nonmember nations. It may also allow labor mobility as well as common economic policies. For example, the European Union (EU).

Common Market for Eastern and Southern Africa (COMESA): An organization of states that intends to promote the development of the resources of its members, COMESA forms a major trading block of 20 nations: Angola, Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe.

Common Market of the South: See Mercosur.

Commonwealth: An association of independent states that promotes cooperation, consultation, and mutual assistance among members. However, such association has no treaty or constitution. For example, the British Commonwealth.

Comparative Advantage: A comparative advantage exists when a nation or economic region is able to produce a product at a lower opportunity cost compared to another nation or region. The rule of economics that states that each country should specialize in producing those goods that it is able to produce relatively most efficiently.

Compensatory Trade: The sale of goods or services that is paid for by bartering other goods or services.

Complementary Imports: The imports of goods or services that the importing country does not possess or produce.

Compliant Documents: Documents presented under a letter of credit that comply with all its terms and conditions. The banks are only obliged to pay the beneficiary if documents are totally compliant.

Compounding: Process of reinvesting each interest payment to earn more interest. Compounding is based on the idea that interest itself becomes principal and therefore also earns interest in subsequent periods.

Compound Interest: Interest that is earned both on the initial principal and on interest earned on the initial principal in previous periods. The interest earned in one period becomes in effect part of the principal in a following period.

Compound Rate: A rate that has both a specific rate as well as an ad valorem rate.

Compound Value: Value of a sum after investing it over more than one period. Also called future value.

Confirming Bank: Bank that adds its payment undertaking to a letter of credit.

Consignee: Party to whom goods are to be delivered.

Consignment: Delivery of merchandise from an exporter (the consignor) to an agent (the consignee) under agreement that the consignee sells the merchandise of the account of the consignor, while the consignor retains title to the goods until the consignee sells them. The consignee sells merchandise for commissions and remits the net proceeds to the consignor.

Consignor: A consignor is an individual entity, partnership, or company that ships its goods to another party to be taken care of. A consignor is usually an exporter.

Consolidated Income: The sum of income across all of the multinational corporation's domestic and foreign subsidiaries.

Consolidation: A form of corporate reorganization in which two firms pool their assets and liabilities to form a new company. The term can also be used for shipping, in which a freight consolidator combines shipments of cargo that are less than truckload (LTL) in order to reduce shipping rates.

Consular Statement: A document required by some foreign countries, describing a shipment of goods and showing information such as the consignor, consignee, and value of shipment. Certified by a consular official of the foreign country, it is used by the country's officials to verify the value, quantity, and nature of the shipment.

Consulate: The diplomatic station located in a foreign country that represents the commercial interests of the home country.

Consumer Goods: Goods produced for individuals rather than for manufacturing purposes.

Consumer Price Indexes (CPI): A program that produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services. It is one indication of inflation.

Contango: The amount the buyer pays the seller to delay the transaction of a security, especially when the future price of the security is above the expected future spot price. The opposite is called backwardation.

Contingency Insurance: Contingency insurance protects the exporter in any situation in which exporter responsibility relied on the buyer to insure, but sustained a loss because of inadequate coverage from that source. It will cover situations in which the FOB endorsement would have otherwise served had that been in force.

Contingent Claim: Claim whose value is directly dependent on, or is contingent on, the value of its underlying assets. For example, the debt and equity securities issued by a firm derive their value from the total value of the firm.

Continuous Compounding: Interest compounded continuously, every instant, rather than at fixed intervals.

Continuous Quotation System: A trading system in which buy and sell orders are matched with market makers as the orders arrive, ensuring liquidity in individual shares.

Contract Manufacturing: A firm allowing another firm to manufacture a prespecified product.

Contribution Margin: Amount that each additional product, such as a jet engine, contributes to after-tax profit of the whole project: (Sales price – Variable cost) X (1 – T), where T is the corporate tax rate.

Controlled Foreign Corporation (CFC): In the U.S. tax code, a foreign corporation owned more than 50 percent either in terms of market value or voting power by U.S. shareholders.

Convention on the International Trade in Endangered Species (CITES): CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments.

CITES aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

Convertible Bonds: Bonds sold with a conversion feature that allows the holder to convert the bond into common stock on or prior to a conversion date and at a prespecified conversion price.

Convertible Currency: A currency that can be traded for other currencies at will.

Convex Tax Schedule: A tax schedule in which the effective tax rate is greater at high levels of taxable income than at low levels of taxable income. Such a schedule results in progressive taxation.

Cooperation Council for the Arab States of the Gulf (GCC): The Cooperation Council for the Arab States of the Gulf (GCC) was established on May 25, 1981. It joined the six states of the United Arab Emirates, State of Bahrain, Kingdom of Saudi Arabia, Sultanate of Oman, State of Qatar and State of Kuwait. The framework's focus is on achieving a state of unity in all fields among its member states. It also stresses a furthering of relations and cooperation among member states and provides a platform to address security and economic development challenges.

Copenhagen Criteria: The regulations that all applicant countries to the European Union must meet and that all EU member nations must maintain.

Corporate Culture: The set of values, beliefs, relationships between individuals, and functions that guide the decisions of a company to achieve its objectives.

Corporate Governance: The way in which major stakeholders exert control over the modern corporation.

Corporate Social Responsibility (CSR): The responsibilities that corporations (including MNCs) have to workers and their families, to consumers, to investors, and to the natural environment.

Corporation: Form of business organization that is created as a distinct "legal person" composed of one or more actual individuals or legal entities. Primary advantages of a corporation include limited liability, ease of ownership, transfer, and perpetual succession.

Correlation: A measure of the covariability of two assets that is scaled for the standard deviations of the assets (rAB = sAB / sAsB such that $-1 < rAB < +1$).

Correspondent Bank: A bank that, in its own country, handles the business of a foreign bank.

Corruption Perceptions Index (CPI): A ranking of countries by level of corruption that is researched and published by Transparency International (TI), the world's leading nongovernmental organization dedicated to fighting corruption.

Cost and Freight: A pricing term that indicates that the cost of the goods and freight charges are included in the quoted price.

Cost of Equity Capital: The required return on the company's common stock in capital markets. It is also called the equity holders' required rate of return because it is what equity holders can expect to obtain in the capital market. It is a cost from the firm's perspective.

Cottage Industry: An industry comprised of a labor force that produces goods for sale at home, often with their own equipment.

Counter Credit: Another name for back-to-back letter of credit.

Countertrade: The sale of goods or services that are paid for in whole or part by the transfer of goods or services from a foreign country.

Countervailing Duties: Duties levied on an imported good that has been unfairly subsidized by a foreign government. Imposing duties on the good is meant to raise the product's price to a "fair market value."

Country Risk: The political and financial risks of conducting business in a particular foreign country.

Coupon: The stated interest on a debt instrument.

Coupon Swap: A fixed-for-floating interest rate swap.

Courtage: A European term for brokerage fee.

Covariance: A measure of the covariability of two assets (sAB = sAsB rAB).

Cover Note: Insurance document evidencing that insurance cover for a consignment has been taken out, but not giving full details.

Credit Risk Insurance: Insurance that covers the risk of nonpayment for delivered goods.

Creeping Nationalization: The succession of small but important changes in a firm's condition or standing that bring it slowly under national control.

Cross-Hedge: A futures hedge using a currency that is different from, but closely related to, the currency of the underlying exposure.

Culture: Collective mental paradigms that a society imparts to individuals in the form of behavior patterns, shared values, norms, and institutions.

Cumulative Translation Adjustment (CTA): An equity account under Financial Accounting Standards Board Statement No. 52 that accumulates gains or losses caused by translation accounting adjustments.

Currency Coupon Swap: A fixed-for-floating rate nonamortizing currency swap traded primarily through international commercial banks.

Currency Cross-Hedge: A hedge of currency risk using a currency that is correlated with the currency in which the underlying exposure is denominated.

Currency of Reference: The currency that is being bought or sold. It is most convenient to place the currency of reference in the denominator of a foreign exchange quote.

Currency Option: A contract giving the option holder the right to buy or sell an underlying currency at a specified price and on a specified date. The option writer (seller) holds the obligation to fulfill the other side of the contract.

Currency Risk: The risk of unexpected changes in foreign currency exchange rates. Also known as foreign exchange risk.

Currency Swap: A contractual agreement to exchange a principal amount of two different currencies and, after a prearranged length of time, to give back the original principal. Interest payments in each currency are also typically swapped during the life of the agreement.

Current Account: A measure of a country's international trade in goods and services.

Current Account Balance: A broad measure of import-export activity that includes services, travel and tourism, transportation, investment income and interest, gifts, and grants along with the trade balance on goods.

Current Rate Method: A translation accounting method, such as Financial Accounting Standards Board Statement No. 52 (FAS #52) in the United States, that translates monetary and real assets and monetary liabilities at current exchange rates. FAS #52 places any imbalance into an equity account called the "cumulative translation adjustment."

Customhouse Broker: A person or firm obtains the license from the treasury department of its country when required, and helps clients (importers) to enter and declare goods through customs.

Customs: The authorities designated to collect duties levied by a country on imports and exports.

Customs Union: A form of a regional economic integration group that eliminates import and export tariffs among member nations and establishes common external tariffs.

D

Dealing Desk: The desk at an international bank that trades spot and forward foreign exchange. Also known as trading desk.

Debt Capacity: The amount of debt that a firm chooses to borrow to support a project.

Debt-for-Equity Swap: A swap agreement to exchange equity (debt) returns for debt (equity) returns over a prearranged length of time.

Debtor Nation: A nation that is owed less in foreign currency than it owes other nations.

Decision Trees: A graphical analysis of sequential decisions and the likely outcomes of those decisions.

Deferred Payment Credit: A type of letter of credit that provides for payment some time after presentation of the shipping documents by the exporter.

Del Credere Risk: Situation created when a sales agent sells on credit and there is a chance that the buyer either does not want to or does not have the money to pay.

Deliverable Instrument: The asset underlying a derivative security. For a currency option, the deliverable instrument is determined by the options exchange and is either spot currency or an equivalent value in futures contracts.

Delta-Cross-Hedge: A futures hedge that has both currency and maturity mismatches with the underlying exposure.

Delta-Hedge: A futures hedge using a currency that matches the underlying exposure and a maturity date that is different from, but preferably close to, the maturity of the underlying exposure.

Demand Management: A business process with the intention to coordinate and influence all sources of demand for a firm's products.

Depository Receipt: A derivative security issued by a foreign borrower through a domestic trustee representing ownership in the deposit of foreign shares held by the trustee.

Depreciation: (1) The expense against earnings to write-off purchase price of an asset over its useful life. (2) A decrease in a currency value relative to another currency in a floating exchange rate system.

Derivative Security: A financial security whose price is derived from the price of another asset. The value of a derivative is determined by the fluctuations in the asset.

Devaluation: A decrease in a currency value relative to another currency in a fixed exchange rate system. The purpose of devaluation typically is to increase export and decrease import in order to correct a balance of payment deficit.

Developed Countries: The richer, more industrialized countries in the world.

Developing Country: A country that is in the process of becoming industrialized. Average national income must be below $9,265 for a country to be classified as a developing country. A developing country typically lacks industrialization, infrastructure, high literacy rate, and advanced living standards.

Difference Check: The difference in interest payments that is exchanged between two swap counterparties.

Digital Divide: The digital divide refers to the widening technological gap between the richer and the poorer countries of the world.

Direct Costs of Financial Distress: Costs of financial distress that are directly incurred during bankruptcy or liquidation proceedings.

Direct Exporting: Marketer takes direct responsibility for its products abroad by selling them directly to foreign customers or through local representatives in foreign markets.

Direct Financing Lease: A nonleveraged lease by a lessor in which the lease meets any of the definitional criteria of a capital lease, plus additional criteria.

Direct Product Profitability: Measuring the direct costs associated with handling a product from the warehouse until a customer buys from the retail store.

Direct Terms: The price of a unit of foreign currency in domestic currency terms, such as $0.6548/DM for a U.S. resident (contrast with indirect quote).

Discount: If a bond is selling below its face value, it is said to sell at a discount.

Discounted Cash Flow: A valuation methodology that discounts expected future cash flows at a discount rate appropriate for the risk, currency, and maturity of the cash flows.

Discounted Payback: The length of time needed to recoup the present value of an investment; sometimes used when investing in locations with high country risk.

Discounted Payback Period Rule: An investment decision rule in which the cash flows are discounted at an interest rate and the payback rule is applied on these discounted cash flows.

Discounting: Calculating the present value of a future amount. The process is the opposite of compounding.

Discretionary Reserves: The accounting balance sheet accounts that are used in some countries to temporarily store earnings from the current year or the recent past.

Discriminatory Pricing: The practice of selling a product or service at different prices that do not reflect a proportional difference in costs.

Dispatch: An amount paid by a vessel's operator to a charter if loading or unloading is completed in less time than stipulated in the charter party.

Dispute Settlement Body (DSB): Dispute Settlement Body is a part of the World Trade Organization (WTO) that settles trade disputes between governments.

Dispute Settlement Panel (DSP): The WTO's Dispute Settlement Body forms different Dispute Settlement Panels to resolve conflicting issues among its members.

Dispute Settlement Understanding (DSU): The Dispute Settlement Understanding (DSU) of the World Trade Organization (WTO) was one of the key outcomes of the Uruguay Round of multilateral trade negotiations.

Distributor: A foreign agent who sells for a supplier directly and maintains an inventory of the supplier's product.

Diversifiable Risk: A risk that specifically affects a single asset or a small group of assets. Also called unique or unsystematic risk.

Diversionary Dumping: The sale of foreign products at less than fair value to a third country where the products are further processed and sold to another country.

Dock Receipt: A receipt issued by an ocean carrier to acknowledge receipt of a shipment at the carrier's dock or warehouse.

Dock Statement: A receipt issued by an ocean carrier to acknowledge the receipt of a shipment at the carrier's dock or warehouse facilities.

Domestic Bonds: Bonds issued and traded within the internal market of a single country and denominated in the currency of that country.

Domestic International Sales Corporation: In the U.S. tax code, a specialized sales corporation whose income is lumped into the same income basket as a foreign sales corporation.

Domestic Liquidity: The aggregate of money supply, quasi-money or savings and time deposits, and deposit substitutes.

Downstream Dumping: A type of dumping in which the primary producer first sells its product to another domestic producer at below fair value or cost. The second producer then further processes the product and exports it to another country at a lower than normal cost.

Draft: A means of payment whereby a drawer (the importer) instructs a drawee (either the importer or its commercial bank) to pay the payee (the exporter). Also known as trade bill or bill of exchange.

Dual Pricing: The practice of selling identical products in different markets for different prices.

Dumping: Selling merchandise in another country at a price below the price at which the same merchandise is sold in the home market or selling such merchandise below the costs incurred in production and shipment, that is, selling the product at less than fair value. Dumping is an illegal trade practice.

Dumping Margin: The difference between the fair value of a product and the amount for which it is available in the case of dumping.

Duty: A tax imposed on imports by the customs authority of a country.

E

Earnings Response Coefficient: The relation of stock returns to earnings surprises around the time of corporate earnings announcements.

Easement: A right held by one party to make use of the land of another.

East African Community (EAC): The East African Community (EAC) is a regional organization comprised of the Republics of Kenya, Uganda, and the United Republic of Tanzania.

The EAC provides a forum for cooperation on a broad range of topics including: trade, science and technology, wildlife management, investments and industrial development, and foreign affairs. The three East African countries encompass a population of 82 million and cover an area of 1.8 million square kilometers.

Eclectic Paradigm: A theory of the multinational firm that posits three types of advantages benefiting the multinational corporation: ownership-specific, location-specific, and market internalization advantages.

Economic Community of West African States (ECOWAS): A regional group consisting of fifteen West African nations. It is a free trade area for agricultural products and raw materials, and a preferential trade area for various industrial products.

Economic Exposure: Change in the value of a corporation's assets or liabilities as a result of changes in currency values.

Economic Freedom: Economic freedom occurs when individuals and businesses make most of the economic decisions in an economy.

Economic Integration: The integration of commercial and financial activities and commerce among countries through the abolishment of economic discrimination.

Economic Union: A group that combines the economic characteristics of a common market with some degree of harmonization of macroeconomic policies, such as monetary and fiscal policies.

Economic Value Added: A method of performance evaluation that adjusts accounting performance with a charge reflecting investors' required return on investment.

Economies of Scale: Achieving lower average cost per unit through a larger scale of production. This is achieved by spreading fixed costs over a greater amount of production.

Economies of Vertical Integration: Achieving lower operating costs by bringing the entire production chain within the firm rather than contracting through the marketplace.

Effective Annual Interest Rate: The interest rate as if it were compounded once per time period rather than several times per period.

Effective Annual Yield: Calculated as (1+i/n)n, where i is the stated annual interest rate and n is the number of compounding periods per year (contrast with bond equivalent yield and money market yield).

Effective Exchange Rate: Spot exchange rates that are actually paid or received by the general public, including taxes on any transactions as well as bank commissions.

Efficient Frontier: The mean-variance efficient portion of the investment opportunity set.

Efficient Market: A market in which prices reflect all relevant information.

Embargo: A type of economic sanction that totally disallows the imports of a specific product or all products from a specific country. Embargoes are typically placed in time of war.

Emerging Market: An emerging market has a very high growth rate, which yields enormous market potential. It is distinguished by the recent progress it has made in economic liberalization.

Emerging Stock Markets: The stock markets of emerging economies. These markets typically have higher expected returns than established markets but also higher risk.

Employment Rate: The ratio, in percent, of the number of employed persons to total labor force.

Endogenous Uncertainty: Price or input cost uncertainty that is within the control of the firm, such as when the act of investing reveals information about price or input cost.

Equity-Linked Eurobonds: A Eurobond with a convertibility option or warrant attached.

Erosion: Cash-flow amount transferred to a new project from customers and sales of other products of the firm.

Euro: The single currency of the European Economic and Monetary Union (EMU) introduced in January 1999; it became the official currency of EMU member countries on January 1, 2002.

Eurobond: A bond that is denominated in a currency other than that of the country of issue.

Eurocurrencies: Deposits and loans denominated in one currency and traded in a market outside the borders of the country issuing that currency (e.g., Eurodollars).

Eurocurrency Market: A money market for currencies held in the form of deposits in countries other than that where the currency is issued.

Eurodollars: Dollar-denominated deposits held in a country other than the United States.

European Article Number (EAN): A standard international numbering code system that is used primarily in retail applications. It is also compatible with the U.S. UPC (Universal Product Code).

European Bank for Reconstruction and Development (EBRD): One of four major regional development banks currently operating in the global economy.

European Central Bank (ECB): The central bank for the European Union (EU). It sets monetary policy for member countries.

European Committee for Standardization (CEN): An organization comprised of the national standards organizations of 30 European countries. The European Committee for Standardization, or CEN, seeks to promote the European economy in the global market by providing an efficient and standardized infrastructure for trade.

European Currency Unit (ECU): A trade-weighted basket of currencies in the European Exchange Rate Mechanism (ERM) of the European Union.

European Exchange Rate Mechanism (ERM): The exchange rate system used by countries in the European Union in which exchange rates are pegged within bands around an ERM central value.

European Free Trade Association (EFTA): The European Free Trade Association (EFTA) is an international organization established in 1960. It is comprised of Iceland, Liechtenstein, Norway, and Switzerland, promoting free trade and economic integration.

There are three main branches of the EFTA: the EFTA Secretariat, Surveillance Authority, and EFTA Court. Its function is to create a free trade area among its member states.

European Monetary System (EMS): An exchange rate system based on cooperation between European Union central banks.

European Option: An option that can be exercised only at expiration (contrast with American option).

European Terms: A foreign exchange quotation that states the foreign currency price of one U.S. dollar (contrast with American terms).

European Union (EU): An intergovernmental organization that coordinates foreign, economic, and judicial policy among its member nations.

Exaction: Demanding or imposing various fees from a position of authority.

Exchange Rate: The price of one currency in terms of another, i.e., the number of units of one currency that may be exchanged for one unit of another currency.

Exchange Risk: The risk that losses may result from the changes in the relative values of different currencies.

Excise Tax: A tax on the consumption of certain goods either made in or imported into a country.

Exercise Price: The price at which an option can be exercised (also called the striking price).

Ex-Im Bank: Export-Import Bank of the United States. Provides guarantees of working capital loans for U.S. exporters, guarantees the repayment of loans or makes loans to foreign purchasers of U.S. goods and services, and provides credit insurance against non-payment by foreign buyers for political or commercial risk. Currently, the bank is focusing on critical areas such as emphasizing exports to developing countries, aggressively countering trade subsidies of other governments, stimulating small business transactions, promoting the export of environmentally beneficial goods and services, and expanding project finance capabilities. Ex-Im Bank is not an aid or development agency, but a government held corporation, managed by a board of directors.

Exogenous Uncertainty: Price or input cost uncertainty that is outside the control of the firm.

Expiry Date: The date when a letter of credit is no longer valid, i.e., the date beyond which it cannot be used.

Explicit Tax: A tax that is explicitly collected by a government; includes income, withholding, property, sales, and value added taxes and tariffs.

Export: Any resource, intermediate good, or final good or service that producers in one country sell to buyers in another country.

Export Administration Regulations (EAR): EAR carry both civil and criminal penalties. The EAR are available by subscription from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401.

Export Broker: An individual or firm that helps to locate and introduce buyers and sellers in international business for a commission but does not take part in actual sales transactions.

Export Credit Insurance: Insurance provided to exporters in order to protect them against commercial and political risks.

Export Financing Interest: In the U.S. tax code, interest income derived from goods manufactured in the United States and sold outside the United States as long as not more than 50 percent of the value is imported into the United States.

Export License: A general export license covers the exportation of goods not restricted under the terms of a validated export license. No formal application or written authorization is needed to ship exports under a general export license.

Export Restraints: Quantitative restrictions imposed by exporting countries to limit exports to specified foreign markets, usually as a follow-up to formal or informal agreements reached with importing countries.

Export Subsidies: Any form of government payment that helps an exporter or manufacturing company to lower its export costs.

Export Trading Company (ETC): A company that facilitates the export of goods and services. An ETC can either act as the export department for producers or take title to the product and export for its own account.

Expropriation: A specific type of political risk in which a government seizes foreign assets.

External Market: A market for financial securities that are placed outside the borders of the country issuing that currency.

Extraterritoriality: A government practice that applies its laws outside its established territorial boundaries.

F

Face Value: The value of a bond that appears on its face. Also referred to as par value or principal.

Factoring: Sale of an accounts receivable balance to buyers (factors) that are willing and able to bear the costs and risks of credit and collections.

Factor Model: A model that assumes a linear relation between an asset's expected return and one or more systematic risk factors.

Fast Track Negotiating: Authority provided by the U.S. Congress to the Executive Branch to negotiate amendment-proof trade agreements.

Federal Trade Commission (FTC): The FTC is an independent U.S. government agency established in 1914. Its main goals are consumer protection and the prevention of trust formations by companies.

Financial Contagion: The spread of a financial crisis from a country or region to other countries or regions.

Financial Engineering: The process of innovation by which new financial products are created.

Financial Innovation: The process of designing new financial products, such as exotic currency options and swaps.

Financial Market: The market for the exchange of credit and capital in an economy. It consists of the money market and the capital market.

Financial Markets: Markets for financial assets and liabilities.

Financial Policy: The corporation's choices regarding the debt-equity mix, currencies of denomination, maturity structure, method of financing investment projects, and hedging decisions with a goal of maximizing the value of the firm to some set of stakeholders.

Financial Price Risk: The risk of unexpected changes in a financial price, including currency (foreign exchange) risk, interest rate risk, and commodity price risk.

Financial Risk: Financial risk refers to unexpected events in a country's financial, economic, or business life.

Financial Service Income: In the U.S. tax code, income derived from financial services such as banking, insurance, leasing, financial service management fees, and swap income.

Financial Strategy: The way in which the firm pursues its financial objectives.

Financial Structure: The proportion of debt and equity and the particular forms of debt and equity chosen to finance the assets of the firm. Also known as capital structure.

First-to-Market Advantage: Also known as "first-mover advantage." The idea of first-mover advantage is that the initial occupant of a strategic position or niche (market segment) gains access to resources and capabilities that a follower cannot match.

Fixed Cost: A cost that is fixed in total for a given period of time and for given volume levels. It is not dependent on the amount of goods or services produced during the period.

Fixed Exchange Rate System: An exchange rate system in which governments stand ready to buy and sell currency at official exchange rates. Fluctuations of this currency are not possible.

Fixed Forward Contract: Currency is bought or sold at a given future date.

Flight of Capital: The movement of capital from one place to another in order to avoid loss or increase gain.

Floating Currency System: An exchange rate system under which a government is not obligated to declare that its currency is convertible into a fixed amount of another currency.

Floating Exchange Rate: An exchange rate system in which currency values are allowed to fluctuate according to supply and demand forces in the market without direct interference by government authorities.

Floor: In banking and finance, a floor can be negotiated and agreed upon when the interest rate is dependent on the market interest rate.

FOB Endorsement: Used with FOB (Free on Board), FAS, C&F, or CFR (but not CIF) quotations, FOB sales endorsement to an open marine policy can cover transit risk from the point of origin until title transfers.

Food and Drug Administration (FDA): A U.S. agency that has power to set standards for food, drugs, cosmetics, and devices. Before new drugs can be approved by the FDA and be released to the market, they must undergo extensive laboratory testing within the pharmaceutical company. The company must then file a formal and thorough application for approval with the FDA.

Force Majeure: The title of a standard clause in marine and other contracts exempting the parties for nonfulfillment of their obligations as a result of conditions beyond their control, such as acts of God or war.

Foreign Aid: A grant of money, technical assistance, capital equipment, or other assistance typically extended by richer nations to poorer nations.

Foreign Base Company Income: In the U.S. tax code, a category of Subpart F income that includes foreign holding company income and foreign base company sales and service income.

Foreign Bonds: Bonds that are issued in a domestic market by a foreign borrower, denominated in domestic currency, marketed to domestic residents, and regulated by the domestic authorities.

Foreign Bottom: An ocean vessel built or registered in a foreign country.

Foreign Branch: A foreign affiliate that is legally a part of the parent firm. In the U.S. tax code, foreign branch income is taxed as it is earned in the foreign country.

Foreign Debt: The funds or money owed by one nation to foreign countries' investors, banks, or governments.

Foreign Direct Investment (FDI): The act of building productive capacity directly in a foreign country.

Foreign Equity Requirements: Investment rules that limit foreign ownership to a minority holding in a company.

Foreign Exchange: Currency of another country, or a financial instrument that facilitates payment from one currency to another.

Foreign Exchange Broker: Brokers serving as matchmakers in the foreign exchange market who do not put their own money at risk.

Foreign Exchange Dealer: A financial institution making a market in foreign exchange.

Foreign Exchange Markets: Networks of commercial banks, investment banks, and other financial institutions that convert, buy, and sell currencies in the global economy.

Foreign Exchange Rate: The price of one nation's currency in terms of another nation's currency. The foreign exchange rate is specified as the amount of one currency that can be traded per unit of another.

Foreign Exchange Risk: The risk of unexpected changes in foreign currency exchange rates. Also known as currency risk.

Foreign Remittances: The transfer across national boundaries of any kind of funds.

Foreign Sales Corporation (FSC): In the U.S. tax code, a specialized sales corporation whose income is lumped into the same income basket as that of a domestic international sales corporation.

Foreign-Source Income: Income earned from foreign operations.

Foreign Tax Credit (FTC): In the U.S. tax code, a credit against domestic U.S. income taxes up to the amount of foreign taxes paid on foreign-source income.

Foreign Trade Zone: A physical area in which the government allows firms to delay or avoid paying tariffs on imports.

Forfaiting: A form of factoring in which large, medium- to long-term receivables are sold to buyers (forfaiters) who are willing and able to bear the costs and risks of credit and collections.

Forward Contract: A binding commitment to exchange a specified amount of one currency for a specified amount of another currency on a specified future date.

Forward Discount: A currency whose nominal value in the forward market is lower than in the spot market (contrast with forward premium).

Forward Foreign Exchange: An agreement to purchase or sell a defined amount of forward currency in the future at a certain fixed rate.

Forward Market: A market for forward contracts in which trades are made for future delivery according to an agreed-upon delivery date, exchange rate, and amount.

Forward Parity: When the forward rate is an unbiased predictor of future spot exchange rates.

Forward Premium: A currency whose nominal value in the forward market is higher than in the spot market (contrast with forward discount).

Foul Bill of Lading: A receipt issued by a carrier to the exporter making use of its services that, to reduce the carrier's liability, notes that the goods were in some way damaged, short in quantity, or improperly packaged.

Franchise Agreement: An agreement in which a domestic company (the franchiser) licenses its trade name and/or business system to an independent company (the franchisee) in a foreign market.

Franchising: A parent company grants another independent entity the privilege to do business in a prespecified manner, including manufacturing, selling products, marketing technology, and other business approach.

Free Cash Flow: Cash flow after all positive-NPV (net present value) projects have been exhausted in the firm's main line of business.

Freely Floating Exchange Rate System: An exchange rate system in which currency values are allowed to fluctuate according to supply and demand forces in the market without direct interference by government authorities.

Free Market: The type of market in which goods and services cross national borders freely, unrestrained by tariffs or any other sort of government barrier to trade.

Free On Board (FOB): A trade term requiring the seller to deliver goods via a method of transportation designated by the buyer. The seller fulfills its obligations to deliver when the goods have passed through the seller's ownership and prepared for delivery to the buyer.

Free Port: An area such as a port city into which merchandise may legally be moved without payment of duties.

Free Trade Area of the Americas (FTAA): A proposed hemispheric trade zone that would cover all of the countries in North, South, and Latin America. The FTAA is highly controversial.

Free Trade Zone: An area designated by the government to which goods may be imported for processing and subsequent export on duty-free basis. Merchandise may be stored, used, or manufactured in the zone and reexported without duties being paid.

Freight Forwarder: An independent business that handles export shipment on behalf of the shipper without vested interest in the products. A freight forwarder is a good source of information and assistance on export regulations and documentation, shipping methods, and foreign import regulations.

Freight Shippers: Also known as freight forwarders. Freight shippers are agents used to coordinate the logistics of transportation.

Frequency Distribution: The organization of data to show how often certain values or ranges of values occur.

Full Payout Lease: A lease in which the lessor recovers, through the lease payments, all costs incurred in the lease plus an acceptable rate of return, without any reliance upon the leased equipment's future residual value.

Fundamental Analysis: A method of predicting exchange rates using the relationships of exchange rates to fundamental economic variables such as GNP growth, money supply, and trade balances.

Future Value: Value of a sum after investing it over multiple periods. Also called compound value.

Futures Commission Merchant: A brokerage house that is authorized by a futures exchange to trade with retail clients.

Futures Contract: A commitment to exchange a specified amount of one currency for a specified amount of another currency at a specified time in the future. Futures contracts are periodically marked-to-market, so that changes in value are settled throughout the life of the contract. Exchange-traded currency futures are marked-to-market on a daily basis.

G

G8: The G7 countries plus Russia.

General Agreement on Tariffs and Trade (GATT): A post–World War II agreement designed to promote freer international trade among the nations of the world. The General Agreement on Tariffs and Trade was replaced by the World Trade Organization (WTO) in 1994.

Generalized Autoregressive Conditional Heteroskedasticity: An economic time series model in which returns at each instant of time are normally distributed but volatility is a function of recent history of the series.

Generalized System of Preferences (GSP): A program of tariff preferences designed to encourage the economic growth of certain developing countries. In accordance with the Generalized System of Preferences (GSP), developed countries let the manufactured and semimanufactured goods of eligible developing countries enter with either no duty or a lower rate than is applied to other countries.

Generally Accepted Accounting Principles (GAAP): A common set of accounting concepts, standards, and procedures by which financial statements are prepared.

Geocentric Multinational: A multinational in which the subsidiaries are neither satellites nor independent city-states, but parts of a whole whose focus is on worldwide objectives as well as local objectives, each part making its unique contribution with its unique competence.

Global Bond: A bond that trades in the Eurobond market as well as in one or more national bond markets.

Global Economy: The international network of individuals, businesses, governments, and multilateral organizations that collectively make production and consumption decisions.

Globalization: A growing global movement to increase the flow of goods, services, people, real capital, and money across national borders in order to create a more integrated and interdependent world economy.

Global Quota: An import quota set by a nation that specifies the allowed quantity of a product from all countries.

Gold Exchange Standard: An exchange rate system used from 1925 to 1931 in which the United States and England were allowed to hold only gold reserves while other nations could hold gold, U.S. dollars, or pounds sterling as reserves.

Gold Standard: An exchange rate system used prior to 1914 in which gold was used to settle national trade balances. Also called the "classical gold standard."

Goodwill: The accounting treatment of an intangible asset such as the takeover premium in a merger or acquisition.

Gradualism: A steady and calculated approach to transforming an economy from communism to capitalism.

Graduation: The point at which a developing country's eligibility for Generalized System of Preferences (GSP) is terminated for the reason of sufficient economic progression.

Gray-Market Imports: Gray-market imports are parallel distribution of genuine goods by intermediaries other than authorized channel members.

Greenfield: A greenfield investment is the investment in a manufacturing plant, office, or other physical company-related structure or group of structures in an area where no previous facilities exist.

Greenmail: Buying shares on the open market in the hope that the target's business partners will buy back the shares at inflated prices.

Gross Domestic Product (GDP): A measure of the market value of goods and services produced by a nation. Unlike gross national product, GDP excludes profits made by domestic firms overseas, as well as the share of reinvested earnings in domestic firms' foreign-based operations.

Gross National Income (GNI): Previously known as gross national product, gross national income comprises the total value of goods and services produced within a country (i.e., its gross domestic product), together with its income received from other countries (notably interest and dividends), less similar payments made to other countries. For example, if a British-owned company operating in another country sends some of its income (profits) back to the UK, UK's GNI is enhanced. Similarly, a British production unit of a U.S. company sending profit to the United States will affect the British GNI but will not reduce it since it is not included in the first place.

Gross National Product (GNP): GNP is the total value of all final goods and services produced within a nation in a particular year, plus income earned by its citizens who are working abroad, minus income of nonresidents located in that country. It is essentially the measurement of the value of all goods and services produced by a country's citizens regardless of their location. It differs from gross domestic product (GDP) in that GDP measures the total production within a country regardless of the citizenship of the producer.

Growing Perpetuity: A constant stream of cash flows without end that is expected to rise indefinitely. For example, cash flows to the landlord of an apartment building might be expected to rise a certain percentage each year.

Growth Options: The positive net present value opportunities in which the firm has not yet invested. The value of growth options reflects the time value of the firm's current investment in real assets as well as the option value of the firm's potential future investments.

Growth Stocks: Stocks with high price/book or price/earnings ratios. Historically, growth stocks have had lower average returns than value stocks (stocks with low price/book or PE ratios) in a variety of countries.

G7: A formal organization of seven highly industrialized democracies: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

Guideline Lease: A lease written under criteria established by the IRS to determine the availability of tax benefits to the lessor.

Gulf Cooperation Council (GCC): A council created in 1981 and composed of Saudi Arabia, Bahrain, Oman, Qatar, Kuwait, and the United Arab Emirates. It is a forum to coordinate and integrate economic policies between these six countries, which account for about 40 percent of oil in the international market.

H

Harmonized Tariff Schedule (HTS): A method of classification used by many countries to determine tariffs on imports.

Heavily Indebted Poor Countries (HIPC) Initiative: The HIPC Initiative is a major international response to the burdensome external debt held by the world's poorest, most indebted countries. It originated in 1996 as a joint undertaking of the World Bank and the International Monetary Fund (IMF).

Hedge: A position or operation that offsets an underlying exposure. For example, a forward currency hedge uses a forward currency contract to offset the exposure of an underlying position in a foreign currency. Hedges reduce the total variability of the combined position.

Hedge Funds: Private investment partnerships with a general manager and a small number of limited partners.

Hedge Portfolio: The country-specific hedge portfolio in the International Asset Pricing Model serves as a store of value (like the risk-free asset in the CAPM) as well as a hedge against the currency risk of the market portfolio.

Hedge Quality: Measured by the r-square in a regression of spot rate changes on futures price changes.

Hedge Ratio: The ratio of derivatives contracts to the underlying risk exposure.

Hedging: Reducing the risk of a cash position by using the futures instruments to offset the price movement of the cash asset.

High-Withholding-Tax Interest Income: In the U.S. tax code, interest income that has been subject to a foreign gross withholding tax of five percent or more.

Historical Volatility: Volatility estimated from a historical time series.

Holding-Period Return: The rate of return over a given period.

Home Asset Bias: The tendency of investors to overinvest in assets based in their own country.

Homogeneous Expectations: Idea that all individuals have the same beliefs concerning future investments, profits, and dividends.

Hyperinflation: An extremely high rate of inflation, often exceeding several hundred or several thousand percent.

Hysteresis: The behavior of firms that fail to enter markets that appear attractive and, once invested, persist in operating at a loss. This behavior is characteristic of situations with high entry and exit costs along with high uncertainty.

I

Implicit Tax: Lower (higher) before-tax required returns on assets that are subject to lower (higher) tax rates.

Implied Volatility: The volatility that is implied by an option value given the other determinants of option value.

Import: Any resource, intermediate good, or final good or service that buyers in one country purchase from sellers in another country.

Import Licenses: Licenses required by some countries to bring in a foreign-made good. In many cases, import licenses are also used by the issuing country to control the quantity of imported items.

Income Baskets: In the U.S. tax code, income is allocated to one of a number of separate income categories. Losses in one basket may not be used to offset gains in another basket.

Income Statement: Financial report that summarizes a firm's performance over a specified time period.

Incremental IRR: Internal Rate of Return (IRR) on the incremental investment from choosing a large project instead of a smaller project.

Indemnity Clause: A clause in which one party indemnifies the other. In leasing, generally a clause whereby the lessee indemnifies the lessor from loss of tax benefits.

Independent Project: A project that is independent of the acceptance or rejection of other projects.

Index Futures: A futures contract that allows investors to buy or sell an index (such as a foreign stock index) in the futures market.

Index Options: A call or put option contract on an index (such as a foreign stock market index).

Index Swap: A swap of a market index for some other asset (such as a stock-for-stock or debt-for-stock swap).

Indication Pricing Schedule: A schedule of rates for an interest rate or currency swap.

Indirect Costs of Financial Distress: Costs of financial distress that are indirectly incurred prior to formal bankruptcy or liquidation.

Indirect Customers: The end users (e.g., consumers) of the products and services purchased from the wholesalers, retailers, and consignees—the direct customers of the seller.

Indirect Diversification Benefits: Diversification benefits provided by the multinational corporation that are not available to investors through their portfolio investment.

Indirect Exporting: Exporting of products to foreign markets by using an intermediary, usually an export trading company based in the exporter's country.

Indirect Terms: The price of a unit of domestic currency in foreign currency terms such as DM1.5272/$ for a U.S. resident (contrast with direct terms).

Infant Industry Argument: The infant industry argument is a rationale for the government's "temporary protection" of a new industry or corporation in order to help it become established domestically and later become competitive worldwide. These protections consist of tariff and nontariff barriers to imports, preventing global competition from entering the market.

Inflation Rate: The general increase in the price level herein measured by the growth rate in the GNP Implicit Price Index or the general price deflator.

Informational Efficiency: Whether or not market prices reflect information and thus the true (or intrinsic) value of the underlying asset.

Integrated Financial Market: A market in which there are no barriers to financial flows and purchasing power parity holds across equivalent assets.

Intellectual Property: Material or communicable result in forms of discoveries, inventions, designs, and literary and art works of scientific, humanistic, literary, and artistic endeavor. It includes, but is not limited to, works in the form of scientific discoveries and inventions, designs, patents, trademarks, books, monographs, papers, paintings, drawings and sculptures, performances, computer software, and lecture and conference presentations.

Intellectual Property Rights: Patents, copyrights, and proprietary technologies and processes that are the basis of the multinational corporation's competitive advantage over local firms.

Inter-American Development Bank: A regional development bank designed to promote sustainable economic development in the Western Hemisphere. Its headquarters are located in Washington, D.C.

Interbank Spread: The difference between a bank's offer and bid rates for deposits in the Eurocurrency market.

Interest Rate Risk: The risk of unexpected changes in an interest rate.

Interest Rate Swap: An agreement to exchange interest payments for a specific period of time on a given principal amount. The most common interest rate swap is a fixed-for-floating coupon swap. The notional principal is typically not exchanged.

Intermediated Market: A financial market in which a financial institution (usually a commercial bank) stands between borrowers and savers.

Intermodal: The use of two or more modes of transportation to complete a cargo move; truck/rail/ship, or truck/air, for example.

Internal Market: A market for financial securities denominated in the currency of a host country and placed within that country.

Internal Rate of Return (IRR): A discount rate at which the net present value of an investment is zero. The IRR is a method of evaluating capital expenditure proposals.

International Accounting Standards Board (IASB): The International Accounting Standards Board (IASB) is an independent, privately funded organization that sets international accounting standards. The IASB is committed to developing a single set of high-quality, understandable, and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements.

International Asset Pricing Model (IAPM): The international version of the CAPM in which investors in each country share the same consumption basket and purchasing power parity holds.

International Bank for Reconstruction and Development: Also called the World Bank, an international organization created at Bretton Woods in 1944 to help in the reconstruction and development of its member nations.

International Bonds: Bonds that are traded outside the country of the issuer. International bonds are either foreign bonds trading in a foreign national market or Eurobonds trading in the international market.

International Chamber of Commerce (ICC): International nongovernmental body concerned with promotion of trade and harmonization of trading practice.

International Energy Agency (IEA): The IEA is an autonomous agency linked with the Organisation for Economic Co-operation and Development (OECD). It is the authoritative source for energy statistics worldwide and an energy policy adviser for 26 member countries. It was founded during the oil crisis of 1973–74 and was initially focused on coordinating efforts between member countries in times of oil supply emergencies. Since then it has expanded its role to encompass climate change policies, market reform, energy technology collaboration, and outreach to the rest of the world.

International Labour Organization (ILO): The International Labour Organization is the UN specialized agency that seeks the promotion of social justice and internationally recognized human and labor rights. The ILO formulates international labor standards in the form of conventions and recommendations setting minimum standards of labor rights.

International Monetary Fund (IMF): An international organization designed to promote global economic stability and development. It compiles statistics on cross-border transactions and publishes a monthly summary of each country's balance of payments.

International Monetary System: The global network of governmental and commercial institutions within which currency exchange rates are determined.

International Organization for Standardization (ISO): ISO is a worldwide federation of national standardization bodies of more than 140 countries. Established as a nongovernment organization in 1947, it develops international standards and publishes them. All branches other than electrical engineering standards are within the scope of the ISO.

Intervention: The efforts undertaken by a country or its central bank to affect the price of the country's currency on the exchange market. This can be done either through the government buying or selling large quantities of the currency to affect total supply, or by the central bank changing interest rates to affect the cash flow into the country.

In-the-Money Option: An option that has value if exercised immediately.

Intrinsic Value of an Option: The value of an option if exercised immediately.

Investment Agreement: Agreement specifying the rights and responsibilities of a host government and a corporation in the structure and operation of an investment project.

Investment Opportunity Set: The set of investments available to an individual or corporation.

Investment Philosophy: The investment approach (active or passive) pursued by an investment fund and its managers.

Invisible Barriers to Trade: Government regulations that do not directly restrict trade but have a hindering effect through the use of excessive and obscure requirements on goods before they can be sold, especially imported goods.

While known to local business people, foreign investors are not aware of these conditions, making them "invisible." Labeling requirements or other sorts of measurement or sanitary standards would be an example of this.

J

***Jeito*:** The way of somehow getting things done in Brazil; the jeito can help conquer seemingly insurmountable tasks (Portuguese).

Joint Venture: An agreement of two or more companies to pool their resources to execute a well-defined mission. Resource commitments, responsibilities, and earnings are shared according to a predetermined contractual formula.

Jurisdiction: The right of an authority to apply the law in a given territory.

Just-in-Time (JIT): An organization-wide practice that keeps the inventory to the minimum and provides customers the right goods or service at the right time.

K

***Kanban* System:** A Japanese Just-in-Time inventory system that makes use of cards to signal the need for more raw materials or supplies.

***Keiretsu*:** Collaborative groups of vertically and horizontally integrated firms with extensive share cross-holdings and with a major Japanese bank or corporation at the center.

Kyoto Protocol: A multilateral environmental agreement; its goal is to control global warming by reducing greenhouse gases emitted into the Earth's atmosphere.

L

Laissez-Faire: A term associated with the free enterprise economic system that calls for minimal government intervention or regulation, except in maintenance of this economic freedom.

Landed Cost: The quoted or invoiced cost of a commodity, plus any inbound transportation charges.

Law of One Price: The principle that equivalent assets sell for the same price. The law of one price is enforced in the currency markets by financial market arbitrage. Also known as purchasing price parity (PPP).

Lead Manager: The lead investment bank in a syndicate selling a public securities offering.

Leading and Lagging: Reduction of transaction exposure through timing of cash flows within the corporation.

Lease: A contract in which one party conveys the use of an asset to another party for a specific period of time at a predetermined rate.

Lease Rate: The periodic rental payment to a lessor for the use of assets. Others may define lease rate as the implicit interest rate in minimum lease payments.

Least Developed Countries: The poorest of the developing countries. They are characterized by a low gross national product per capita, a reliance on subsistence agriculture, rapid population growth, inadequate infrastructure, a weak safety net of social programs, and a low quality of life.

Note: Many sources prefer LLDC to denote Least Developed Countries and LDC for Less Developed Countries.

Less Developed Countries: This is a form of categorization in economic growth for the countries that are just beginning to industrialize.

Less Than Truckload (LTL): Refers to shipments of relatively small amounts of freight, typically between 100 and 10,000 pounds. It usually involves slower freight times than full truckload shipping.

Letter of Credit (L/C): A letter issued by an importer's bank guaranteeing payment upon presentation of specified trade documents (invoice, bill of lading, inspection and insurance certificates, etc.).

Letter of Intent: A document describing the preliminary understanding between parties intending to join together in some sort of action or engage in a contract.

Leveraged Lease: The lessor provides an equity portion (usually 20 to 40 percent) of the equipment cost and lenders provide the balance on a nonrecourse debt basis.

Liberalization: The process by which certain business activities become more market driven.

License Agreement: A sales agreement in which a domestic company (the licensor) allows a foreign company (the licensee) to market its products in a foreign country in return for royalties, fees, or other forms of compensation.

Licensing: One firm gives another firm a permission, which allows the latter to engage in an activity otherwise legally forbidden to it. Such activities usually involve the transfer of intellectual and proprietary knowledge in return for royalty as revenue.

Limited Flexibility Exchange Rate System: The International Monetary Fund's name for an exchange rate system with a managed float.

Liquidity: The ease with which an asset can be exchanged for another asset of equal value.

Liquid Market: A market in which traders can buy or sell large quantities of an asset when they want and with low transactions costs.

Loanable Funds: The pool of funds from which borrowers can attract capital; typically categorized by currency and maturity.

Location-Specific Advantages: Advantages (natural and created) that are available only or primarily in a single location.

Lombard Rate: The rate of interest changed by the Bundesbank, Germany's central bank, to loans backed by movable, easily sold assets.

London Interbank Bid Rate (LIBID): The bid rate that a Euromarket bank is willing to pay to attract a deposit from another Euromarket bank in London.

London Interbank Offer Rate (LIBOR): The offer rate that a Euromarket bank demands in order to place a deposit at or make a loan to another Euromarket bank in London.

Long Position: A position in which a particular asset (such as a spot or forward currency) has been purchased.

Lump of Labor Fallacy: The fallacious argument that, working on the assumption that there is only a fixed amount of work in the world, says that an increasing population will inevitably lead to increasing unemployment. This argument is often used by governments as reasoning behind reducing the workweek to reduce unemployment.

M

Maastricht Treaty: The treaty, formally known as the Treaty on European Union, signed in 1992, that led to the economic unification of many European countries. The treaty changed the name of the European Community (EC) to the European Union (EU) and led to the creation of a monetary union with a European Central bank, political and military integration, common foreign policy, and common citizenship among member countries.

Macro Country Risks: Country (or political) risks that affect all foreign firms in a host country.

Management Contract: An agreement by which one firm allows another to manage its foreign activities on behalf of it. The managing firm is forbidden to make capital investment or financing decisions.

Managerial Flexibility: Flexibility in the timing and scale of investment provided by a real investment option.

Manifest: Document that lists in detail all the bills of lading issued by a freight carrier of its agent or master (that is, a detailed summary of the total cargo of a vessel).

Maquiladoras: Duty-free assembly plants located mainly in the developing world. Maquiladoras are one type of foreign direct investment.

Margin Account: An account maintained by an investor with a brokerage firm in which securities may be purchased by borrowing a portion of the purchase price from the brokerage, or may be sold short by borrowing the securities from the brokerage firm.

Margin Requirement: A performance bond paid upon purchase of a futures contract that ensures the exchange clearinghouse against loss.

Market Access: The extent to which a domestic industry can penetrate a related market in a foreign country. Access can be limited by tariffs or other nontrade barriers.

Market-Based Corporate Governance System: A system of corporate governance in which the supervisory board represents a dispersed set of largely equity shareholders.

Market Economy: An economy in which resource allocations, prices, and other marketing decisions are primarily determined by the free market.

Market Failure: A failure of arms-length markets to efficiently complete the production of a good or service.

In the eclectic paradigm, the multinational corporation's market internalization advantages take advantage of market failure.

Marketing Mix: The set of marketing tools that the firm uses to pursue its marketing objectives in the target market.

Market Internalization Advantages: Advantages that allow the multinational corporation to internalize or exploit the failure of an arms-length market to efficiently accomplish a task.

Market Maker: A financial institution that quotes bid (buy) and offer (sell) prices.

Market Model: Also known as the one-factor market model. The empirical version of the security market line: Rj = aj + bjRM + ej.

Market Portfolio: A portfolio of all assets weighted according to their market values.

Market Risk Premium: The risk premium on an average stock; (E[RM]−RF).

Market Timing: An investment strategy of shifting among asset classes in an attempt to anticipate which asset class(es) will appreciate or depreciate during the coming period.

Marking to Market: The process by which changes in the value of futures contracts are settled on a daily basis.

Matchmaker Program: A service organized by the United States International Trade Administration. This program aids firms that are new to exporting or new to the market to meet prescreened business prospects in foreign markets who are interested in their products or services.

Maturity Date: The date on which the last payment on a bond is due.

Mean-Variance Efficient: An asset that has higher mean return at a given level of risk (or lower risk at a given level of return) than other assets.

Mercosur: The "common market of the South," a customs union that includes Argentina, Brazil, Paraguay, Uruguay, and Venezuela in a regional trade pact that reduces tariffs on intrapact trade by up to 90 percent. Bolivia, Chile, Colombia, Ecuador, and Peru are associate members.

Merger: A form of corporate acquisition in which one firm absorbs another and the assets and liabilities of the two firms are combined.

Method of Payment: The way in which a merger or acquisition is financed.

Micro Country Risks: Country risks that are specific to an industry, company, or project within a host country.

Microcredit: Small loans, perhaps $50 or $100, that are extended to small businesses to finance a business start-up or other business activity.

Middle Market: A market segment generally represented by financing under $2 million. In leasing, this sector is dominated by single investor leases.

Miller and Modigliani's Irrelevance Proposition: If financial markets are perfect, then corporate financial policy (including hedging policy) is irrelevant.

Mixed Tariff: A combination of specific and ad valorem tariffs.

Monetary Assets and Liabilities: Assets and liabilities with contractual payoffs.

Money Market Hedge: A hedge that replicates a currency forward contract through the spot currency and Eurocurrency markets.

Money Markets: Financial markets for debt securities that pay off in the short term (often less than one year).

Money Market Yield: A bond quotation convention based on a 360-day year and semiannual coupons (contrast with bond equivalent yield).

Money Supply: The total amount of currency in circulation and peso deposits subject to check of the monetary system.

Monopoly: Exclusive control or possession by one group of the means of producing or selling goods or services.

More Flexible Exchange Rate System: The International Monetary Fund's name for a floating exchange rate system.

Most Favored Nation (MFN): Most favored nation status is granted to one country by another; the granting country then accords the recipient's imports and exports the most favorable treatment that it accords any country.

Multilateral Environmental Agreements (MEAs): Environmental agreements negotiated by a number of countries.

Multilateral Investment Guarantee Agency (MIGA): One of the five institutions comprising the World Bank Group.

MIGA's purpose is to help encourage equity investment and other kinds of direct investment flow into developing countries.

Multinational Corporation (MNC): A corporation with operations in more than one country.

Multinational Netting: Elimination of offsetting cash flows within the multinational corporation.

Mutually Exclusive Investment Decisions: Investment decisions in which the acceptance of a project precludes the acceptance of one or more alternative projects.

N

Nationalization: A process whereby privately owned companies are brought under state ownership and control (contrast with privatization).

National Tax Policy: The way in which a nation chooses to allocate the burdens of tax collections across its residents.

National Trade Data Bank (NTDB): Is the U.S. government's most comprehensive source of international trade data and export promotion information. Types of information on the NTDB include international market research, export opportunities; indices of foreign and domestic companies; how-to market guides; reports on demographic, political, and socioeconomic conditions for hundreds of countries; and much more.

National Treatment: A country accords no less favorable treatment to imported goods than it does to domestic goods.

Natural Advantage: Theory in economics that certain countries have a competitive advantage in certain products due to their access to specific natural resources, their climatic conditions, or their transportation system.

Negative-NPV Tie-in Project: A negative net present value (NPV) infrastructure development project that a local government requires of a company pursuing a positive-NPV investment project elsewhere in the economy.

Net Asset Value (NAV): The sum of the individual asset values in a closed-end mutual fund. Closed-end funds can sell at substantial premiums or discounts to their net asset values.

Net Currency Exposure: Exposure to foreign exchange risk after netting all intracompany cash flows.

Net Exposed Assets: Exposed assets minus exposed liabilities. The term is used with market values or, in translation accounting, with book values.

Net Monetary Assets: Monetary assets minus monetary liabilities.

Net Position: A currency position after aggregating and canceling all offsetting transactions in each currency, maturity, and security.

Net Present Value (NPV): The present value of future cash returns, discounted at the appropriate market interest rate, minus the present value of the cost of the investment.

Net Working Capital: Current assets minus current liabilities.

Newly Industrializing Countries (NIC): A group of former LDC countries that, due to high levels of economic growth, have grown rapidly in recent years.

New Protectionism: Recent efforts to pressure national governments to exercise greater control over foreign trade and foreign direct investment.

New-to-Export (NTE): The name of the circumstances of a company that either engages in export activities for the first time, engages in exportation for first time in 24 months, or has only exported because of prior unsolicited orders.

New-to-Market (NTM): The name of the circumstances under which a company exports to a foreign market to which it has either never exported, has not exported to for the past 24 months, or has only exported to because of prior unsolicited orders.

Nominal Cash Flow: A cash flow expressed in nominal terms if the actual dollars to be received (or paid out) are given.

Nominal Interest Rate: Interest rate unadjusted for inflation.

Noncash Item: Expense against revenue that does not directly affect cash flow, such as depreciation and deferred taxes.

Nongovernmental Organizations (NGOs): A variety of special interest groups that operate in the global community.

Nonintermediated Debt Market: A financial market in which borrowers (governments and large corporations) appeal directly to savers for debt capital through the securities markets without using a financial institution as intermediary.

Nonmarket Economy: An economy in which the government, through the use of central planning, makes most economic decisions to control economic activity.

Nonmonetary Assets and Liabilities: Assets and liabilities with noncontractual payoffs.

Nontariff Barrier: An indirect measure used to discriminate against foreign manufacturers, for example, extensive inspection procedures for foreign imports that create barriers to entering the specific market.

Nordic Council: A regional alliance established in 1952 between Norway, Sweden, Finland, Denmark, and Iceland that is dedicated to cooperation among the Nordic countries. This has led to a common labor market, social security, and free movement of citizens across borders.

Normal Distribution: Symmetric bell-shaped frequency distribution that can be defined by its mean and standard deviation.

Normal Trade Relations (NTR): A new name for Most Favored Nation (MFN) trading status, in which the country that grants this status accords the recipient's imports and exports the most favorable treatment that it accords any country.

North American Free Trade Agreement (NAFTA): NAFTA is a regional trade pact among the United States, Canada, and Mexico.

North-South Trade: A name for trade between developed (northern) and less developed countries (southern).

Notional Principal: In a swap agreement, a principal amount that is only "notional" and is not exchanged.

O

Offering Statement: In the United States, a shortened registration statement required by the Securities and Exchange Commission on debt issues with less than a nine-month maturity.

Offer Rates: The rate at which a market maker is willing to sell the quoted asset. Also known as ask rates.

Official Settlements Balance: An overall measure of a country's private financial and economic transactions with the rest of the world. Also known as overall balance.

Offshore Financial Centers (OFCs): The many types of financial institutions that operate without financial supervision by governments or other agencies.

Oligopoly: A market dominated by so few sellers that action by any of them will impact both the price of the good and the competitors.

Open Account: The seller delivers the goods to the buyer and then bills the buyer according to the terms of trade.

Open and Reform Policy: An economic policy enacted by the Chinese government combining central planning with market-oriented reforms to increase productivity, living standards, and technological quality without exacerbating inflation, unemployment, and budget deficits, with the goal of moving from a centrally planned economy to a market-based one.

Open-End Fund: A mutual fund in which the amount of money under management grows/shrinks as investors buy/sell the fund.

Operating Cash Flow: Earnings before interest and depreciation minus taxes. It measures the cash flow generated from operations, not counting capital spending or working capital requirements.

Operating Exposure: Changes in the value of real (nonmonetary) assets or operating cash flows as a result of changes in currency values.

Operating Leverage: The trade-off between fixed and variable costs in the operation of the firm.

Operational Efficiency: Market efficiency with respect to how large an influence transaction costs and other market frictions have on the operation of a market.

Opportunity Cost: Most valuable alternative that is given up. The rate of return used in NPV computation is an opportunity interest rate.

Orderly Marketing Agreements: Agreements between two or more governments to hold back the growth of trade for certain products by limiting exports and imposing import quotas.

Organisation for Economic Co-operation and Development (OECD): A group of 30 countries that meets regularly to discuss global issues and make appropriate economic and social policies.

Organization of American States (OAS): A regional organization created in 1948 promoting the economic and social development of Latin America. OAS members include the United States, Mexico, most of South and Central America, and most of the Caribbean nations.

Organization of Petroleum Exporting Countries (OPEC): A producer cartel that produces and sells oil.

Out-of-the-Money Option: An option that has no value if exercised immediately.

Outright Quote: A quote in which all of the digits of the bid and offer prices are quoted (contrast with points quote).

Outsourcing: A situation in which a firm's functions are performed or provided by a person or group from outside the company.

Outward Swap: Purchasing foreign currency today and reselling it at a forward rate against the domestic currency.

Overall Balance: (See Official Settlements Balance).

Overall FTC Limitation: In the U.S. tax code, a limitation on the FTC equal to foreign-source income times U.S. tax on worldwide income divided by worldwide income.

Overseas Private Investment Corporation (OPIC): A U.S. agency that assists U.S. companies protect their investment against risk in a particular country besides providing other services.

Ownership-Specific Advantages: Property rights or intangible assets, including patents, trademarks, organizational and marketing expertise, production technology and management, and general organizational abilities, that form the basis for the multinational's advantage over local firms.

P

Packing List: Document listing the contents of a consignment of goods.

Parallel Loan: A loan arrangement in which a company borrows in its home currency and then trades this debt for the foreign currency debt of a foreign counterpart.

Partnership: Form of business organization in which two or more co-owners form a business. In a general partnership each partner is liable for the debts of the partnership.

Passive Income: In the U.S. tax code, income (such as investment income) that does not come from active participation in a business.

Patent: A government grant that gives inventors exclusive right of making, using, or selling the invention.

Payback Period Rule: An investment decision rule that states that all investment projects that have payback periods equal to or less than a particular cutoff period are accepted, and all those that pay off in more than the particular cutoff period are rejected. The payback period is the number of years required for a firm to recover its initial investment required by a project from the cash flow it generates.

Payoff Profile: A graph with the value of an underlying asset on the x-axis and the value of a position taken to hedge against risk exposure on the y-axis. Also used with changes in value (contrast with risk profile).

Payout Ratio: Proportion of net income paid out in cash dividends.

Pegged Exchange Rate System: The IMF's name for a fixed exchange rate system.

Pension Liabilities: A recognition of future liabilities resulting from pension commitments made by the corporation. Accounting for pension liabilities varies widely by country.

Perfect Market Assumptions: A set of assumptions under which the law of one price holds. These assumptions include frictionless markets, rational investors, and equal access to market prices and information.

Peril Point: The limit beyond which the reduction of tariff protection in a given industry would cause it serious injury.

Periodic Call Auction: A trading system in which stocks are auctioned at intervals throughout the day.

Perpetuity: A constant stream of cash flows without end. A British consol is an example.

Phytosanitary Measure: A piece of legislation, regulation, or procedure with the purpose of preventing the introduction or spread of pests. Phytosanitary procedures often include the performance of inspections, tests, surveillance, or other treatments.

Points Quote: An abbreviated form of the outright quote used by traders in the interbank market.

Political Risk: The risk that a sovereign host government will unexpectedly change the rules of the game under which businesses operate. Political risk includes both macro and micro risks.

Pooling: In logistics, pooling is when a group of carriers agree to share freight, customers, and revenues or profits. In the United States it is outlawed by the Interstate Commerce Act.

Portfolio: The combined holding of more than one stock, bond, real estate asset, or other asset by an investor.

Power Distance: The extent to which a society accepts hierarchical differences.

Predatory Pricing: It is a form of price discrimination that requires selling below cost with the intention of destroying competition. However, predatory pricing is against the law.

Premium: If a bond is selling above its face value, it is said to sell at a premium.

Present Value: The value of a future cash stream discounted at the appropriate market interest rate.

Present Value Factor (PVF): Factor used to calculate an estimate of the present value of an amount to be received in a future period.

Price Elasticity of Demand: The sensitivity of quantity sold to a percentage change in price.

Price Uncertainty: Uncertainty regarding the future price of an asset.

Private Placement: A securities issue privately placed with a small group of investors rather than through a public offering.

Privatization: A process whereby publicly owned enterprises are sold to private investors (contrast with nationalization).

Product Cycle Theory: Product cycle theory views the products of the firm as evolving through 4 stages: (1) infancy, (2) growth, (3) maturity, and (4) decline.

Production Possibilities Schedule: The maximum amount of goods (for example, food and clothing) that a country is able to produce given its labor supply.

Production Sharing: Production sharing occurs when a producer chooses to make a product in stages—and in different countries—so that the firm can employ the lowest-cost resources in production.

Product Life Cycle (PLC): The complete life of a product, from early planning through sales buildup, maximum sales, declining sales, and withdrawal of the product. Product life cycle lengths and types can vary depending on the type of product, the frequency of replacement, and other factors.

Profitability Index: A method used to evaluate projects. It is the ratio of the present value of expected future cash flows after initial investment divided by the amount of the initial investment.

Pro Forma Invoice: An invoice provided by a supplier prior to the shipment of merchandise describing the goods, their value, and other specifications.

Progressive Taxation: A convex tax schedule that results in a higher effective tax rate on high income levels than on low-income levels.

Project Financing: A way to raise nonrecourse financing for a specific project characterized by the following: (1) the project is a separate legal entity and relies heavily on debt financing, and (2) the debt is linked to the cash flow generated by the project.

Promissory Note: Financial document in which the buyer agrees to make payment to the seller at a specified time.

Proprietary Knowledge: Private or exclusive knowledge that cannot be legally used or duplicated by competitors.

Prospectus: A brochure that describes a mutual fund's investment objectives, strategies, and position limits.

Protectionism: Protection of local industries through tariffs, quotas, and regulations that discriminate against foreign businesses.

Psychic Distance: The similarities or lack thereof between country markets. This concept takes into account geographic distance, cultural similarities, linguistic aspects, legal systems, and methods of conducting business.

Public Relations (PR): A variety of programs designed to promote and/or protect a company's image or its individual products.

Public Securities Offering: A securities issue placed with the public through an investment or commercial bank.

Pull Strategy: In logistics, it is a strategy that uses actual customer demand to determine production and distribution schedules. In marketing, it is using intensive advertising to create customer demand for a product. In either case, the product is "pulled" through the system by the consumer.

Purchasing Agent: Someone who buys goods in his or her country on behalf of foreign buyers.

Purchasing Power Parity (PPP): The principle that equivalent assets sell for the same price. Purchasing power parity is a measurement of a currency's value based on the buying power within its own domestic economy.

Pure Discount Bond: Bonds that pay no coupons and only pay back the face value at maturity. Also referred to as zero-coupon bond or a single-payment bond.

Push Strategy: In logistics, it is a strategy that uses forecasts rather than customer demand to determine production and distribution schedules. In marketing, it is a wholesaler using promotion to create demand directly at the consumer level, bypassing retailers. In either case, the product is "pushed" through the system by the manufacturer to the customer.

Put-Call Parity: The relation of the value of a long call, a short put, the exercise price, and the forward price at expiration.

Put Option: The right to sell the underlying asset at a specified price and on a specified date.

Q

Quantitative Restrictions (QR): Restrictions on trade, generally in the form of quotas, that limit the quantity of a good or service that can be imported or exported. Another form of quantity restriction is a VER, or Voluntary Export Restraint.

Quid Pro Quo: The English translation is "a favor for a favor."

Quota: The quantity of goods of a specific kind that a country permits to be imported without restriction or imposition of additional duties.

R

Random Walk: A process in which instantaneous changes in exchange rates are normally distributed with a zero mean and constant variance.

Real Appreciation/Depreciation: A change in the purchasing power of a currency.

Real Cash Flow: A cash flow is expressed in real terms if the current, or date 0, purchasing power of the cash flow is given.

Real Exchange Rate: A measure of the nominal exchange rate that has been adjusted for inflation differentials since an arbitrarily defined base period.

Realignment: The coordinated revaluation and devaluation of the currencies of several countries.

Real Interest Rate: Interest rate expressed in terms of real goods; that is, the nominal interest rate minus the expected inflation rate.

Real Options: An option or option-like feature embedded in a real investment opportunity.

Reciprocal Marketing Agreement: A strategic alliance in which two companies agree to comarket each other's products in their home market. Production rights may or may not be transferred.

Reconsignment: In shipping, it is the change in either the name of the consignee, the place of delivery, or relinquishment of the shipment by the carrier at the point of origin.

Recourse: The right to demand return of money paid. In negotiation of a letter of credit, payment by the negotiating bank will normally be with recourse.

Red Clause: A banking term that refers to a special clause in a letter of credit allowing the seller of goods to obtain an unsecured advance from the issuing bank to finance the manufacture or purchase of the goods.

Regional Development Banks (RDBs): Banks that are owned and operated by member nations; they are designed to extend development loans and provide other assistance to member nations. The world's four regional development banks are the African Development Bank Group, the Asian Development Bank, the European Bank for Reconstruction and Development, and the Inter-American Development Bank.

Registered Bonds: Bonds for which each issuer maintains a record of the owners of its bonds. Countries requiring that bonds be issued in registered form include the United States and Japan (contrast with bearer bonds).

Registration Statement: In the United States, a statement filed with the Securities and Exchange Commission on securities issues that discloses relevant information to the public.

Re-invoicing Centers: An offshore financial affiliate that is used to channel funds to and from the multinational's foreign operations.

Remittance: The forwarding of funds from one party to another as payment for goods or services.

Repatriation: The act of remitting cash flows from a foreign affiliate to the parent firm.

Replevin: A legal action that entitles the rightful owner of property that has been wrongfully kept from him or her to recover it.

Rescind: To void or cancel a contract.

Reservation Price: The price below (above) which a seller (purchaser) is unwilling to go.

Residual Value: The value of an asset at the conclusion of a lease.

Restitution: In the case of a breach of contract, restitution is the restoration of the involved parties to their original positions prior to the contract.

Restrictive Endorsement: Endorsement transferring title or right to a named party.

Retention Ratio: Retained earnings divided by net income.

Return on Equity (ROE): Net income after interest and taxes divided by average common stockholder's equity.

Revaluation: An increase in a currency value relative to other currencies in a fixed exchange rate system.

Right of Priority: In patent, industrial design, and trademark laws, a priority right or right of priority is a time-limited right, triggered by the first filing of an application for a patent, an industrial design, or a trademark, respectively. The priority right belongs to the applicant or his successor in title and allows him to file a subsequent application for the same invention, design, or trademark and benefit, for this subsequent application, from the date of filing of the first application for the examination of certain requirements.

Rights of Set-Off: An agreement defining each party's rights should one party default on its obligation. Rights of set-off were common in parallel loan arrangements.

Risk Averse: Seeking stability rather than risk.

Risk Premium: The excess return on the risky asset that is the difference between expected return on risky assets and the return of risk-free assets.

Risk Profile: A graph with the value of an underlying asset on the x-axis and the value of a position exposed to risk in the underlying asset on the y-axis. Also used with changes in value (contrast with payoff profile).

Roll's Critique: The CAPM holds by construction when performance is measured against a mean-variance efficient index. Otherwise, it holds not at all.

Royalty: Payment made for the use of a person's or business's property based on an agreed percentage of the income arising from its use.

R-Square: The percent of the variation in a dependent variable (a y-variable) that is "explained by" variation in an independent variable (an x-variable). The concept is also known as the coefficient of determination.

Rules of Origin: Rules used to determine in what country a good will be considered as actually made for tariff and other trade purposes.

S

Safety Stock (SS): The materials in an inventory in anticipation of unforeseen shortages of materials or abnormal demand for the final product.

Scenario Analysis: A process of asking "What if?" using scenarios that capture key elements of possible future realities.

Section 201: Also known as the "escape clause" of the U.S. Trade Act of 1971, section 201 is a provision that permits imports to be restricted in a certain industry, for a limited time, if those imports have caused injury to U.S. firms.

Section 301: In U.S. trade law, section 301 is a provision that allows private parties to seek compensation through the U.S. government if they have experienced injury to their business because of the illegal or unfair actions of foreign governments.

Security Market Line (SML): In the CAPM, the relation between required return and systematic risk (or beta): Rj – RF + bj (E[RM] – RF).

Security Selection: An investment strategy that attempts to identify individual securities that are underpriced relative to other securities in a particular market or industry.

Seeking Stability Rather Than Risk: An element of the Paris Convention for the Protection of Industrial Property that gives an inventor 12 months from the date of the first application filed in a Paris Convention country in which to file in other Paris Convention countries.

This relieves companies of the burden of filing applications in many countries simultaneously. Approximately 100 countries, including the United States, signed the Paris Convention.

Segmented Market: A market that is partially or wholly isolated from other markets by one or more market imperfections.

Seller's Market: A seller's market exists when the demand for a good outweighs the supply, and so the economic forces of business cause the goods to be priced at or closer to the vendor's estimate of their value.

Semi-Strong Form Efficient Market: A market in which prices fully reflect all publicly available information.

Sensitivity Analysis: Analysis of the effect on the project when there is some change in critical variables such as sales and costs.

Separation Principle: The principle that portfolio choice can be separated into two independent tasks: (1) determination of the optimal risky portfolio, which is purely a technical problem, and (2) the personal choice of the best mix of the risky portfolio and the risk-free asset.

Set-of-Contracts Perspective: A view of the corporation as the nexus of a set of legal contracts linking the various stakeholders. Important contracts include those with customers, suppliers, labor, management, debt, and equity.

Settlement of Disputes: The Settlement of Disputes was a declaration made by the UN stating that any water-based international disagreement must be settled in a peaceful and diplomatic manner.

Sharpe Index: A measure of risk-adjusted investment performance in excess return per unit of total risk: SI = (RP – RF)/(sP).

Shipper: Usually the supplier or owner of commodities shipped.

Short Position: A position in which a particular asset (such as a spot or forward currency) has been sold.

Short Selling: Selling an asset that you do not own, or taking a short position.

Side Effect: Any aspect of an investment project that can be valued separately from the project itself.

Sight Draft: A draft that is payable on demand.

Signaling: The use of observable managerial actions in the marketplace as an indication of management's beliefs concerning the prospects of the company.

Simple Interest: Interest calculated by considering only the original principal amount.

Small Business Administration (SBA): An independent agency of the U.S. federal government that aids, counsels, assists, and protects the interests of small business concerns to preserve free competitive enterprise and to maintain and strengthen the overall economy of the United States.

Smoot-Hawley Act: Passed in 1930, this protectionist act increased import duties to the highest rate ever imposed by the United States, resulting in the downfall of the world trade system at the time, during the Great Depression.

Social Capital: Physical or real capital that is owned by the public sector rather than by private firms.

Society for Worldwide Interbank Financial Transactions (SWIFT): Network through which international banks conduct their financial transactions.

Soft Clause: In a letter of credit, a soft clause is a clause that renders it impossible for the beneficiary, or seller, to fulfill the conditions of the letter separately and independently of the purchaser.

Soft Currency: A currency that is not readily accepted in exchange for other currencies or convertible to gold.

Soft Loan: A loan with generous terms such as lower than usual or no interest, and/or a long payback period.

Sogo Sosha: A term referring to general trading companies that import and export merchandise.

Sole Proprietorship: A business owned by a single individual. The sole proprietorship pays no corporate income tax but has unlimited liability for business debts and obligations.

South Asian Association for Regional Cooperation (SAARC): The South Asian Association for Regional Cooperation (SAARC) was established on December 8, 1985.

Its member states consist of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Its main areas of cooperation are Agriculture and Rural Development; Health and Population Activities; Women, Youth, and Children; Environment and Forestry; Science and Technology and Meteorology; Human Resources Development; and Transport.

Southern African Customs Union (SACU): Established in 1910, the SACU is the oldest customs union in the world and is composed of South Africa, Swaziland, Botswana, Namibia, and Lesotho.

The countries engage in the free exchange of goods across their borders, and share a common external tariff and excise duties, as well as the revenues generated by them.

Southern African Development Community (SADC): The Southern African Development Community (SADC) was first established in 1992. It is the successor to the Southern African Development Coordination Conference (SADCC). The member states are Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, United Republic of Tanzania, Zambia, and Zimbabwe.

Southern Cone: The geographic region including Argentina, Brazil, Chile, Paraguay, and Uruguay.

Sovereignty: The rights of a country to rule itself, to manage its own affairs, and to jurisdiction over land, airspace, and maritime matters.

Special Drawing Right (SDR): An international reserve created by the International Monetary Fund and allocated to member countries to supplement foreign exchange reserves.

Specific Tariff: A tariff assessed at a specific amount per unit of weight.

Spot Exchange Rate: Exchange rate today for settlement in two days.

Spot Market: A market in which trades are made for immediate delivery (within two business days for most spot currencies).

Stabilization Policies: Government policies designed to promote economic growth, steady employment, and stable prices.

Stakeholders: Those with an interest in the firm. A narrow definition includes the corporation's debt and equity holders. A broader definition includes labor, management, and other interested parties.

Stamp Tax: A tax on a financial transaction.

Standard Deviation: The positive square root of the variance. This is the standard statistical measure of the spread of a sample.

Standard Industrial Classification (SIC): A standard numerical code system used by the U.S. government to classify products and services.

Stated Annual Interest Rate: The interest rate expressed as a percentage per annum, by which interest payment is determined.

Stationary Time Series: A time series in which the process generating returns is identical at every instant of time.

Stock Index Futures: A futures contract on a stock index.

Stock Index Swap: A swap involving a stock index. The other asset involved in a stock index swap can be another stock index (a stock-for-stock swap), a debt index (a debt-for-stock swap), or any other financial asset or financial price index.

Stock Market: An institution that facilitates the buying and selling of stocks.

Strategic Alliance: A collaborative agreement between two companies designed to achieve some strategic goal. Strategic alliances include international licensing agreements, management contracts, and joint ventures as special cases.

Striking Price: The price at which an option can be exercised (also called the exercise price).

Subpart F Income: In the U.S. tax code, income from foreign subsidiaries owned more than 10 percent and controlled foreign corporations that is taxed on a pro rata basis as it is earned.

Subsidiary: Any organization controlled by another with more than 50 percent of its voting capital held by the latter.

Subsidized Financing: Financing that is provided by a host government and that is issued at a below-market interest rate.

Subsidy: Monetary assistance granted by the government to an individual or other entity in support of an activity that is regarded as being in the public interest.

Subsistence Agriculture: Small-scale agriculture designed to meet the consumption needs of individual households.

Sunk Cost: A cost that has already occurred and cannot be removed. Because sunk costs are in the past, such costs should be ignored when deciding whether to accept or reject a project.

Sunk Costs: Expenditures that are at least partially lost once an investment is made.

Supervisory Board: The board of directors that represents stakeholders in the governance of the corporation.

Swap: An agreement to exchange two liabilities (or assets) and, after a prearranged length of time, to reexchange the liabilities (or assets).

Swap Book: A swap bank's portfolio of swaps, usually arranged by currency and by maturity.

Swaption: A swap with option(s) attached.

Switching Options: A sequence of options in which exercise of one option creates one or more additional options. Investment-disinvestment, entry-exit, expansion-contraction, and suspension-reactivation decisions are examples of switching options.

Syndicate: The selling group of investment banks in a public securities offering.

Synergy: In an acquisition or merger, when the value of the combination is greater than the sum of the individual parts: Synergy = VAT – (VA + VT).

Synthetic Forward Position: A forward position constructed through borrowing in one currency, lending in another currency, and offsetting these transactions in the spot exchange market.

Systematic Risk: Risk that is common to all assets and cannot be diversified away (measured by beta).

T

Tangibility: Tangible assets are real assets that can be used as collateral to secure debt.

Tare Weight: The weight of a container and packing materials that excludes the weight of the goods it contains.

Targeted Registered Offerings: Securities issues sold to "targeted" foreign financial institutions according to U.S. SEC guidelines. These foreign institutions then maintain a secondary market in the foreign market.

Tariff Anomaly: The state of having a tariff on raw materials or semiprocessed products be higher than the tariff on the corresponding finished product.

Tariff Escalation: The situation in which duties are low or nonexistent for raw materials, moderate for semi-manufactured goods and relatively high for finished products.

Tariff-Quota: A tariff that is set at a lower rate until a specified quantity (the quota) of goods has been imported, at which point the tariff increases for additional imports.

Tariffs: Taxes on imported goods and services, levied by governments to raise revenues and create barriers to trade.

Tax Arbitrage: Arbitrage using a difference in tax rates or tax systems as the basis for profit.

Tax Clienteles: Clienteles of investors with specific preferences for debt or equity that are driven by differences in investors' personal tax rates.

Tax Haven: A country or region imposing low or no taxes on foreign source income.

Tax Haven Affiliate: A wholly owned affiliate that is in a low-tax jurisdiction and that is used to channel funds to and from the multinational's foreign operations. The tax benefits of tax-haven affiliates were largely removed in the United States by the Tax Reform Act of 1986.

Tax Holiday: A reduced tax rate provided by a government as an inducement to foreign direct investment.

Tax Neutrality: Taxes that do not interfere with the natural flow of capital toward its most productive use.

Tax Preference Items: Items such as tax-loss carryforwards and carrybacks and investment tax credits that shield corporate taxable income from taxes.

Technical Analysis: Method of forecasting future exchange rates based on the history of rates.

Temporal Method: A translation accounting method (such as FAS #8 in the United States) that translates monetary assets and liabilities at current exchange rates and all other balance sheet accounts at historical exchange rates.

Territorial Tax System: A tax system that taxes domestic income but not foreign income. This tax regime is found in Hong Kong, France, Belgium, and the Netherlands.

Tied Loan: A loan issued by a government requiring the borrower to spend the funds in the lending country.

Time Draft: A draft that is payable on a specified future date.

Time Value of an Option: The difference between the value of an option and the option's intrinsic value.

Timing Option: The ability of the firm to postpone investment (or disinvestment) and to reconsider the decision at a future date.

Total Cash Flow of the Firm: Total cash inflow minus total cash outflow.

Total Quality Management (TQM): An organization-wide approach to continuously improving the overall quality of its process, products, and service.

Total Risk: The sum of systematic and unsystematic risk (measured by the standard deviation or variance of return).

Trade Acceptance: A time draft that is drawn on and accepted by an importer.

Trade Balance: A country's net balance (exports minus imports) on merchandise trade.

Trade Barrier: A governmental policy, action, or practice that intentionally interrupts the free flow of goods or services between countries.

Trade Deficit: A trade deficit occurs when the value of a country's exports is less than the value of its imports.

Trade-in Allowance: Price discount granted for a new item by turning in an old item at the time of purchase.

Trademark: A registration process under which a name, logo, or characteristic can be identified as exclusive.

Trade-Offs: A kind of interaction involving the offsetting of high costs in one section with lower or diminished costs in another.

Trade Surplus: A trade surplus occurs when the value of a country's exports is greater than the value of its imports.

Trading Desk: The desk at an international bank that trades spot and forward foreign exchange. Also known as dealing desk.

Transaction Exposure: Changes in the value of contractual (monetary) cash flows as a result of changes in currency values.

Transaction Statement: A document that clearly outlines the terms and conditions agreed upon between an importer and an exporter.

Transfer Prices: Prices on intracompany sales.

Transfer Pricing: The price one unit of a company charges to another unit of the same company for goods or services exchanged between the two.

Translation Exposure: Changes in a corporation's financial statements as a result of changes in currency values. Also known as accounting exposure.

Transparency: The observed degree of clarity, openness, measurability, and verifiability in a law, regulation, agreement, or trade practice.

Treaty of Tordesillas: Treaty between Spain and Portugal that divided the South American continent (among other lands) between the two countries. Ratified in 1494, it originally gave Spain much more land than Portugal.

Trustee: A bank or trust company that holds title to or a security interest in leased property for the benefit of the lessee, lessor, and/or creditors of the lessor.

Turnkey Contract: An agreement in which a contractor is responsible for setting up a facility from start to finish for another firm.

Tying Arrangement: The condition imposed by a seller that obliges a buyer to agree to purchase an additional product (tied product) if they wish to purchase their desired product (tying product).

U

Umbrella Rate: In shipping, the umbrella rate is a rate system designed to protect less competitive carriers by setting artificially high minimum rates.

Unbiased Expectations Hypothesis: The hypothesis that forward exchange rates are unbiased predictors of future spot rates (see forward parity).

Uncertainty Avoidance: The extent to which a society tolerates uncertainty and ambiguity.

Unemployment Rate: The ratio of the total number of unemployed persons to the total number of persons in the labor force.

United Nations Conference on Trade and Development (UNCTAD): UNCTAD was established in 1964 with the goal of promoting sustainable development while integrating developing countries into the world economy. It acts as a forum for intergovernmental deliberations with an aim at building consensus; conducting research, policy analysis, and data collection; and providing technical assistance tailored to the specific needs of different developing countries.

United Nations Industrial Development Organization (UNIDO): UNIDO helps developing countries and countries with economies in transition in their fight against marginalization in today's globalized world. It mobilizes knowledge, skills, information, and technology to promote productive employment, a competitive economy, and a sound environment.

Unlevered Beta: The beta (or systematic risk) of a project as if it were financed with 100 percent equity.

Unlevered Cost of Equity: The discount rate appropriate for an investment assuming it is financed with 100 percent equity.

Unsustainable Debt: A financial condition in which a country is unable to service its foreign (external) debt without decimating its economy.

Unsystematic Risk: Risk that is specific to a particular security or country and that can be eliminated through diversification.

Usury: The practice of charging or paying exorbitant interest on a loan or other transaction. Note: in Islamic societies, charging or receiving any amount of interest is considered usury.

V

Value-Added Reseller: A company that purchases products from a variety of sources to produce a new finished product for sale.

Value Added Tax (VAT): A sales tax collected at each stage of production in proportion to the value added during that stage.

Value Chain: A value-added process in a firm to transform raw materials and other inputs to finished goods, which creates value to customers.

Value Date: Date on which a foreign exchange contract is executed, i.e., seller delivers.

Value Stocks: Stocks with low price/book ratios or price/earnings ratios. Historically, value stocks have enjoyed higher average returns than growth stocks (stocks with high price/book or PE ratios) in a variety of countries.

Variable Cost: A cost that varies directly with volume and is zero when production is zero.

Venture Capital: An investment in a start-up business that is perceived to have excellent growth prospects but that does not have access to capital markets.

Virtual Corporation: Partnerships so close that those partners become a single firm for all operational purposes.

Voluntary Export Restraint (VER): One country promises another country to limit its imports; this is often done when the promising country fears increased tariffs or quotas if it does not self-regulate.

W

Warehouse Receipt: A receipt issued by a warehouse listing the goods received.

Warehouse-to-Warehouse: An insurance policy that covers goods over the entire journey from the seller's to the buyer's premises.

Warrant: An option issued by a company that allows the holder to purchase equity from the company at a predetermined price prior to an expiration date. Warrants are frequently attached to Eurobonds.

Weak Form Efficient Market: It is a market in which prices fully reflect the information in past prices.

Weighted Average Cost of Capital (WACC): A discount rate that reflects the after-tax required returns on debt and equity capital.

Weight Note: A document issued by either the exporter or a third party declaring the weight of goods in a consignment.

West African Economic and Monetary Union (UEMOA): A regional alliance of francophone West African countries that promotes economic integration among the seven member countries. The country members are Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal, and Togo. They all share a common currency and have a central bank to oversee it.

Wharfage Charge: A charge assessed by a pier or dock owner for handling incoming or outgoing cargo.

Withholding Tax: A tax on dividend or interest income that is withheld for payment of taxes in a host country. Payment is typically withheld by the financial institution distributing the payment.

Without Reserve: In shipping this indicates that a shipper's agent has the power to make important decisions abroad without the consent of those the agent represents.

Working Capital: An accounting term that indicates the difference between current assets and current liabilities.

World Bank: An international organization created at Bretton Woods in 1944 to help in the reconstruction and development of its member nations. Its goal is to improve the quality of life for people in the poorer regions of the world by promoting sustainable economic development. *See also* International Bank for Reconstruction and Development.

World Customs Organization (WCO): The WCO is an international organization whose function is the facilitation of trade between member states through the simplification and standardization of customs practices. The WCO was established in 1952 as the Customs Cooperation Council. Today, WCO provides regulations and standards to 169 customs administrations worldwide.

World Intellectual Property Organization (WIPO): The World Intellectual Property Organization (WIPO) is an international organization focused on the protection of intellectual property. WIPO administers 23 international treaties and is one of 16 specialized agencies of the United Nations. WIPO members include 183 nations around the world.

World Trade Organization (WTO): The WTO is a multilateral organization that promotes free and fair trade among the nations of the world. The WTO was created in 1994 by 121 nations at the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). The WTO is responsible for implementation and administration of the trade agreement.

Worldwide Tax System: A tax system that taxes worldwide income as it is repatriated to the parent company. It is utilized in Japan, the United Kingdom, and the United States.

Writ: A judicial order to an officer of the law, such as a judge or a sheriff, to perform or have performed a specified act.

WTO Committee on Trade and Development (CTD): The WTO Committee on Trade and Development is a forum for discussion on all multi-interest issues of special interest to developing countries.

Y

Yield to Maturity: The discount rate that equates the present value of interest payments and redemption value with the present price of the bond.

Y2K: The abbreviation used to refer to the year 2000 computer problems resulting from the use of two-digit year inputs. Left uncorrected, computers would have recognized the input 00 to mean 1900 and not 2000.

Z

***Zaibatsu*:** Large family-owned conglomerates that controlled much of the economy of Japan prior to World War II. The four most historically significant zaibatsu, the Big Four, are Mitsubishi, Mitsui, Yasuda, and Sumitomo, whose roots date back to the Japanese Edo period.

Zeitgeist: A German expression that can be interpreted to mean "the spirit of time." It indicates the general intellectual state and outlook of an era or generation.

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Resource Guide

Books

Adler, N. J. *International Dimensions of Organizational Behavior*, Fourth Edition (South-Western College Publishing, 2001)

Ambler, T. and Styles, C. *The Silk Road to International Marketing—Profit and Passion in Global Business* (Financial Times/Prentice Hall, 2000)

Arnold, D. *The Mirage of Global Markets* (Prentice Hall, 2004)

Arnould, E. J., Price, L. and Zinkhan, G. M. *Consumers*, Second Edition (McGraw-Hill, 2004)

Ball, D. A. et al. *International Business: The Challenge of Global Competition*, Eleventh Edition (McGraw-Hill, 2007)

Bartlett, C. A. and Ghoshal, S. *Managing Across Borders. The Transnational Solution*, Second Edition (Harvard Business School, 2002)

Bartlett, C. A. and Ghoshal, S. *Transnational Management: Text, Cases, and Readings in Cross-Border Management*, Fifth Edition (McGraw-Hill/Irwin, 2006)

Beamish, P. W. et al. *International Management With PowerWeb,* Fifth Edition (McGraw-Hill, 2003)

Brett, J. M. *Negotiating Globally: How to Negotiate Deals, Resolve Disputes, and Make Decisions Across Cultural Boundaries,* Second Edition (Jossey-Bass, 2007)

Brown, J. F. *The Global Business Leader: Practical Advice for Success in a Transcultural Marketplace* (Palgrave Macmillan, 2007)

Cantwell, J. and Narula, R. *International Business and the Eclectic Paradigm. Developing the OLI Framework* (Routledge, 2003)

Cateora, P. and Graham, J. *International Marketing*, Twelfth Edition (McGraw-Hill/Irwin, 2005)

Cavusgil, S. T. et al. *Doing Business in Emerging Markets. Entry and Negotiation Strategies* (Sage, 2002)

Cavusgil, S. T., Knight, G. and Riesenberger, J. *International Business: Strategy, Management, and the New Realities* (Prentice Hall, 2007)

Cheol, E. and Resnick, B. *International Financial Management*, Fourth Edition (McGraw-Hill, 2005)

Child, J., Faulkner, D. and Pitkethly, R. *The Management of International Acquisitions* (Oxford University Press, 2003)

Clegg, S. R. et al. *Global Management. Universal Theories and Local Realities* (Sage, 1999)
Cohen, E. *Leadership Without Borders: Successful Strategies From World-Class Leaders* (Wiley, 2007)
Condon, B. J. *NAFTA, WTO and Global Business Strategy: How AIDS, Trade and Terrorism Affect Our Economic Future* (Quorum Books, 2002)
Czinkota, M. R., Ronkainen, I. A., and Moffet, M. H. *International Business*, Seventh Edition (Cengage Learning Asia, 2007)
Daniels, J. D., Radebaugh, L. H. and Sullivan, D. P. *International Business: Environments and Operations,* Tenth Edition (Pearson Education, 2004)
De George, R. T. *Competing With Integrity in International Business* (Oxford University Press, 1993)
Deresky, H. *International Management: Managing Across Borders and Cultures*, Fifth Edition (Prentice Hall, 2006)
Dunning, J. H. *Governments, Globalization, and International Business* (Oxford University Press, 1999)
Elgstrom, O. and Jonsson, C. *European Union Negotiations: Processes, Networks and Institutions* (Routledge, 2005)
Eun, C. S. and Resnick, B. G. *International Finance Management,* Fourth Edition (McGraw-Hill/Irwin, 2007)
Fletcher, R. and Brown, L. *International Marketing—An Asia-Pacific Perspective* (Pearson Education, 2002)
Frank, A. G. *ReOrient: Global Economy in the Asian Age* (University of California Press, 1998)
Friedman, T. L. *The Lexus and the Olive Tree.* (Anchor Books, 2002)
Friedman, T. L. *The World is Flat* (Farrar, Straus & Giroux, 2006)
Goldsmith, M. et al. *Global Leadership: The Next Generation* (Financial Times/Prentice Hall, 2003)
Hampden-Turner, C. and Trompenaars, F. *Riding the Waves of Culture: Understanding Diversity in Global Business*, Second Edition (McGraw-Hill, 1997)
Harrison, A., Dalkiran, E. and Elsey, E. *International Business: Global Competition From a European Perspective* (Oxford University Press, 2000)
Hill, C. W. L. *International Business: Competing in the Global Marketplace*, Sixth Edition (McGraw-Hill, 2007)
Hodgetts, R. and Doh, J. *International Management: Culture, Strategy, and Behaviour*, Seventh Edition (McGraw-Hill/Irwin, 2008)
Hoecklin, L. *Managing Cultural Differences: Strategies for Competitive Advantage* (Addison-Wesley and EIU, 1995)
Hofstede, G. *Cultures and Organisations: The Software of the Mind* (McGraw-Hill, 1991)
Holt, D. H. and Wigginton, K. *International Management*, Second Edition (South-Western College, 2001)
Inda, J. X. and Rosaldo, R. *The Anthropology of Globalization*, Second Edition (Wiley-Blackwell, 2007)
Jones, G. and Zeitlin, J. *The Oxford Handbook of Business History* (Oxford University Press, 2008)
Kline, J. M. *Ethics for International Business. Decision-Making in a Global Political Economy* (Routledge, 2005)
Kotler, P. et al. *Marketing Management—An Asian Perspective,* Second Edition (Prentice Hall, 1999)
Krug, J. A. and Daniels, J. D. *International Business and Globalization* (Sage, 2007)
Krug, J. A. and Daniels, J. D. *Multinational Enterprise Theory* (Sage, 2008)
Laudicina, P. *World Out of Balance* (McGraw-Hill, 2005)
Mahoney, D., Trigg, M., Griffin, R. and Putsay, M. *International Business: A Managerial Perspective* (Addison-Wesley, 1997)
Marquardt, M. J. and Berger, N. O. *Global Leaders for the 21st Century* (State University of New York Press, 2000)
McCall, Jr., M. W. and Hollenback, G. P. *Developing Global Executives* (Harvard Business Press, 2002)
McFarlin, D. B. and Sweeney, P. D. (2006) *International Management: Strategic Opportunities and Cultural Challenges*, Third Edition (South-Western College, 2006)
Meier, G. M. *The International Environment of Business Competition and Governance in the Global Economy* (Oxford University Press, 1998)
Mendenhall, M. et al. *Global Leadership: Research, Practice and Development* (Routledge, 2008)

Mishkin, F. *The Economics of Money, Banking and Financial Markets*, Sixth Edition (Addison-Wesley, 2003)
Nesadurai, Helen E. S. *Globalisation, Domestic Politics and Regionalism*: *The Asean Free Trade Area* (Routledge, 2006)
Nye, Jr., J. S., Nye, J. S. and Donahue, J. D. *Governance in a Globalizing World* (Brookings Institution, 2000)
Park, W. W. *Arbitration of International Business Disputes Studies in Law and Practice* (Oxford University Press, 2006)
Pellenbarg, P. *International Business Geography. Case Studies of Corporate Firms* (Routledge, 2007)
Pieterse, J. N. *Globalization and Culture: Global Melange* (Rowman and Littlefield, 2003)
Ramonet, I. *Wars of the 21st Century. New Threats, New Fears* (Ocean Press, 2004)
Ringman, A. M. and Hodgetts, R.M. *International Business (*McGraw-Hill, 1997)
Root, F. R. *Entry Strategies for International Markets* (Jossey-Bass, 1998)
Rugman, A. M. *International Business. Critical Perspectives on Business and Management* (Routledge, 2002)
Rugman, A. M. *The Regional Multinationals: MNEs and "Global" Strategic Management* (Cambridge University Press, 2005)
Rugman, A. M. and Brewer, T. L. *The Oxford Handbook of International Business* (Oxford University Press, 2003)
Samii, M. *International Business and Information Technology. Interaction and Transformation in the Global Economy* (Routledge, 2004)
Schaffer, R., Agusti, F. and Earle, B. *International Business Law and Its Environment,* Seventh Edition (Thomson South-Western, 2008)
Schmidt, W. V. et al. *Communicating Globally: Intercultural Communication and International Business* (Sage, 2007)
Solomon, M. *Consumer Behavior* (Prentice Hall, 2002)
Stiglitz, J. *Making Globalization Work* (Norton, 2006)
Tayeb, M. H. *International Human Resource Management: A Multinational Company Perspective* (Oxford University Press, 2004)
Thomas, D. C. *Essentials of International Management: A Cross Cultural Perspective* (Sage, 2002)
van Tulder, R. and van der Zwart, A. *International Business-Society Management. Linking Corporate Responsibility and Globalization* (Routledge, 2006)
Turner, C. and Johnson, D. *International Business. Theory and Practice to Themes and Issues in the Modern World Economy* (Routledge, 2003)
Usunier, J.-C. *International and Cross-Cultural Management Research* (Sage, 1998)
Vermulst, E., Waer, P. and Bourgeois, J. *Rules of Origin in International Trade: A Comparative Study* (University of Michigan Press, 1994)
Wankel, C. *21st Century Management: A Reference Handbook* (Sage, 2008)
Wild, J. J., Wild, K. L. and Han, J. C. Y. *International Business: The Challenges of Globalization*, Third Edition (Pearson Education, 2005)
Zaltman, G. *How Customers Think* (Harvard Business School Press, 2003)

Journals

Academy of Management Journal
Asia Pacific Business Review
Asia Pacific Journal of Human Resources
Asia Pacific Journal of Management
Asian Journal of Management Cases
Business and Society
Business History
Business Week
California Management Review
Columbia Journal of World Business
Culture and Organization
Economic Development Quarterly
Economist, The
Education, Business and Society: Contemporary Middle Eastern Issues
European Journal of Industrial Relations
European Journal of International Management
European Journal of Marketing
Far Eastern Economic Review
Financial Times
Fortune
Global Business Review
Harvard Business Review
Indian Economic and Social History Review

International Journal of Cross Cultural Management
International Journal of Leadership Studies
International Journal of Management
International Journal of Research in Marketing
International Marketing Review
International Small Business Journal
International Studies of Management and Organization
The International Trade Journal: Western Hemispheric Studies
Journal of Business
Journal of Business Communication
Journal of Chinese Economic and Business Studies
Journal of Emerging Market Finance
Journal of International Business Studies
Journal of International Management
Journal of Leadership and Organization Studies
Journal of Macromarketing
Journal of Management
Journal of Marketing Communications
Journal of Multinational Financial Management
Journal of Public Relations Research
Journal of Strategic Marketing
Macroeconomics and Finance in Emerging Market Economies
Management and Organizational History
Management Communication Quarterly
Management International Review
Review of International Political Economy
South Asia Economic Journal
Strategic Management Journal
Thunderbird International Business Review
Time
Wall Street Journal

Internet

Academy of Management
http://www.aomonline.org
American Marketing Association
http://www.marketingpower.com
Asian Development Bank
http://www.adb.org
Association for the Taxation of Financial Transactions for the Aid of Citizens (ATTAC)
http://www.attac.org
Association of Management/International Association of Management
http://www.aom-iaom.org
Association of Southeast Asian Nations (ASEAN)
http://www.aseansec.org
Corporate Watch
http://www.corporatewatch.org
European International Business Academy
http://www.eiba-online.org
European Union (EU)
http://www.europe.eu
Food and Agriculture Organization (FAO)
http://www.fao.org
Free Trade Area of the Americas (FTAA)
http://www.ftaa-alca.org
General Agreement on Tariffs and Trade (GATT)
http://www.gatt.org
Global Academy of Business and Economic Research
http://www.gaberic.org
Independent Media Center
http://www.indymedia.org
International Association for Business and Society
http://www.iabs.net
International Chamber of Commerce
http://www.iccwbo.org
International Monetary Fund (IMF)
http://www.imf.org
North American Free Trade Agreement (NAFTA)
http://www.nafta-sec-alena.org
Organisation for Economic Co-operation and Development (OECD)
http://www.oecd.org
Securities and Exchange Commission (SEC)
http://www.sec.gov
Trans-European Networks
http://ec.europe.eu/ten
United Nations Centre on Transnational Corporations (UNCTC)
http://unctc.unctad.org
United Nations Industrial Development Organization (UNIDO)
http://www.unido.org
United States of America Department of Commerce
http://www.commerce.gov
World Investment Report
http://www.unctad.org/WIR
World Trade Organization
http://www.wto.org

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Appendix

WORLD TRADE IN MERCHANDISE BY PRODUCT
World Trade Organization

1. Overview

Table I.1

Growth in the volume of world merchandise exports and production, 2000-2007

(Annual percentage change)

	2000-07	2005	2006	2007
World merchandise exports	**5.5**	**6.5**	**8.5**	**6.0**
Agricultural products	4.0	6.0	6.0	4.5
Fuels and mining products	3.5	3.5	3.5	3.0
Manufactures	6.5	7.5	10.0	7.5
World merchandise production	**3.0**	**3.0**	**3.0**	**4.0**
Agriculture	2.5	2.0	1.5	2.5
Mining	1.5	1.5	1.0	0.0
Manufacturing	3.0	4.0	4.0	5.0
World GDP	**3.0**	**3.0**	**3.5**	**3.5**

Note : See the Metadata for the estimation of world aggregates of merchandise exports, production and GDP.

Table I.2

Growth in the volume of world merchandise trade by selected region and economy, 2000-2007

(Annual percentage change)

Exports				Imports		
2000-07	2006	2007		2000-07	2006	2007
5.5	**8.5**	**6.0**	**World**	**5.5**	**8.0**	**5.5**
3.0	8.5	5.0	North America	4.0	6.0	2.0
1.0	1.0	1.0	Canada	4.0	5.5	6.5
3.0	11.0	1.5	Mexico	3.5	10.5	4.5
3.5	10.5	7.0	United States	4.0	5.5	1.0
6.5	3.5	3.5	South and Central America	8.0	15.5	17.5
4.0	7.5	3.5	Europe	3.5	7.5	3.5
4.0	7.5	3.0	European Union (27)	3.5	7.0	3.0
1.0	2.0	1.5	Norway	5.5	10.5	9.5
4.0	10.0	7.0	Switzerland	2.0	7.0	5.0
8.0	5.5	7.5	Commonwealth of Independent States (CIS)	17.0	21.0	19.5
10.5	13.5	11.5	Asia	8.5	8.5	8.0
2.0	2.0	2.5	Australia	9.0	8.0	11.0
22.5	22.0	19.5	China	18.0	16.5	13.5
3.0	9.5	6.5	Hong Kong, China	8.0	9.5	8.0
13.0	11.0	11.5	India	13.5	9.5	14.0
6.5	10.0	9.0	Japan	3.0	2.0	1.0
8.5	12.0	8.5	Six East Asian traders a	5.5	7.5	5.0

a Hong Kong, China; Republic of Korea; Malaysia; Singapore; Taipei, Chinese and Thailand.

2. Trade by region

Table I.3

World merchandise trade and trade in commercial services by region and selected economy, 2007

(Annual percentage change)

Exports				Imports		
2000-07	2006	2007		2000-07	2006	2007
			Merchandise			
12	**16**	**15**	**World**	**11**	**15**	**15**
6	13	11	North America	7	11	6
6	15	12	United States	7	11	5
6	8	8	Canada	7	11	9
14	21	15	South and Central America	12	22	25
17	16	17	Brazil	12	23	32
20	41	18	Chile	14	17	23
12	13	16	Europe	12	15	16
12	13	16	European Union (27)	12	14	15
11	13	16	Switzerland	10	12	14
20	24	21	Commonwealth of Independent States (CIS)	24	30	34
19	25	17	Russian Federation	26	31	36
19	12	28	Ukraine	23	25	35
16	19	16	Africa	16	14	24
13	13	20	South Africa	17	24	18
18	16	12	Nigeria a	19	5	35
16	22	15	Middle East	16	13	26
17	17	11	Saudi Arabia a	17	17	29
19	24	19	United Arab Emirates a	21	18	32
13	18	16	Asia	13	16	15
25	27	26	China	23	20	21
6	9	10	Japan	7	12	7
			Commercial services			
12	**12**	**18**	**World**	**11**	**11**	**18**
7	9	13	North America	7	9	9
7	10	15	United States	7	9	9
7	7	6	Canada	9	11	12
10	14	17	South and Central America	9	15	21
14	21	26	Brazil	12	21	28
11	21	28	Argentina	2	12	27
13	11	20	Europe	12	10	19
13	11	20	European Union (27)	12	10	18
12	10	21	Switzerland	13	5	18
21	24	27	Commonwealth of Independent States (CIS)	21	17	30
22	25	27	Russian Federation	20	16	32
20	21	26	Ukraine	23	23	26
...	...	22	Africa	...	...	25
11	10	24	Egypt	9	8	27
...	7	13	South Africa	...	18	17
13	17	13	Middle East	15	20	25
5	10	10	Israel	6	9	21
7	9	8	Saudi Arabia	16	34	58
13	16	19	Asia	11	14	17
9	13	10	Japan	5	9	11
22	24	33	China	20	21	29

a Secretariat estimates.

Table I.4

Intra- and inter-regional merchandise trade, 2007

(Billion dollars and percentage)

	Destination							
Origin	North America	South and Central America	Europe	CIS	Africa	Middle East	Asia	World
Value								
World	**2517**	**451**	**5956**	**397**	**355**	**483**	**3294**	**13619**
North America	951.2	130.7	328.7	12.4	27.3	50.1	352.1	1853.5
South and Central America	151.3	122.0	105.6	6.4	13.7	9.1	80.2	499.2
Europe	458.5	80.4	4243.6	189.0	147.7	152.9	433.7	5772.2
Commonwealth of Independent States (CIS)	23.6	6.3	287.5	103.2	6.9	16.2	59.6	510.3
Africa	91.9	14.6	167.5	0.9	40.5	10.5	80.9	424.1
Middle East	83.9	4.4	108.3	4.8	27.5	93.4	397.3	759.9
Asia	756.4	92.3	714.6	79.8	91.4	150.4	1889.8	3799.7
Share of regional trade flows in each region's total merchandise exports								
World	**18.5**	**3.3**	**43.7**	**2.9**	**2.6**	**3.5**	**24.2**	**100.0**
North America	51.3	7.0	17.7	0.7	1.5	2.7	19.0	100.0
South and Central America	30.3	24.4	21.2	1.3	2.7	1.8	16.1	100.0
Europe	7.9	1.4	73.5	3.3	2.6	2.6	7.5	100.0
Commonwealth of Independent States (CIS)	4.6	1.2	56.3	20.2	1.3	3.2	11.7	100.0
Africa	21.7	3.4	39.5	0.2	9.5	2.5	19.1	100.0
Middle East	11.0	0.6	14.3	0.6	3.6	12.3	52.3	100.0
Asia	19.9	2.4	18.8	2.1	2.4	4.0	49.7	100.0
Share of regional trade flows in world merchandise exports								
World	**18.5**	**3.3**	**43.7**	**2.9**	**2.6**	**3.5**	**24.2**	**100.0**
North America	7.0	1.0	2.4	0.1	0.2	0.4	2.6	13.6
South and Central America	1.1	0.9	0.8	0.0	0.1	0.1	0.6	3.7
Europe	3.4	0.6	31.2	1.4	1.1	1.1	3.2	42.4
Commonwealth of Independent States (CIS)	0.2	0.0	2.1	0.8	0.1	0.1	0.4	3.7
Africa	0.7	0.1	1.2	0.0	0.3	0.1	0.6	3.1
Middle East	0.6	0.0	0.8	0.0	0.2	0.7	2.9	5.6
Asia	5.6	0.7	5.2	0.6	0.7	1.1	13.9	27.9

Table I.5

Shares of regional trade flows in world merchandise exports, 2007

(Percentage)

Destination / Origin	World	North America	South and Central America	Europe	CIS	Africa	Middle East	Asia
					Share			
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North America	13.6	37.8	29.0	5.5	3.1	7.7	10.4	10.7
South and Central America	3.7	6.0	27.1	1.8	1.6	3.9	1.9	2.4
Europe	42.4	18.2	17.8	71.2	47.7	41.6	31.7	13.2
CIS	3.7	0.9	1.4	4.8	26.0	1.9	3.4	1.8
Africa	3.1	3.7	3.2	2.8	0.2	11.4	2.2	2.5
Middle East	5.6	3.3	1.0	1.8	1.2	7.8	19.3	12.1
Asia	27.9	30.1	20.5	12.0	20.1	25.7	31.2	57.4

Table I.6

World merchandise exports by region and selected economy, 1948, 1953, 1963, 1973, 1983, 1993, 2003 and 2007

(Billion dollars and percentage)

	1948	1953	1963	1973	1983	1993	2003	2007
	Value							
World	**59**	**84**	**157**	**579**	**1838**	**3675**	**7375**	**13619**
	Share							
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North America	**28.1**	**24.8**	**19.9**	**17.3**	**16.8**	**18.0**	**15.8**	**13.6**
United States	21.7	18.8	14.9	12.3	11.2	12.6	9.8	8.5
Canada	5.5	5.2	4.3	4.6	4.2	4.0	3.7	3.1
Mexico	0.9	0.7	0.6	0.4	1.4	1.4	2.2	2.0
South and Central America	**11.3**	**9.7**	**6.4**	**4.3**	**4.4**	**3.0**	**3.0**	**3.7**
Brazil	2.0	1.8	0.9	1.1	1.2	1.0	1.0	1.2
Argentina	2.8	1.3	0.9	0.6	0.4	0.4	0.4	0.4
Europe	**35.1**	**39.4**	**47.8**	**50.9**	**43.5**	**45.4**	**45.9**	**42.4**
Germany a	1.4	5.3	9.3	11.6	9.2	10.3	10.2	9.7
France	3.4	4.8	5.2	6.3	5.2	6.0	5.3	4.1
Italy	11.3	9.0	7.8	5.1	4.0	4.6	4.1	3.6
United Kingdom	1.8	1.8	3.2	3.8	5.0	4.9	4.1	3.2
Commonwealth of Independent States (CIS) b	**-**	**-**	**-**	**-**	**-**	**1.5**	**2.6**	**3.7**
Africa	**7.3**	**6.5**	**5.7**	**4.8**	**4.5**	**2.5**	**2.4**	**3.1**
South Africa c	2.0	1.6	1.5	1.0	1.0	0.7	0.5	0.5
Middle East	**2.0**	**2.7**	**3.2**	**4.1**	**6.8**	**3.5**	**4.1**	**5.6**
Asia	**14.0**	**13.4**	**12.5**	**14.9**	**19.1**	**26.1**	**26.2**	**27.9**
China	0.9	1.2	1.3	1.0	1.2	2.5	5.9	8.9
Japan	0.4	1.5	3.5	6.4	8.0	9.9	6.4	5.2
India	2.2	1.3	1.0	0.5	0.5	0.6	0.8	1.1
Australia and New Zealand	3.7	3.2	2.4	2.1	1.4	1.4	1.2	1.2
Six East Asian traders	3.4	3.0	2.4	3.4	5.8	9.7	9.6	9.3
Memorandum item:								
EU d	-	-	27.5	38.6	38.6	38.6	42.7	39.1
USSR, former	2.2	3.5	4.6	3.7	5.0	**-**	**-**	**-**
GATT/WTO Members e	62.8	69.6	75.0	84.1	78.4	89.4	94.3	94.1

a Figures refer to the Fed. Rep. of Germany from 1948 through 1983.
b Figures are significantly affected by i) changes in the country composition of the region and major adjustment in trade conversion factors between 1983 and 1993; and ii) including the mutual trade flows of the Baltic States and the CIS between 1993 and 2003.
c Beginning with 1998, figures refer to South Africa only and no longer to the Southern African Customs Union.
d Figures refer to the EEC(6) in 1963, EC(9) in 1973, EC(10) in 1983, EU(12) in 1993, and EU(25) in 2003 and 2006.
e Membership as of the year stated.
Note: Between 1973 and 1983 and between 1993 and 2003 export shares were significantly influenced by oil price developments.

Table I.7

World merchandise imports by region and selected economy, 1948, 1953, 1963, 1973, 1983, 1993, 2003 and 2007

(Billion dollars and percentage)

	1948	1953	1963	1973	1983	1993	2003	2007
	Value							
World	**62**	**85**	**164**	**595**	**1882**	**3787**	**7691**	**13968**
	Share							
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North America	**18.5**	**20.5**	**16.1**	**17.2**	**18.5**	**21.4**	**22.5**	**19.4**
United States	13.0	13.9	11.4	12.3	14.3	15.9	16.9	14.5
Canada	4.4	5.5	3.9	4.2	3.4	3.7	3.2	2.8
Mexico	1.0	0.9	0.8	0.6	0.7	1.8	2.3	2.1
South and Central America	**10.4**	**8.3**	**6.0**	**4.4**	**3.8**	**3.3**	**2.5**	**3.3**
Brazil	1.8	1.6	0.9	1.2	0.9	0.7	0.7	0.9
Argentina	2.5	0.9	0.6	0.4	0.2	0.4	0.2	0.3
Europe	**45.3**	**43.7**	**52.0**	**53.3**	**44.2**	**44.6**	**45.0**	**43.4**
Germany a	2.2	4.5	8.0	9.2	8.1	9.0	7.9	7.6
United Kingdom	13.4	11.0	8.5	6.5	5.3	5.5	5.2	4.4
France	5.5	4.9	5.3	6.3	5.6	5.7	5.2	4.4
Italy	2.5	2.8	4.6	4.7	4.2	3.9	3.9	3.6
Commonwealth of Independent States (CIS) b	**-**	**-**	**-**	**-**	**-**	**1.2**	**1.7**	**2.7**
Africa	**8.1**	**7.0**	**5.2**	**3.9**	**4.6**	**2.6**	**2.1**	**2.6**
South Africa c	2.5	1.5	1.1	0.9	0.8	0.5	0.5	0.7
Middle East	**1.8**	**2.1**	**2.3**	**2.7**	**6.2**	**3.3**	**2.7**	**3.4**
Asia	**13.9**	**15.1**	**14.1**	**14.9**	**18.5**	**23.6**	**23.5**	**25.3**
China	0.6	1.6	0.9	0.9	1.1	2.7	5.4	6.8
Japan	1.1	2.8	4.1	6.5	6.7	6.4	5.0	4.4
India	2.3	1.4	1.5	0.5	0.7	0.6	0.9	1.6
Australia and New Zealand	2.9	2.3	2.2	1.6	1.4	1.5	1.4	1.4
Six East Asian traders	3.5	3.7	3.1	3.7	6.1	10.3	8.6	8.7
Memorandum item:								
EU d	-	-	29.0	39.2	39.2	39.2	41.8	39.9
USSR, former	1.9	3.3	4.3	3.5	4.3	**-**	**-**	**-**
GATT/WTO Members e	58.1	66.9	75.3	85.5	81.3	88.7	94.9	95.0

a Figures refer to the Fed. Rep. of Germany from 1948 through 1983.

b Figures are significantly affected by i) changes in the country composition of the region and major adjustment in trade conversion factors between 1983 and 1993 and ii) including the mutual trade flows of the Baltic States and the CIS between 1993 and 2003.

c Beginning with 1998, figures refer to South Africa only and no longer to the Southern African Customs Union.

d Figures refer to the EEC(6) in 1963, EC(9) in 1973, EC(10) in 1983, EU(12) in 1993, and EU(25) in 2003 and EU(27) in 2007.

e Membership as of the year stated.

Note: Between 1973 and 1983 and between 1993 and 2003 export shares were significantly influenced by oil price developments.

3. Leading traders

Table I.8

Leading exporters and importers in world merchandise trade, 2007

(Billion dollars and percentage)

Rank	Exporters	Value	Share	Annual percentage change	Rank	Importers	Value	Share	Annual percentage change
1	Germany	1326.4	9.5	20	1	United States	2020.4	14.2	5
2	China	1217.8	8.7	26	2	Germany	1058.6	7.4	17
3	United States	1162.5	8.3	12	3	China	956.0	6.7	21
4	Japan	712.8	5.1	10	4	Japan	621.1	4.4	7
5	France	553.4	4.0	12	5	United Kingdom	619.6	4.4	3
6	Netherlands	551.3	4.0	19	6	France	615.2	4.3	14
7	Italy	491.5	3.5	18	7	Italy	504.5	3.5	14
8	United Kingdom	437.8	3.1	-2	8	Netherlands	491.6	3.5	18
9	Belgium	430.8	3.1	17	9	Belgium	413.2	2.9	17
10	Canada	419.0	3.0	8	10	Canada	389.6	2.7	9
11	Korea, Republic of	371.5	2.7	14	11	Spain	372.6	2.6	13
12	Russian Federation	355.2	2.5	17	12	Hong Kong, China	370.1	2.6	10
						retained imports	93.3	0.7	8
13	Hong Kong, China	349.4	2.5	8	13	Korea, Republic of	356.8	2.5	15
	domestic exports	18.1	0.1	-20					
	re-exports	331.3	2.4	10					
14	Singapore	299.3	2.1	10	14	Mexico a	296.3	2.1	11
	domestic exports	156.0	1.1	9					
	re-exports	143.3	1.0	11					
15	Mexico	272.0	2.0	9	15	Singapore	263.2	1.8	10
						retained imports	119.9	0.8	9
16	Taipei, Chinese	246.4	1.8	10	16	Russian Federation a	223.4	1.6	36
17	Spain	241.0	1.7	13	17	Taipei, Chinese	219.6	1.5	8
18	Saudi Arabia b	234.2	1.7	11	18	India	216.6	1.5	24
19	Malaysia	176.2	1.3	10	19	Turkey	170.1	1.2	22
20	United Arab Emirates b	173.0	1.2	19	20	Australia	165.3	1.2	19
21	Switzerland	172.1	1.2	16	21	Poland	162.7	1.1	28
22	Sweden	169.1	1.2	14	22	Austria	162.4	1.1	18
23	Austria	162.9	1.2	19	23	Switzerland	161.2	1.1	14
24	Brazil	160.6	1.2	17	24	Sweden	151.3	1.1	19
25	Thailand	153.1	1.1	17	25	Malaysia	147.0	1.0	12
26	India	145.3	1.0	20	26	Thailand	140.8	1.0	9
27	Australia	141.3	1.0	14	27	United Arab Emirates b	132.0	0.9	32
28	Poland	138.8	1.0	25	28	Brazil	126.6	0.9	32
29	Norway	136.4	1.0	12	29	Czech Republic a	117.9	0.8	27
30	Czech Republic	122.4	0.9	29	30	Denmark	99.6	0.7	17
31	Ireland	121.0	0.9	11	31	Hungary	95.0	0.7	21
32	Indonesia	118.0	0.8	14	32	Indonesia	92.4	0.6	15
33	Turkey	107.2	0.8	25	33	South Africa b	91.0	0.6	18
34	Denmark	103.5	0.7	12	34	Saudi Arabia	90.2	0.6	29
35	Hungary	94.6	0.7	26	35	Ireland	82.5	0.6	13
36	Finland	89.7	0.6	16	36	Finland	81.5	0.6	18
37	Iran, Islamic Rep. of b	86.0	0.6	12	37	Norway	80.3	0.6	25
38	South Africa	69.8	0.5	20	38	Portugal	78.1	0.5	17
39	Bolivarian Rep. of Venezuela	69.2	0.5	6	39	Greece	76.1	0.5	20
40	Chile	68.3	0.5	18	40	Romania	69.9	0.5	37
41	Nigeria b	65.5	0.5	12	41	Viet Nam	60.8	0.4	36
42	Kuwait	62.4	0.4	12	42	Ukraine	60.7	0.4	35
43	Algeria	60.2	0.4	10	43	Slovak Republic a	60.2	0.4	34
44	Slovak Republic	58.2	0.4	39	44	Israel	59.0	0.4	17
45	Argentina	55.9	0.4	20	45	Philippines a, b	58.0	0.4	7
46	Israel	54.1	0.4	16	46	Chile	47.1	0.3	23
47	Portugal	51.5	0.4	19	47	Bolivarian Rep. of Venezuela	46.1	0.3	37
48	Philippines	50.5	0.4	6	48	Iran, Islamic Rep. of b	46.0	0.3	13
49	Ukraine	49.2	0.4	28	49	Argentina	44.8	0.3	31
50	Viet Nam	48.4	0.3	21	50	Colombia	32.9	0.2	26
	Total of above c	**13006.4**	**93.2**	**-**		**Total of above c**	**13097.7**	**92.0**	**-**
	World c	**13950.0**	**100.0**	**15**		**World c**	**14244.0**	**100.0**	**15**

a Imports are valued f.o.b.
b Secretariat estimates.
c Includes significant re-exports or imports for re-export.
Note: For annual data 1997-2007, see Appendix Tables A6 and A7.

Table I.9

Leading exporters and importers in world merchandise trade (excluding intra-EU (27) trade), 2007

(Billion dollars and percentage)

Rank	Exporters	Value	Share	Annual percentage change	Rank	Importers	Value	Share	Annual percentage change
1	Extra-EU (27) exports	1697.8	16.4	17	1	United States	2020.4	19.0	5
2	China	1217.8	11.8	26	2	Extra-EU (27) imports	1952.0	18.4	15
3	United States	1162.5	11.3	12	3	China	956.0	9.0	21
4	Japan	712.8	6.9	10	4	Japan	621.1	5.8	7
5	Canada	419.0	4.1	8	5	Canada	389.6	3.7	9
6	Korea, Republic of	371.5	3.6	14	6	Hong Kong, China	370.1	3.5	10
						retained imports	93.3	0.9	8
7	Russian Federation	355.2	3.4	17	7	Korea, Republic of	356.8	3.4	15
8	Hong Kong, China	349.4	3.4	8	8	Mexico a	296.3	2.8	11
	domestic exports	18.1	0.2	-20					
	re-exports	331.3	3.2	10					
9	Singapore	299.3	2.9	10	9	Singapore	263.2	2.5	10
	domestic exports	156.0	1.5	9		retained imports	119.9	1.1	9
	re-exports	143.3	1.4	11					
10	Mexico	272.0	2.6	9	10	Russian Federation a	223.4	2.1	36
11	Taipei, Chinese	246.4	2.4	10	11	Taipei, Chinese	219.6	2.1	8
12	Saudi Arabia b	234.2	2.3	11	12	India	216.6	2.0	24
13	Malaysia	176.2	1.7	10	13	Turkey	170.1	1.6	22
14	United Arab Emirates b	173.0	1.7	19	14	Australia	165.3	1.6	19
15	Switzerland	172.1	1.7	16	15	Switzerland	161.2	1.5	14
16	Brazil	160.6	1.6	17	16	Malaysia	147.0	1.4	12
17	Thailand	153.1	1.5	17	17	Thailand	140.8	1.3	9
18	India	145.3	1.4	20	18	United Arab Emirates b	132.0	1.2	32
19	Australia	141.3	1.4	14	19	Brazil	126.6	1.2	32
20	Norway	136.4	1.3	12	20	Indonesia	92.4	0.9	15
21	Indonesia	118.0	1.1	14	21	South Africa b	91.0	0.9	18
22	Turkey	107.2	1.0	25	22	Saudi Arabia	90.2	0.8	29
23	Iran, Islamic Rep. of b	86.0	0.8	12	23	Norway	80.3	0.8	25
24	South Africa	69.8	0.7	20	24	Viet Nam	60.8	0.6	36
25	Bolivarian Rep. of Venezuela	69.2	0.7	6	25	Ukraine	60.7	0.6	35
26	Chile	68.3	0.7	18	26	Israel	59.0	0.6	17
27	Nigeria b	65.5	0.6	12	27	Philippines a, b	58.0	0.5	7
28	Kuwait	62.4	0.6	12	28	Chile	47.1	0.4	23
29	Algeria	60.2	0.6	10	29	Bolivarian Rep. of Venezuela	46.1	0.4	37
30	Argentina	55.9	0.5	20	30	Iran, Islamic Rep. of b	46.0	0.4	13
31	Israel	54.1	0.5	16	31	Argentina	44.8	0.4	31
32	Philippines	50.5	0.5	6	32	Colombia	32.9	0.3	26
33	Ukraine	49.2	0.5	28	33	Kazakhstan	32.8	0.3	38
34	Viet Nam	48.4	0.5	21	34	Pakistan	32.6	0.3	9
35	Kazakhstan	47.8	0.5	25	35	Iraq b	32.0	0.3	19
36	Libyan Arab Jamahiriya b	45.4	0.4	16	36	Morocco	31.7	0.3	32
37	Qatar	42.0	0.4	23	37	New Zealand	30.9	0.3	17
38	Iraq b	41.6	0.4	31	38	Nigeria b	29.5	0.3	35
39	Angola b	39.9	0.4	25	39	Belarus	28.7	0.3	28
40	Colombia	30.0	0.3	23	40	Algeria	27.6	0.3	29
41	Peru	28.0	0.3	17	41	Egypt	27.1	0.3	31
42	New Zealand	27.0	0.3	20	42	Croatia	25.8	0.2	20
43	Oman	24.7	0.2	15	43	Kuwait	23.6	0.2	48
44	Belarus	24.3	0.2	23	44	Qatar	22.0	0.2	34
45	Pakistan	17.8	0.2	5	45	Peru b	20.2	0.2	32
46	Egypt	16.2	0.2	18	46	Tunisia	19.0	0.2	28
47	Trinidad and Tobago b	15.1	0.1	7	47	Bangladesh	18.6	0.2	16
48	Tunisia	15.0	0.1	31	48	Serbia	18.4	0.2	39
49	Morocco	14.7	0.1	15	49	Oman b	16.1	0.2	46
50	Ecuador	13.8	0.1	8	50	Syrian Arab Republic b	14.5	0.1	26
	Total of above c	**10003.5**	**96.9**	**-**		**Total of above c**	**10188.4**	**95.9**	**-**
	World (excl. intra-EU (27)) c	**10328.0**	**100.0**	**15**		**World (excl. intra-EU (27)) c**	**10622.0**	**100.0**	**14**

a Imports are valued f.o.b.
b Secretariat estimates.
c Includes significant re-exports or imports for re-export.
Note: For annual data 1997-2007, see Appendix Tables A6 and A7.

Table I.10

Leading exporters and importers in world trade in commercial services, 2007

(Billion dollars and percentage)

Rank	Exporters	Value	Share	Annual percentage change	Rank	Importers	Value	Share	Annual percentage change
1	United States	456.4	13.9	15	1	United States	335.9	10.9	9
2	United Kingdom	273.0	8.3	18	2	Germany	250.5	8.1	15
3	Germany	205.8	6.3	15	3	United Kingdom	194.1	6.3	13
4	France	136.7	4.2	16	4	Japan	148.7	4.8	11
5	Spain	128.3	3.9	21	5	China	129.3	4.2	29
6	Japan	127.1	3.9	10	6	France	124.1	4.0	16
7	China	121.7	3.7	33	7	Italy	118.3	3.8	21
8	Italy	110.5	3.4	13	8	Spain	98.4	3.2	26
9	India	89.7	2.7	20	9	Ireland	94.5	3.1	20
10	Ireland	89.0	2.7	30	10	Netherlands	86.8	2.8	10
11	Netherlands	87.5	2.7	9	11	Korea, Republic of	82.5	2.7	21
12	Hong Kong, China	82.7	2.5	14	12	Canada	80.3	2.6	12
13	Belgium	75.5	2.3	...	13	India	77.2	2.5	22
14	Singapore	67.3	2.0	14	14	Belgium	70.6	2.3	...
15	Sweden	63.8	1.9	28	15	Singapore	70.1	2.3	14
16	Luxembourg	62.3	1.9	23	16	Russian Federation	57.8	1.9	32
17	Denmark	61.8	1.9	17	17	Denmark	54.0	1.7	19
18	Korea, Republic of	61.5	1.9	27	18	Sweden	47.8	1.5	21
19	Switzerland	61.5	1.9	21	19	Hong Kong, China	41.0	1.3	11
20	Canada	61.4	1.9	6	20	Austria	38.9	1.3	17
21	Austria	55.2	1.7	21	21	Norway	38.6	1.3	24
22	Greece	43.1	1.3	21	22	Australia	38.2	1.2	21
23	Norway	40.7	1.2	23	23	Thailand	38.0	1.2	16
24	Australia	39.7	1.2	23	24	Luxembourg	36.0	1.2	19
25	Russian Federation	39.1	1.2	27	25	Taipei, Chinese	35.3	1.1	8
26	Taipei, Chinese	30.9	0.9	7	26	Brazil	34.8	1.1	28
27	Thailand	28.8	0.9	17	27	Switzerland	33.9	1.1	18
28	Poland	28.6	0.9	39	28	Saudi Arabia	30.6	1.0	58
29	Turkey	28.2	0.9	13	29	United Arab Emirates a	28.1	0.9	...
30	Malaysia	28.2	0.9	30	30	Malaysia	27.8	0.9	18
31	Brazil	22.6	0.7	26	31	Poland	24.3	0.8	25
32	Portugal	22.1	0.7	26	32	Mexico	24.0	0.8	7
33	Israel	21.1	0.6	10	33	Indonesia a	23.3	0.8	...
34	Finland	20.7	0.6	19	34	Finland	20.8	0.7	12
35	Egypt	19.7	0.6	24	35	Greece	19.5	0.6	23
36	Mexico	17.8	0.5	9	36	Israel	17.8	0.6	21
37	Hungary	16.6	0.5	26	37	South Africa	16.3	0.5	17
38	Czech Republic	16.3	0.5	23	38	Hungary	15.0	0.5	30
39	Macao, China	14.5	0.4	37	39	Turkey	14.1	0.5	35
40	Ukraine	13.6	0.4	26	40	Czech Republic	13.9	0.5	19
	Total of above	**2970.0**	**90.3**	**-**		**Total of above**	**2730.0**	**88.5**	**-**
	World	**3290.0**	**100.0**	**18**		**World**	**3085.0**	**100.0**	**18**

a Secretariat estimate.

Note : Figures for a number of countries and territories have been estimated by the Secretariat. Annual percentage changes and rankings are affected by continuity breaks in the series for a large number of economies, and by limitations in cross-country comparability. See the Metadata, Section II.2. For annual data 1997-2007, see Appendix Tables A8 and A9.

Table I.11

Leading exporters and importers in world trade in commercial services (excluding intra-EU (27) trade), 2007

(Billion dollars and percentage)

Rank	Exporters	Value	Share	Annual percentage change	Rank	Importers	Value	Share	Annual percentage change
1	Extra EU (27) exports	667.2	27.7	22	1	Extra EU (27) imports	544.9	24.0	19
2	United States	456.4	18.9	15	2	United States	335.9	14.8	9
3	Japan	127.1	5.3	10	3	Japan	148.7	6.6	11
4	China	121.7	5.1	33	4	China	129.3	5.7	29
5	India	89.7	3.7	20	5	Korea, Republic of	82.5	3.6	21
6	Hong Kong, China	82.7	3.4	14	6	Canada	80.3	3.5	12
7	Singapore	67.3	2.8	14	7	India	77.2	3.4	22
8	Korea, Republic of	61.5	2.6	27	8	Singapore	70.1	3.1	14
9	Switzerland	61.5	2.6	21	9	Russian Federation	57.8	2.5	32
10	Canada	61.4	2.6	6	10	Hong Kong, China	41.0	1.8	11
11	Norway	40.7	1.7	23	11	Norway	38.6	1.7	24
12	Australia	39.7	1.6	23	12	Australia	38.2	1.7	21
13	Russian Federation	39.1	1.6	27	13	Thailand	38.0	1.7	16
14	Taipei, Chinese	30.9	1.3	7	14	Taipei, Chinese	35.3	1.6	8
15	Thailand	28.8	1.2	17	15	Brazil	34.8	1.5	28
16	Turkey	28.2	1.2	13	16	Switzerland	33.9	1.5	18
17	Malaysia	28.2	1.2	30	17	Saudi Arabia	30.6	1.3	58
18	Brazil	22.6	0.9	26	18	United Arab Emirates a	28.1	1.2	...
19	Israel	21.1	0.9	10	19	Malaysia	27.8	1.2	18
20	Egypt	19.7	0.8	24	20	Mexico	24.0	1.1	7
21	Mexico	17.8	0.7	9	21	Indonesia a	23.3	1.0	...
22	Macao, China	14.5	0.6	37	22	Israel	17.8	0.8	21
23	Ukraine	13.6	0.6	26	23	South Africa	16.3	0.7	17
24	South Africa	13.2	0.5	13	24	Turkey	14.1	0.6	35
25	Croatia	12.6	0.5	16	25	Nigeria	13.9	0.6	66
26	Lebanon	12.5	0.5	8	26	Egypt	13.1	0.6	27
27	Indonesia a	12.0	0.5	...	27	Kazakhstan	11.3	0.5	31
28	Morocco	11.7	0.5	26	28	Ukraine	10.8	0.5	26
29	Argentina	9.8	0.4	28	29	Argentina	10.5	0.5	27
30	New Zealand	9.2	0.4	15	30	Kuwait	10.4	0.5	24
31	Chile	8.7	0.4	12	31	Lebanon	10.0	0.4	14
32	Cuba	8.1	0.3	22	32	Iran, Islamic Rep. of a	9.9	0.4	...
33	Saudi Arabia	7.9	0.3	8	33	Chile	9.7	0.4	18
34	Philippines	7.9	0.3	33	34	New Zealand	8.9	0.4	16
35	Kuwait	7.4	0.3	23	35	Pakistan	8.4	0.4	4
	Total of above	**2260.0**	**93.9**	**-**		**Total of above**	**2085.0**	**91.9**	**-**
	World (excl. intra-EU (27))	**2410.0**	**100.0**	**19**		**World (excl. intra-EU (27))**	**2270.0**	**100.0**	**18**

a Secretariat estimate.

Note: Figures for a number of countries and territories have been estimated by the Secretariat Annual percentage changes and rankings are affected by continuity breaks in the series for a large number of economies, and by limitations in cross-country comparability. See the Metadata, Section II.2. For annual data 1997-2007, see Appendix Tables A8 and A9.

4. Bilateral trade of leading traders

Table I.12

Merchandise trade of Canada by origin and destination, 2007

(Billion dollars and percentage)

Exports						Imports a					
Destination	Value	Share		Annual percentage change		Origin	Value	Share		Annual percentage change	
	2007	2000	2007	2006	2007		2007	2000	2007	2006	2007
Region						Region					
World	**418.5**	**100.0**	**100.0**	**8**	**8**	**World**	**389.6**	**100.0**	**100.0**	**12**	**9**
North America	335.3	87.7	80.1	5	5	North America	231.2	67.7	59.3	8	8
Europe	38.1	5.1	9.1	25	31	Asia	75.1	14.5	19.3	20	12
Asia	31.3	5.3	7.5	18	13	Europe	55.4	12.4	14.2	15	7
South and Central America	6.2	1.0	1.5	22	23	South and Central America	13.1	1.8	3.4	19	11
Africa	3.1	0.4	0.8	31	40	Africa	8.7	0.8	2.2	32	14
Middle East	3.1	0.4	0.7	23	31	Middle East	4.4	0.7	1.1	28	4
CIS	1.4	0.1	0.3	49	37	CIS	1.8	0.2	0.5	-15	15
Economy						Economy					
United States	331.9	87.3	79.3	5	5	United States	211.2	64.4	54.2	10	8
European Union (27)	32.5	4.7	7.8	25	26	European Union (27)	47.3	10.6	12.1	17	6
China	8.7	0.9	2.1	15	28	China	36.7	3.2	9.4	28	18
Japan	8.6	2.2	2.0	10	3	Mexico	16.4	3.4	4.2	20	14
Mexico	4.6	0.5	1.1	39	20	Japan	14.8	4.7	3.8	13	7
Above 5	**386.3**	**95.6**	**92.3**	**-**	**-**	**Above 5**	**326.5**	**86.2**	**83.8**	**-**	**-**
Norway	3.4	0.2	0.8	30	106	Korea, Republic of	5.0	1.4	1.3	15	-1
Korea, Republic of	2.8	0.5	0.7	24	-3	Norway	5.0	1.2	1.3	-4	4
India	1.6	0.1	0.4	64	12	Algeria	4.7	0.3	1.2	27	8
Australia	1.6	0.3	0.4	20	1	Taipei, Chinese	3.6	1.4	0.9	7	6
Hong Kong, China	1.4	0.3	0.3	19	2	Canada b	3.5		0.9	1	17
Taipei, Chinese	1.4	0.3	0.3	10	15	Brazil	3.2	0.4	0.8	19	4
Brazil	1.4	0.3	0.3	29	21	Malaysia	2.7	0.7	0.7	20	5
Switzerland	1.3	0.1	0.3	8	41	Thailand	2.2	0.5	0.6	21	8
Russian Federation	1.1	0.0	0.3	66	39	Switzerland	2.1	0.4	0.5	7	13
United Arab Emirates	1.0	0.1	0.2	43	50	Peru	2.0	0.1	0.5	65	8
Indonesia	0.9	0.2	0.2	23	31	India	1.9	0.3	0.5	17	10
Singapore	0.9	0.1	0.2	24	31	Saudi Arabia	1.7	0.3	0.4	7	16
South Africa	0.7	0.1	0.2	55	27	Australia	1.7	0.4	0.4	-3	18
Bolivarian Rep. of Venezuela	0.7	0.2	0.2	22	3	Chile	1.6	0.2	0.4	20	-4
Chile	0.7	0.1	0.2	21	69	Iraq	1.4	0.2	0.4	48	-4
Saudi Arabia	0.6	0.1	0.2	32	33	Singapore	1.4	0.4	0.4	8	60
Colombia	0.6	0.1	0.1	22	37	Bolivarian Rep. of Venezuela	1.4	0.4	0.4	-30	30
Turkey	0.6	0.1	0.1	20	28	Russian Federation	1.4	0.2	0.4	-13	11
Thailand	0.6	0.1	0.1	20	16	Angola	1.1	0.0	0.3	95	109
Malaysia	0.6	0.1	0.1	35	20	South Africa	1.0	0.1	0.3	27	36
Cuba	0.5	0.1	0.1	22	16	Cuba	1.0	0.1	0.3	22	79
Algeria	0.5	0.1	0.1	18	111	Indonesia	0.9	0.2	0.2	6	11
Philippines	0.4	0.1	0.1	17	21	Israel	0.9	0.2	0.2	15	17
Pakistan	0.4	0.0	0.1	34	20	Philippines	0.7	0.4	0.2	15	-18
Israel	0.4	0.1	0.1	10	1	Viet Nam	0.7	0.1	0.2	25	23
New Zealand	0.4	0.0	0.1	15	11	Turkey	0.6	0.1	0.2	12	4
Bangladesh	0.3	0.0	0.1	71	129	Bangladesh	0.5	0.0	0.1	18	6
Egypt	0.3	0.0	0.1	43	-13	Hong Kong, China	0.5	0.4	0.1	-2	10
Peru	0.3	0.1	0.1	16	21	New Zealand	0.5	0.1	0.1	-6	10
Viet Nam	0.3	0.0	0.1	11	45	Colombia	0.4	0.1	0.1	16	-21
Iraq	0.3	0.0	0.1	103	97	Argentina	0.4	0.1	0.1	28	-13
Iran, Islamic Rep. of	0.3	0.2	0.1	20	-8	Trinidad and Tobago	0.4	0.0	0.1	39	42
Argentina	0.2	0.1	0.1	18	41	Suriname	0.4	0.0	0.1	25	97
Sri Lanka	0.2	0.0	0.1	123	2	Costa Rica	0.3	0.1	0.1	18	0
Ecuador	0.2	0.0	0.1	7	63	Jamaica	0.3	0.1	0.1	13	-7
Above 40	**415.5**	**99.7**	**99.3**	**-**	**-**	**Above 40**	**383.7**	**97.0**	**98.5**	**-**	**-**

a Imports are valued f.o.b.
b In 2007, Canada reported imports from Canada accounting for nearly 1 percent of its total merchandise imports.

Table I.13

Merchandise trade of the United States by origin and destination, 2007

(Billion dollars and percentage)

Exports						Imports					
Destination	Value	Share		Annual percentage change		Origin	Value	Share		Annual percentage change	
	2007	2000	2007	2006	2007		2007	2000	2007	2006	2007
Region						Region					
World	**1162.5**	**100.0**	**100.0**	**15**	**12**	**World**	**2020.4**	**100.0**	**100.0**	**11**	**5**
North America	385.6	37.0	33.2	10	6	Asia	751.4	37.8	37.2	12	5
Asia	313.3	27.6	27.0	16	12	North America	531.6	29.4	26.3	9	5
Europe	276.0	23.6	23.7	16	16	Europe	393.5	20.3	19.5	7	6
South and Central America	106.5	7.5	9.2	23	21	South and Central America	141.8	6.2	7.0	8	1
Middle East	46.3	2.4	4.0	23	18	Africa	95.2	2.3	4.7	24	14
Africa	23.7	1.4	2.0	22	25	Middle East	80.3	3.2	4.0	14	8
CIS	10.6	0.4	0.9	21	50	CIS	26.5	0.8	1.3	28	5
Economy						Economy					
Canada	248.4	22.6	21.4	9	8	European Union (27)	364.9	18.7	18.1	7	7
European Union (27)	247.7	21.6	21.3	15	15	China	340.3	8.5	16.8	18	11
Mexico	136.5	14.3	11.7	12	2	Canada	317.5	18.5	15.7	5	3
China	65.2	2.1	5.6	32	18	Mexico	213.3	10.9	10.6	16	6
Japan	62.7	8.4	5.4	8	5	Japan	149.6	12.0	7.4	7	2
Above 5	**760.6**	**68.9**	**65.4**	**-**	**-**	**Above 5**	**1385.6**	**68.6**	**68.6**	**-**	**-**
Korea, Republic of	34.7	3.6	3.0	17	7	Korea, Republic of	49.3	3.3	2.4	5	4
Taipei, Chinese	26.4	3.1	2.3	4	14	Bolivarian Rep. of Venezuela	41.0	1.6	2.0	9	7
Singapore	26.3	2.3	2.3	20	6	Taipei, Chinese	39.9	3.4	2.0	9	0
Brazil	24.6	2.0	2.1	25	28	Saudi Arabia	37.2	1.2	1.8	14	12
Hong Kong, China	20.1	1.9	1.7	9	13	Nigeria	33.7	0.9	1.7	15	17
Australia	19.2	1.6	1.7	13	8	Malaysia	33.7	2.1	1.7	8	10
India	17.6	0.5	1.5	27	74	Brazil	27.2	1.2	1.3	7	3
Switzerland	17.0	1.3	1.5	34	18	India	25.1	0.9	1.2	16	9
Israel	13.0	1.0	1.1	13	19	Thailand	23.8	1.4	1.2	13	0
Malaysia	11.7	1.4	1.0	20	7	Israel	21.1	1.0	1.0	13	9
United Arab Emirates	11.6	0.3	1.0	41	3	Russian Federation	20.2	0.6	1.0	28	2
Saudi Arabia	10.4	0.8	0.9	14	33	Singapore	18.7	1.6	0.9	17	3
Bolivarian Rep. of Venezuela	10.2	0.7	0.9	41	13	Algeria	18.4	0.2	0.9	48	15
Colombia	8.6	0.5	0.7	24	28	Switzerland	15.3	0.8	0.8	10	3
Thailand	8.4	0.9	0.7	13	4	Indonesia	15.2	0.9	0.8	11	6
Chile	8.3	0.4	0.7	31	22	Angola	12.9	0.3	0.6	38	6
Philippines	7.7	1.1	0.7	11	1	Iraq	11.9	0.5	0.6	27	3
Russian Federation	7.4	0.3	0.6	20	56	Viet Nam	11.4	0.1	0.6	29	23
Turkey	6.6	0.5	0.6	34	15	Colombia	10.0	0.6	0.5	4	2
Dominican Republic	6.1	0.6	0.5	14	14	Philippines	9.8	1.1	0.5	5	3
Argentina	5.9	0.6	0.5	16	23	Chile	9.8	0.3	0.5	38	5
South Africa	5.5	0.4	0.5	15	24	Trinidad and Tobago	9.3	0.2	0.5	6	6
Egypt	5.3	0.4	0.5	30	30	South Africa	9.3	0.3	0.5	28	20
Costa Rica	4.6	0.3	0.4	15	11	Australia	9.0	0.5	0.4	12	5
Honduras	4.5	0.3	0.4	14	21	Norway	7.6	0.5	0.4	4	3
Indonesia	4.2	0.3	0.4	1	38	Hong Kong, China	7.3	1.0	0.4	11	12
Peru	4.1	0.2	0.4	28	41	Ecuador	6.5	0.2	0.3	22	14
Guatemala	4.1	0.2	0.4	25	16	Peru	5.5	0.2	0.3	14	11
Norway	3.1	0.2	0.3	24	27	Turkey	4.9	0.3	0.2	3	15
Ecuador	2.9	0.1	0.3	37	8	Argentina	4.8	0.3	0.2	14	13
New Zealand	2.8	0.3	0.2	11	4	Dominican Republic	4.3	0.4	0.2	2	7
Nigeria	2.8	0.1	0.2	38	25	Kuwait	4.3	0.2	0.2	9	3
Qatar	2.8	0.0	0.2	35	108	Costa Rica	4.2	0.3	0.2	13	3
Kuwait	2.5	0.1	0.2	8	16	Honduras	4.1	0.3	0.2	1	5
Bahamas	2.5	0.1	0.2	29	8	Pakistan	3.8	0.2	0.2	14	3
Above 40	**1114.0**	**97.2**	**95.8**	**-**	**-**	**Above 40**	**1956.3**	**97.3**	**96.8**	**-**	**-**

Table I.14

Merchandise trade of the European Union (27) by origin and destination, 2007

(Billion dollars and percentage)

Exports						Imports					
Destination	Value	Share		Annual percentage change		Origin	Value	Share		Annual percentage change	
	2007	2000	2007	2006	2007		2007	2000	2007	2006	2007
Region						Region					
World	**5319.7**	**100.0**	**100.0**	**13**	**16**	**World**	**5573.9**	**100.0**	**100.0**	**14**	**15**
Europe	3926.1	73.5	73.8	14	16	Europe	3903.5	69.2	70.0	14	16
North America	419.4	10.3	7.9	8	7	Asia	709.7	12.0	12.7	16	18
Asia	395.7	7.5	7.4	10	17	North America	295.4	8.3	5.3	8	15
CIS	174.4	1.3	3.3	31	32	CIS	250.9	2.7	4.5	27	12
Africa	138.1	2.4	2.6	7	22	Africa	162.2	2.9	2.9	14	11
Middle East	132.3	2.2	2.5	4	17	South and Central America	110.0	1.7	2.0	22	17
South and Central America	74.4	1.7	1.4	15	21	Middle East	91.4	1.9	1.6	5	5
Economy						Economy					
European Union (27)	3621.9	68.0	68.1	14	16	European Union (27) a	3621.9	64.5	65.0	14	16
United States	354.5	8.9	6.7	7	6	China	315.7	2.7	5.7	23	29
Switzerland	127.0	2.7	2.4	7	15	United States	247.2	7.3	4.4	8	13
Russian Federation	120.8	0.8	2.3	28	34	Russian Federation	196.9	2.2	3.5	25	10
China	97.1	1.0	1.8	24	23	Japan	106.6	3.3	1.9	5	10
Above 5	**4321.3**	**81.4**	**81.2**	**-**	**-**	**Above 5**	**4488.4**	**79.9**	**80.5**	**-**	**-**
Turkey	72.1	1.2	1.4	13	15	Switzerland	105.2	2.2	1.9	8	17
Norway	59.4	1.0	1.1	15	23	Norway	105.1	1.7	1.9	19	6
Japan	58.5	1.7	1.1	3	6	Turkey	64.3	0.7	1.2	17	23
India	39.8	0.5	0.7	15	32	Korea, Republic of	54.0	1.0	1.0	19	5
United Arab Emirates	36.7	0.5	0.7	0	16	Brazil	44.6	0.7	0.8	14	31
Canada	35.5	0.8	0.7	13	6	Libyan Arab Jamahiriya	37.4	0.5	0.7	33	14
Korea, Republic of	34.0	0.6	0.6	14	18	India	35.9	0.5	0.6	20	27
Australia	31.1	0.6	0.6	4	16	Taipei, Chinese	35.7	1.0	0.6	12	7
Ukraine	30.6	0.2	0.6	39	34	Canada	31.9	0.7	0.6	15	29
Hong Kong, China	28.7	0.8	0.5	6	6	Algeria	29.0	0.6	0.5	17	4
Brazil	28.5	0.6	0.5	11	30	South Africa	28.4	0.5	0.5	11	24
Mexico	28.4	0.5	0.5	15	20	Singapore	25.2	0.6	0.5	6	4
Singapore	28.2	0.6	0.5	14	14	Saudi Arabia	25.0	0.6	0.4	4	15
South Africa	27.6	0.4	0.5	10	12	Malaysia	24.6	0.7	0.4	12	9
Saudi Arabia	27.5	0.5	0.5	14	24	Thailand	22.8	0.5	0.4	13	23
Israel	19.7	0.6	0.4	4	13	Iran, Islamic Rep. of	19.0	0.3	0.3	26	5
Taipei, Chinese	18.3	0.6	0.3	2	10	Kazakhstan	18.3	0.1	0.3	37	4
Croatia	18.2	0.2	0.3	16	17	Indonesia	17.5	0.4	0.3	14	14
Morocco	16.9	0.3	0.3	11	28	Chile	17.2	0.2	0.3	55	10
Malaysia	15.6	0.3	0.3	12	21	Ukraine	16.9	0.2	0.3	15	37
Algeria	15.3	0.2	0.3	4	23	Australia	16.2	0.3	0.3	18	15
Egypt	14.2	0.3	0.3	8	24	Mexico	16.2	0.3	0.3	15	23
Iran, Islamic Rep. of	13.8	0.2	0.3	12	2	Israel	15.5	0.4	0.3	3	24
Tunisia	13.1	0.3	0.2	10	19	Hong Kong, China	14.9	0.4	0.3	16	3
Nigeria	11.6	0.2	0.2	19	32	Nigeria	13.0	0.2	0.2	30	4
Thailand	10.8	0.3	0.2	7	18	Tunisia	12.3	0.2	0.2	13	28
Serbia	10.7	...	0.2	124	48	Argentina	11.7	0.2	0.2	15	26
Qatar	8.6	0.1	0.2	66	34	Morocco	10.7	0.2	0.2	20	18
Kazakhstan	8.3	0.1	0.2	41	32	Viet Nam	10.7	0.2	0.2	25	24
Argentina	8.2	0.2	0.2	22	34	Azerbaijan	10.1	0.0	0.2	119	48
Indonesia	7.4	0.2	0.1	5	18	Egypt	9.6	0.1	0.2	48	0
Belarus	6.6	0.1	0.1	37	20	Iraq	9.3	0.2	0.2	41	47
Chile	6.4	0.1	0.1	10	19	United Arab Emirates	7.7	0.1	0.1	41	7
Kuwait	6.0	0.1	0.1	1	31	Philippines	7.7	0.3	0.1	1	5
Libyan Arab Jamahiriya	5.7	0.1	0.1	3	23	Bolivarian Rep. of Venezuela	7.4	0.1	0.1	64	4
Above 40	**5123.2**	**96.3**	**96.3**	**-**	**-**	**Above 40**	**5419.4**	**96.8**	**97.2**	**-**	**-**

a The figures are affected by the "INTRASTAT" system of recording trade between EU member States. Intra-EU (27) imports are underrecorded. To compensate for this under-recording, intra-EU (27) exports have been used to obtain total (World) imports.

Table I.15

Merchandise trade of Japan by origin and destination, 2007

(Billion dollars and percentage)

Exports						Imports					
Destination	Value	Share		Annual percentage change		Origin	Value	Share		Annual percentage change	
	2007	2000	2007	2006	2007		2007	2000	2007	2006	2007
Region						Region					
World	**712.8**	**100.0**	**100.0**	**9**	**10**	**World**	**621.1**	**100.0**	**100.0**	**12**	**7**
Asia	361.5	43.3	50.7	6	12	Asia	303.3	46.4	48.8	10	7
North America	166.4	32.7	23.4	10	0	Middle East	113.7	13.0	18.3	25	4
Europe	112.9	17.8	15.8	8	12	North America	85.4	22.0	13.8	6	4
Middle East	26.2	2.0	3.7	16	36	Europe	72.7	13.9	11.7	2	8
South and Central America	15.0	1.7	2.1	28	25	South and Central America	19.6	2.2	3.2	33	21
CIS	12.5	0.2	1.8	60	51	Africa	14.8	1.3	2.4	34	12
Africa	10.3	0.9	1.4	21	22	CIS	11.5	1.3	1.9	8	56
Economy						Economy					
United States	145.6	30.0	20.4	8	1	China	127.8	14.5	20.6	9	8
China a	129.9	8.9	18.2	14	16	United States	72.3	19.1	11.6	6	4
European Union (27)	105.7	16.8	14.8	7	12	European Union (27)	65.1	12.6	10.5	2	8
Korea, Republic of	54.3	6.4	7.6	8	8	Saudi Arabia	35.3	3.7	5.7	29	5
Taipei, Chinese	44.9	7.5	6.3	1	2	United Arab Emirates	32.4	3.9	5.2	25	2
Above 5	**480.4**	**69.6**	**67.4**	**-**	**-**	**Above 5**	**332.8**	**53.8**	**53.6**	**-**	**-**
Hong Kong, China a	38.9			1	7	Australia	31.3	3.9	5.0	14	12
Thailand	25.6	2.8	3.6	2	12	Korea, Republic of	27.3	5.4	4.4	12	0
Singapore	21.8	4.3	3.1	5	13	Indonesia	26.5	4.3	4.3	16	10
Malaysia	15.1	2.9	2.1	5	14	Taipei, Chinese	19.9	4.7	3.2	13	2
Australia	14.2	1.8	2.0	1	14	Thailand	18.3	2.8	3.0	9	9
Russian Federation	10.8	0.1	1.5	57	53	Malaysia	17.4	3.8	2.8	6	12
Canada	10.5	1.6	1.5	13	6	Qatar	16.9	1.5	2.7	39	14
Mexico	10.3	1.1	1.4	34	10	Iran, Islamic Rep. of	12.6	1.4	2.0	8	14
Philippines	9.5	2.1	1.3	1	5	Russian Federation	10.6	1.2	1.7	8	59
Indonesia	9.1	1.6	1.3	20	23	Canada	10.0	2.3	1.6	8	4
United Arab Emirates	8.0	0.5	1.1	25	33	Kuwait	9.9	1.3	1.6	19	9
Saudi Arabia	6.7	0.6	0.9	11	45	Philippines	8.7	1.9	1.4	3	10
India	6.2	0.5	0.9	27	38	Chile	8.2	0.7	1.3	42	12
Viet Nam	5.7	0.4	0.8	15	37	South Africa	7.7	0.8	1.2	20	17
South Africa	4.6	0.4	0.6	24	14	Singapore	7.1	1.7	1.1	12	6
Brazil	4.0	0.5	0.6	12	31	Viet Nam	6.1	0.7	1.0	16	16
Switzerland	3.0	0.4	0.4	12	25	Brazil	6.0	0.8	1.0	15	18
Turkey	2.7	0.3	0.4	9	15	Switzerland	5.2	0.9	0.8	1	2
Oman	2.5	0.2	0.4	24	46	India	4.2	0.7	0.7	27	3
New Zealand	2.5	0.3	0.4	14	19	Oman	3.6	0.5	0.6	2	34
Israel	1.9	0.3	0.3	1	58	Mexico	3.2	0.6	0.5	11	12
Qatar	1.8	0.1	0.3	46	26	New Zealand	2.7	0.6	0.4	1	6
Kuwait	1.7	0.1	0.2	1	40	Sudan	2.7	0.1	0.4	63	11
Chile	1.6	0.1	0.2	15	45	Brunei Darussalam	2.5	0.4	0.4	2	7
Pakistan	1.6	0.1	0.2	16	11	Peru	2.2	0.1	0.4	88	69
Iran, Islamic Rep. of	1.3	0.1	0.2	12	14	Norway	1.7	0.3	0.3	7	37
Colombia	1.3	0.1	0.2	29	29	Hong Kong, China	1.4	0.4	0.2	3	5
Bolivarian Rep. of Venezuela	1.3	0.1	0.2	48	14	Iraq	1.0	0.2	0.2	108	12
Egypt	1.3	0.2	0.2	44	13	Israel	0.9	0.2	0.1	0	8
Bahamas	1.2	0.1	0.2	454	2	Egypt	0.8	0.0	0.1	245	111
Norway	1.1	0.2	0.2	49	31	Papua New Guinea	0.8	0.1	0.1	29	27
Ukraine	1.1	0.0	0.2	74	61	Argentina	0.8	0.1	0.1	49	64
Algeria	0.9	0.0	0.1	18	96	Nigeria	0.7	0.1	0.1	17	18
Argentina	0.8	0.2	0.1	22	27	Equatorial Guinea	0.6	0.0	0.1	43	82
Nigeria	0.7	0.1	0.1	9	30	Yemen	0.5	0.0	0.1	36	107
Above 40 a	**711.8**	**-**	**-**	**-**	**-**	**Above 40**	**612.9**	**98.6**	**98.7**	**-**	**-**

a Includes significant shipments recorded as exports to Hong Kong, China with China as final destination.

Table I.16

Trade in commercial services of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)											
World	**1294755**	**100.0**	**11**	**10**	**11**	**World**	**1149464**	**100.0**	**9**	**9**	**10**
European Union (25)	739619	57.1	10	9	10	European Union (25)	685677	59.7	9	9	10
United States	166745	12.9	10	7	13	United States	148476	12.9	7	8	6
Switzerland	66565	5.1	8	6	10	Switzerland	46436	4.0	7	11	2
Japan	23899	1.8	3	7	0	Japan	16002	1.4	11	11	10
Norway	20692	1.6	12	10	14	China	14108	1.2	25	27	23
Above 5	**1017521**	**78.6**	**-**	**-**	**-**	**Above 5**	**910698**	**79.2**	**-**	**-**	**-**
Russian Federation	17762	1.4	26	33	20	Turkey	13686	1.2	7	16	-2
China	15789	1.2	20	35	7	Russian Federation	13389	1.2	22	23	20
Singapore	13760	1.1	22	15	30	Norway	13045	1.1	6	1	10
Canada	12752	1.0	13	9	17	Canada	10100	0.9	9	7	11
Australia	11369	0.9	14	18	9	Hong Kong, China	8312	0.7	14	8	21
Hong Kong, China	8700	0.7	0	17	-14	Singapore	7779	0.7	12	9	16
India	8466	0.7	38	43	32	Australia	7659	0.7	11	13	8
Korea, Republic of	8022	0.6	9	4	13	India	6880	0.6	20	22	18
Turkey	7175	0.6	22	19	26	Egypt	6270	0.5	9	20	-1
South Africa	6628	0.5	13	19	8	Croatia	5983	0.5	14	17	11
Above 15	**1127944**	**87.1**	**-**	**-**	**-**	**Above 15**	**1003801**	**87.3**	**-**	**-**	**-**
United States											
World	**397833**	**100.0**	**10**	**11**	**10**	**World**	**308348**	**100.0**	**9**	**9**	**9**
European Union (25)	138228	34.7	9	9	9	European Union (25)	117519	38.1	10	10	10
Japan	40590	10.2	8	18	-2	Japan	23928	7.8	10	14	6
Canada	38676	9.7	15	14	16	Canada	23587	7.6	7	8	5
Mexico	22083	5.6	12	17	8	Bermuda	15113	4.9	0	-9	11
Switzerland	12942	3.3	11	7	15	Mexico	14785	4.8	4	5	3
Above 5	**252519**	**63.5**	**-**	**-**	**-**	**Above 5**	**194931**	**63.2**	**-**	**-**	**-**
Korea, Republic of	11270	2.8	11	12	11	Switzerland	13751	4.5	27	33	21
China	10725	2.7	20	20	20	China	7261	2.4	12	15	9
Australia	8963	2.3	15	10	20	Taipei, Chinese	6993	2.3	11	16	6
Brazil	7436	1.9	24	23	24	India	6625	2.1	53	78	32
Taipei, Chinese	7022	1.8	12	13	12	Korea, Republic of	6441	2.1	9	12	6
India	6553	1.6	22	16	29	Hong Kong, China	6419	2.1	15	11	18
Singapore	6546	1.6	7	1	14	Australia	4798	1.6	10	18	2
Hong Kong, China	5213	1.3	20	18	21	Singapore	3898	1.3	18	38	2
Bermuda	4767	1.2	6	4	9	Brazil	2847	0.9	21	11	33
Bolivarian Rep. of Venezuela	3177	0.8	15	14	16	Israel	2348	0.8	4	11	-2
Above 15	**324190**	**81.5**	**-**	**-**	**-**	**Above 15**	**256314**	**83.1**	**-**	**-**	**-**
Japan											
World	**115140**	**100.0**	**13**	**14**	**13**	**World**	**133900**	**100.0**	**6**	**2**	**9**
United States	31369	27.2	...	7	...	United States	41467	31.0	...	6	...
European Union (25)	28197	24.5	...	...	...	European Union (25)	28523	21.3	...	...	...
Singapore	8589	7.5	...	25	...	China	7022	5.2	...	25	...
Taipei, Chinese	7594	6.6	...	8	...	Singapore	6578	4.9	...	3	...
China	7559	6.6	...	14	...	Korea, Republic of	6577	4.9	...	5	...
Above 5	**83307**	**72.4**	**-**	**-**	**-**	**Above 5**	**90166**	**67.3**	**-**	**-**	**-**
Korea, Republic of	5575	4.8	...	25	...	Hong Kong, China	5360	4.0	...	5	...
Thailand	3710	3.2	...	47	...	Taipei, Chinese	3643	2.7	...	0	...
Hong Kong, China	3118	2.7	...	-4	...	Australia	3185	2.4	...	-7	...
Canada	2153	1.9	...	8	...	Thailand	2650	2.0	...	6	...
Indonesia	1832	1.6	...	-8	...	Switzerland	2236	1.7	...	-1	...
Australia	1609	1.4	...	15	...	Philippines	1626	1.2	...	6	...
United Arab Emirates	1505	1.3	...	1	...	Indonesia	1495	1.1	...	-5	...
Switzerland	1460	1.3	...	-9	...	Canada	1483	1.1	...	15	...
Philippines	987	0.9	...	16	...	United Arab Emirates	1367	1.0	...	18	...
Saudi Arabia	845	0.7	...	-141	...	Malaysia	1100	0.8	...	-10	...
Above 15	**106102**	**92.2**	**-**	**-**	**-**	**Above 15**	**114313**	**85.4**	**-**	**-**	**-**

Table I.16 *(continued)*

Trade in commercial services of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports						Imports				
	Value	Share	Annual percentage change				Value	Share	Annual percentage change	
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005
Hong Kong, China a										
World	**72674**	**100.0**	**15**	**16**	**14**	**World**	**36905**	**100.0**	**9**	**9**
China	17637	24.3	8	10	7	China	9846	26.7	8	8
United States	15323	21.1	17	15	19	European Union (25)	5835	15.8	19	17
European Union (25)	12527	17.2	21	18	23	United States	5489	14.9	10	12
Japan	5166	7.1	14	14	15	Japan	3125	8.5	8	9
Taipei, Chinese	4676	6.4	8	13	3	Australia	2096	5.7	5	8
Above 5	**55329**	**76.1**	**-**	**-**	**-**	**Above 5**	**26391**	**71.5**	**-**	**-**
Singapore	2004	2.8	15	15	16	Singapore	1957	5.3	28	20
Australia	1936	2.7	36	45	28	Taipei, Chinese	1466	4.0	9	11
Korea, Republic of	1920	2.6	18	7	30	Canada	997	2.7	1	-1
Canada	1133	1.6	12	12	12	Thailand	990	2.7	2	-1
Malaysia	846	1.2	11	9	12	Korea, Republic of	690	1.9	-6	3
Thailand	777	1.1	17	29	6	Malaysia	542	1.5	15	14
Switzerland	720	1.0	9	5	14	Macao, China	501	1.4	6	4
India	620	0.9	10	5	15	India	429	1.2	30	38
Indonesia	536	0.7	29	33	26	United Arab Emirates	377	1.0	36	42
Philippines	476	0.7	16	47	-9	Philippines	357	1.0	4	6
Above 15	**66297**	**91.2**	**-**	**-**	**-**	**Above 15**	**34697**	**94.0**	**-**	**-**
Singapore b, c										
World	**58957**	**100.0**	**12**	**13**	**12**	**World**	**61745**	**100.0**	**11**	**10**
United States	7735	13.1	18	16	20	United States	10786	17.5	6	8
European Union (25)	7678	13.0	15	9	21	European Union (25)	10155	16.4	25	22
Japan	5036	8.5	8	10	6	Japan	3807	6.2	13	-5
Australia	2703	4.6	16	23	10	Hong Kong, China	1744	2.8	17	11
Hong Kong, China	2600	4.4	12	21	4	China	1345	2.2	2	0
Above 5	**25752**	**43.7**	**-**	**-**	**-**	**Above 5**	**27836**	**45.1**	**-**	**-**
China	2479	4.2	4	8	1	Australia	1154	1.9	8	0
Indonesia	2298	3.9	11	6	16	India	931	1.5	23	22
Malaysia	1976	3.4	6	4	8	Korea, Republic of	842	1.4	12	14
Korea, Republic of	1914	3.2	5	17	-6	Malaysia	792	1.3	7	3
India	1616	2.7	14	17	10	Switzerland	782	1.3	2	11
Thailand	1525	2.6	7	14	1	Indonesia	719	1.2	-3	-5
Switzerland	1302	2.2	-1	1	-4	Taipei, Chinese	669	1.1	28	18
Taipei, Chinese	1204	2.0	6	13	-1	Thailand	632	1.0	7	17
United Arab Emirates	864	1.5	10	2	18	Norway	371	0.6	5	39
Philippines	615	1.0	3	-3	10	Philippines	271	0.4	10	-5
Above 15	**41544**	**70.5**	**-**	**-**	**-**	**Above 15**	**34999**	**56.7**	**-**	**-**
Korea, Republic of d										
World	**48382**	**100.0**	**9**	**8**	**11**	**World**	**68023**	**100.0**	**17**	**18**
United States	11788	24.4	7	8	6	United States	19845	29.2	19	16
European Union (25)	7805	16.1	18	17	18	European Union (25)	11865	17.4	13	13
China	6705	13.9	16	14	17	Japan	8251	12.1	14	15
Japan	6427	13.3	-2	-2	-2	China	7478	11.0	23	28
Above 4	**32725**	**67.6**	**-**	**-**	**-**	**Above 4**	**47439**	**69.7**	**-**	**-**

Table I.16 *(continued)*

Trade in commercial services of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
Australia											
World	**32438**	**100.0**	**8**	**9**	**7**	**World**	**31600**	**100.0**	**7**	**9**	**6**
European Union (25)	6196	19.1	3	4	2	European Union (25)	7361	23.3	7	9	5
United States	4042	12.5	10	9	11	United States	5431	17.2	8	8	9
China	2481	7.6	16	24	8	Singapore	3105	9.8	16	18	15
Japan	2324	7.2	-1	2	-4	New Zealand	1696	5.4	5	3	7
New Zealand	2299	7.1	6	12	-1	Japan	1571	5.0	4	8	0
Above 5	**17342**	**53.5**	**-**	**-**	**-**	**Above 5**	**19164**	**60.6**	**-**	**-**	**-**
Singapore	2128	6.6	13	14	11	Hong Kong, China	1248	4.0	6	11	2
Korea, Republic of	1230	3.8	21	23	19	Thailand	913	2.9	20	9	32
Hong Kong, China	1199	3.7	1	3	-2	Switzerland	866	2.7	6	9	3
India	1154	3.6	37	57	20	China	826	2.6	1	12	-9
Malaysia	894	2.8	4	13	-4	Malaysia	643	2.0	10	14	6
Indonesia	595	1.8	-4	-5	-4	Fiji	578	1.8	9	13	4
Canada	530	1.6	21	11	32	Canada	459	1.5	5	16	-5
Thailand	509	1.6	7	9	5	Indonesia	401	1.3	-25	-7	-39
Switzerland	379	1.2	12	10	13	Korea, Republic of	313	1.0	15	10	20
Taipei, Chinese	367	1.1	2	7	-3	Viet Nam	313	1.0	8	12	5
Above 15	**26328**	**81.2**	**-**	**-**	**-**	**Above 15**	**25724**	**81.4**	**-**	**-**	**-**
Russian Federation e											
World	**30866**	**100.0**	**23**	**21**	**25**	**World**	**43803**	**100.0**	**17**	**18**	**16**
European Union (25)	11901	38.6	18	16	20	European Union (25)	18994	43.4	19	23	15
United States	2650	8.6	24	26	22	Turkey	3954	9.0	17	23	13
Ukraine	1532	5.0	...	...	38	United States	2485	5.7	6	-14	31
Switzerland	1284	4.2	25	33	17	Ukraine	1948	4.4	...	...	-5
Turkey	1267	4.1	40	43	37	Egypt	1304	3.0	33	34	33
Above 5	**18634**	**60.4**	**-**	**-**	**-**	**Above 5**	**28686**	**65.5**	**-**	**-**	**-**
Kazakhstan	1081	3.5	33	17	52	Switzerland	1152	2.6	11	4	18
China	832	2.7	15	3	28	China	1102	2.5	11	8	14
Japan	613	2.0	20	25	16	Panama	673	1.5	33	55	13
British Virgin Islands	594	1.9	29	42	18	Kazakhstan	615	1.4	21	24	18
Uzbekistan	476	1.5	...	...	127	United Arab Emirates	535	1.2	15	5	26
Tajikistan	454	1.5	76	13	172	Belarus	493	1.1	10	1	20
Korea, Republic of	450	1.5	14	8	20	Israel	365	0.8	11	31	-6
Belarus	394	1.3	26	18	35	Korea, Republic of	359	0.8	36	34	38
Canada	377	1.2	78	-2	225	Serbia and Montenegro	319	0.7	-24	-65	66
Azerbaijan	326	1.1	...	...	60	British Virgin Islands	304	0.7	93	98	88
Above 15	**24232**	**78.5**	**-**	**-**	**-**	**Above 15**	**34605**	**79.0**	**-**	**-**	**-**

a Financial intermediation services are not allocated geographically. In 2006, they represented 2 per cent of exports, and 0.3 per cent of imports.
b The following transactions are not allocated geographically: travel exports and imports; financial services exports related to foreign exchange trading; imports of freight transportation services and, insurance on goods imports. Overall, they represent 12 per cent of commercial services exports, and 34 per cent of imports.
c ASEAN countries accounted for 12 per cent of total commercial services exports and 5 per cent of imports.
d In 2006 trade in commercial services not allocated geographically accounted for 10 per cent of exports and imports.
e In 2006 trade in commercial services not allocated geographically accounted for 6 per cent of exports and 11 per cent of imports.
Note: For more information on asymmetries, see the Metadata, Section II.2.

5. Regional Trade Agreements

Table I.17

Merchandise exports of NAFTA countries by destination, 1990-2007

(Billion dollars and percentage)

Origin	Destination	United States	Canada	Mexico	NAFTA	All other countries	World
Value							
United States	1990		83.0	28.3	111.3	282.3	393.6
	2000		176.4	111.7	288.1	493.8	781.9
	2005		211.4	120.0	331.5	572.8	904.3
	2006		230.2	134.1	364.4	672.3	1036.6
	2007		248.4	136.5	384.9	777.6	1162.5
Canada	1990	95.2		0.5	95.7	31.9	127.6
	2000	241.6		1.4	243.0	33.7	276.6
	2005	302.2		2.8	305.0	55.1	360.1
	2006	316.7		3.9	320.5	67.7	388.2
	2007	331.9		4.6	336.6	82.4	419.0
Mexico	1990	32.3	0.2		32.5	8.2	40.7
	2000	147.2	3.3		150.5	15.9	166.4
	2005	183.8	4.2		188.1	26.1	214.2
	2006	212.1	5.2		217.3	32.7	250.0
	2007	223.7	6.5		230.1	41.9	272.0
NAFTA	1990	127.5	83.2	28.8	239.5	322.4	561.9
	2000	388.8	179.7	113.1	681.6	543.4	1224.9
	2005	486.1	215.7	122.8	824.6	654.0	1478.6
	2006	528.8	235.4	138.0	902.2	772.6	1674.8
	2007	555.6	254.9	141.1	951.6	901.8	1853.4
Share							
United States	2000		14.4	9.1	23.5	40.3	63.8
	2007		13.4	7.4	20.8	42.0	62.7
Canada	2000	19.7		0.1	19.8	2.7	22.6
	2007	17.9		0.2	18.2	4.4	22.6
Mexico	2000	12.0	0.3		12.3	1.3	13.6
	2007	12.1	0.3		12.4	2.3	14.7
NAFTA	2000	31.7	14.7	9.2	55.6	44.4	100.0
	2007	30.0	13.8	7.6	51.3	48.7	100.0
Annual percentage change							
United States	2000 07		5	3	4	7	6
	2006		9	12	10	17	15
	2007		8	2	6	16	12
Canada	2000 07	5		19	5	14	6
	2006	5		39	5	23	8
	2007	5		20	5	22	8
Mexico	2000 07	6	10		6	15	7
	2006	15	22		16	25	17
	2007	5	25		6	28	9
NAFTA	2000 07	5	5	3	5	8	6
	2006	9	9	12	9	18	13
	2007	5	8	2	5	17	11

Table I.18

Merchandise exports of MERCOSUR countries by destination, 1990-2007

(Million dollars and percentage)

Destination / Origin		MERCOSUR	All other regions: Total	All other regions: South and Central America	All other regions: Other regions	World
Value						
Argentina	1990	1833	10520	516	10004	12353
	2000	8402	17939	3936	14003	26341
	2006	9944	36625	8013	28612	46569
	2007	12471	43462	8710	34752	55933
Brazil	1990	1320	30094	1893	28201	31414
	2000	7762	47324	4402	42922	55086
	2006	13986	123821	17984	105837	137807
	2007	17354	143295	20159	123136	160649
Paraguay	1990	379	580	122	458	959
	2000	553	316	120	196	869
	2006	917	989	392	597	1906
	2007	1374	1411	878	533	2785
Uruguay	1990	595	1098	27	1071	1693
	2000	1024	1271	136	1135	2295
	2006	942	3011	410	2601	3953
	2007	1244	3241	412	2829	4485
MERCOSUR	1990	4127	42292	2558	39734	46419
	2000	17741	66850	8594	58256	84591
	2006	25789	164446	26799	137647	190235
	2007	32443	191409	30159	161250	223852
Share						
Argentina	2000	9.9	21.2	4.7	16.6	31.1
	2007	5.6	19.4	3.9	15.5	25.0
Brazil	2000	9.2	55.9	5.2	50.7	65.1
	2007	7.8	64.0	9.0	55.0	71.8
Paraguay	2000	0.7	0.4	0.1	0.2	1.0
	2007	0.6	0.6	0.4	0.2	1.2
Uruguay	2000	1.2	1.5	0.2	1.3	2.7
	2007	0.6	1.4	0.2	1.3	2.0
MERCOSUR	2000	21.0	79.0	10.2	68.9	100.0
	2007	14.5	85.5	13.5	72.0	100.0
Annual percentage change						
Argentina	2000 07	6	13	12	14	11
	2006	29	12	9	13	15
	2007	25	19	9	21	20
Brazil	2000 07	12	17	24	16	17
	2006	19	16	25	15	16
	2007	24	16	12	16	17
Paraguay	2000 07	14	24	33	15	18
	2006	1	27	29	26	13
	2007	50	43	124	11	46
Uruguay	2000 07	3	14	17	14	10
	2006	21	15	57	10	16
	2007	32	8	0	9	13
MERCOSUR	2000 07	9	16	20	16	15
	2006	22	15	20	14	16
	2007	26	16	13	17	18

Table I.19

Merchandise imports of MERCOSUR countries by origin, 1990-2007

(Million dollars and percentage)

Origin / Destination		MERCOSUR	All other regions: Total	All other regions: South and Central America	All other regions: Other regions	World
Value						
Argentina	1990	833	3243	399	2844	4076
	2000	6881	18273	816	17457	25154
	2006	12556	21602	1174	20428	34158
	2007	16063	28717	1486	27231	44780
Brazil	1990	2441	20083	1349	18734	22524
	2000	8182	50871	3513	47358	59053
	2006	9488	86363	6069	80294	95851
	2007	12282	114299	7209	107090	126581
Paraguay	1990	404	948	58	890	1352
	2000	1132	1061	76	985	2193
	2006	1939	3940	357	3583	5879
	2007	2948	4332	57	4275	7280
Uruguay	1990	560	783	87	696	1343
	2000	1518	1948	237	1711	3466
	2006	2174	2583	701	1882	4757
	2007	2624	3102	684	2418	5726
MERCOSUR	1990	4238	25057	1893	23164	29295
	2000	17713	72153	4642	67511	89866
	2006	26157	114488	8301	106187	140645
	2007	33917	150450	9436	141014	184367
Share						
Argentina	2000	7.7	20.3	0.9	19.4	28.0
	2007	8.7	15.6	0.8	14.8	24.3
Brazil	2000	9.1	56.6	3.9	52.7	65.7
	2007	6.7	62.0	3.9	58.1	68.7
Paraguay	2000	1.3	1.2	0.1	1.1	2.4
	2007	1.6	2.3	0.0	2.3	3.9
Uruguay	2000	1.7	2.2	0.3	1.9	3.9
	2007	1.4	1.7	0.4	1.3	3.1
MERCOSUR	2000	19.7	80.3	5.2	75.1	100.0
	2007	18.4	81.6	5.1	76.5	100.0
Annual percentage change						
Argentina	2000 07	13	7	9	7	9
	2006	8	27	2	29	19
	2007	28	33	27	33	31
Brazil	2000 07	6	12	11	12	12
	2006	26	23	64	21	23
	2007	29	32	19	33	32
Paraguay	2000 07	15	22	4	23	19
	2006	15	94	155	89	58
	2007	52	10	84	19	24
Uruguay	2000 07	8	7	16	5	7
	2006	33	15	112	2	23
	2007	21	20	2	28	20
MERCOSUR	2000 07	10	11	11	11	11
	2006	16	25	54	23	23
	2007	30	31	14	33	31

Table I.20

Merchandise exports of Andean Community countries by destination, 1990-2007

(Million dollars and percentage)

Destination		Andean Community	All other regions			World
Origin			Total	South and Central America	Other regions	
Value						
Bolivia	1990	57	869	359	510	926
	2000	259	971	378	593	1230
	2006	381	3494	2384	1110	3875
	2007	372	4118	2644	1474	4490
Colombia	1990	169	6597	965	5632	6766
	2000	877	12163	2762	9401	13040
	2006	1988	22400	5290	17110	24388
	2007	2148	27843	8196	19647	29991
Ecuador	1990	171	2543	594	1949	2714
	2000	554	4373	921	3452	4927
	2006	1763	10965	1665	9300	12728
	2007	2154	11631	2735	8896	13785
Peru	1990	156	3074	301	2773	3230
	2000	337	6691	784	5907	7028
	2006	1037	22763	3339	19424	23800
	2007	1233	26723	4229	22494	27956
Andean Community	1990	553	13083	2219	10864	13636
	2000	2027	24198	4845	19353	26225
	2006	5169	59622	12678	46944	64791
	2007	5907	70315	17804	52511	76222
Share						
Bolivia	2000	1.0	3.7	1.4	2.3	4.7
	2007	0.5	5.4	3.5	1.9	5.9
Colombia	2000	3.3	46.4	10.5	35.8	49.7
	2007	2.8	36.5	10.8	25.8	39.3
Ecuador	2000	2.1	16.7	3.5	13.2	18.8
	2007	2.8	15.3	3.6	11.7	18.1
Peru	2000	1.3	25.5	3.0	22.5	26.8
	2007	1.6	35.1	5.5	29.5	36.7
Andean Community	2000	7.7	92.3	18.5	73.8	100.0
	2007	7.7	92.3	23.4	68.9	100.0
Annual percentage change						
Bolivia	2000 07	5	23	32	14	20
	2006	24	41	57	15	39
	2007	2	18	11	33	16
Colombia	2000 07	14	13	17	11	13
	2006	5	18	16	18	15
	2007	8	24	55	15	23
Ecuador	2000 07	21	15	17	14	16
	2006	26	26	5	31	26
	2007	22	6	64	4	8
Peru	2000 07	20	22	27	21	22
	2006	28	37	39	37	37
	2007	19	17	27	16	17
Andean Community	2000 07	17	16	20	15	16
	2006	12	27	26	28	26
	2007	14	18	40	12	18

Table I.21

Merchandise imports of Andean Community countries by origin, 1990-2007

(Million dollars and percentage)

Origin		Andean Community	All other regions			World
Destination			Total	South and Central America	Other regions	
Value						
Bolivia	1990	27	660	297	363	687
	2000	144	1686	731	955	1830
	2006	263	2551	1360	1191	2814
	2007	312	3132	1653	1479	3444
Colombia	1990	152	5438	936	4502	5590
	2000	667	10872	1985	8887	11539
	2006	1955	24091	4898	19193	26046
	2007	2347	30550	5032	25518	32897
Ecuador	1990	87	1774	281	1493	1861
	2000	568	3153	836	2317	3721
	2006	1900	10214	2954	7260	12114
	2007	1976	11589	3722	7867	13565
Peru	1990	284	2350	572	1778	2634
	2000	775	6640	1838	4802	7415
	2006	2163	13149	4106	9043	15312
	2007	2617	17563	4616	12947	20180
Andean Community	1990	550	10222	2086	8136	10772
	2000	2154	22351	5390	16961	24505
	2006	6281	50005	13318	36687	56286
	2007	7252	62834	15023	47811	70086
Share						
Bolivia	2000	0.6	6.9	3.0	3.9	7.5
	2007	0.4	4.5	2.4	2.1	4.9
Colombia	2000	2.7	44.4	8.1	36.3	47.1
	2007	3.3	43.6	7.2	36.4	46.9
Ecuador	2000	2.3	12.9	3.4	9.5	15.2
	2007	2.8	16.5	5.3	11.2	19.4
Peru	2000	3.2	27.1	7.5	19.6	30.3
	2007	3.7	25.1	6.6	18.5	28.8
Andean Community	2000	8.8	91.2	22.0	69.2	100.0
	2007	10.3	89.7	21.4	68.2	100.0
Annual percentage change						
Bolivia	2000 07	12	9	12	6	9
	2006	18	20	19	22	20
	2007	19	23	22	24	22
Colombia	2000 07	20	16	14	16	16
	2006	32	22	30	20	23
	2007	20	27	3	33	26
Ecuador	2000 07	19	20	24	19	20
	2006	7	20	23	19	18
	2007	4	13	26	8	12
Peru	2000 07	19	15	14	15	15
	2006	21	23	32	19	22
	2007	21	34	12	43	32
Andean Community	2000 07	19	16	16	16	16
	2006	19	22	28	20	21
	2007	15	26	13	30	25

Table I.22

Merchandise exports of ASEAN countries by destination, 1990-2007

(Billion dollars and percentage)

Destination		ASEAN	All other regions			World
Origin			Total	Asia	Other regions	
Value						
Indonesia	1990	3	23	15	8	26
	2000	11	54	28	26	65
	2006	19	85	50	35	104
	2007	23	95	55	40	118
Malaysia	1990	9	21	10	11	29
	2000	26	72	33	39	98
	2006	42	119	56	62	161
	2007	45	131	66	65	176
Philippines	1990	1	8	3	5	8
	2000	5	34	13	21	40
	2006	8	39	20	19	47
	2007	8	42	26	17	50
Singapore a	1990	14	39	15	24	53
	2000	42	96	45	51	138
	2006	84	188	111	77	272
	2007	95	204	122	82	299
Thailand	1990	3	20	7	14	23
	2000	13	56	23	32	69
	2006	27	104	50	53	131
	2007	33	120	59	61	153
ASEAN	1990	29	115	...	...	144
	2000	104	328	...	...	432
	2006	191	580	...	...	771
	2007	216	649	...	...	864
Share						
Indonesia	2000	2.7	12.5	6.6	5.9	15.1
	2007	2.7	11.0	6.4	4.6	13.7
Malaysia	2000	6.0	16.7	7.6	9.1	22.7
	2007	5.2	15.1	7.6	7.5	20.4
Philippines	2000	1.3	7.9	3.1	4.9	9.2
	2007	0.9	4.9	3.0	1.9	5.8
Singapore a	2000	9.6	22.3	10.4	11.9	31.9
	2007	11.0	23.6	14.2	9.5	34.6
Thailand	2000	3.1	12.9	5.4	7.5	16.0
	2007	3.8	13.9	6.9	7.0	17.7
ASEAN	2000	24.0	76.0	...	...	100.0
	2007	25.0	75.0	...	...	100.0
Annual percentage change						
Indonesia	2000 07	11	8	10	6	9
	2006	18	19	18	21	19
	2007	21	12	11	15	14
Malaysia	2000 07	8	9	10	7	9
	2006	14	14	11	17	14
	2007	8	10	17	4	10
Philippines	2000 07	6	3	10	3	3
	2006	15	15	10	21	15
	2007	2	8	25	10	6
Singapore a	2000 07	13	11	15	7	12
	2006	17	19	23	14	18
	2007	13	9	10	7	10
Thailand	2000 07	14	12	14	9	12
	2006	14	20	19	21	19
	2007	20	16	18	14	17
ASEAN	2000 07	11	10	...	...	10
	2006	15	18	...	...	18
	2007	13	12	...	...	12

a Includes significant re-exports.

Table I.23

Merchandise imports of ASEAN countries by origin, 1990-2007

(Billion dollars and percentage)

Destination	Origin	ASEAN	All other regions: Total	All other regions: Asia	All other regions: Other regions	World
Value						
Indonesia	1990	2	20	10	10	22
	2000	8	35	12	23	44
	2006	25	55	16	39	80
	2007	30	63	20	43	92
Malaysia	1990	6	24	12	11	29
	2000	20	62	34	29	82
	2006	33	98	55	43	131
	2007	37	110	64	46	147
Philippines	1990	1	12	5	6	13
	2000	5	32	15	17	37
	2006	11	43	23	20	54
	2007	13	45	26	19	58
Singapore a	1990	12	48	21	28	61
	2000	40	95	42	53	135
	2006	62	176	87	89	239
	2007	66	197	96	101	263
Thailand	1990	4	29	16	13	33
	2000	10	52	27	25	62
	2006	25	104	57	46	129
	2007	25	116	67	49	141
ASEAN	1990	26	136	..	..	162
	2000	89	291	..	..	381
	2006	173	515	..	..	688
	2007	190	584	..	..	774
Share						
Indonesia	2000	2.2	9.2	3.1	6.1	11.5
	2007	3.8	8.1	2.6	5.6	11.9
Malaysia	2000	5.2	16.4	8.9	7.5	21.5
	2007	4.8	14.2	8.2	6.0	19.0
Philippines	2000	1.4	8.3	3.8	4.5	9.7
	2007	1.7	5.8	3.3	2.4	7.5
Singapore a	2000	10.5	24.9	11.0	13.9	35.3
	2007	8.5	25.5	12.5	13.0	34.0
Thailand	2000	2.7	13.6	7.1	6.5	16.3
	2007	3.2	15.0	8.7	6.3	18.2
ASEAN	2000	23.5	76.5	..	..	100.0
	2007	24.5	75.5	..	..	100.0
Annual percentage change						
Indonesia	2000 07	20	9	8	9	11
	2006	12	4	2	6	6
	2007	16	15	27	10	15
Malaysia	2000 07	10	8	9	7	9
	2006	14	14	14	15	14
	2007	12	12	15	8	12
Philippines	2000 07	14	5	8	1	7
	2006	15	8	9	7	9
	2007	26	3	12	7	7
Singapore a	2000 07	7	11	13	10	10
	2006	20	19	18	20	19
	2007	6	12	11	13	10
Thailand	2000 07	13	12	14	10	12
	2006	10	9	9	8	9
	2007	2	12	18	5	9
ASEAN	2000 07	11	10	..	..	11
	2006	17	13	..	..	14
	2007	10	13	..	..	13

a Includes significant imports for re-export.

6. Least-developed countries

Table I.24

Ratio of exports of goods and commercial services to GDP of the least-developed countries, 2006

(Million dollars and percentage)

	Value	Ratio to GDP					
	GDP	Goods and commercial services		Goods		Commercial services	
	2006	2000	2006	2000	2006	2000	2006
LDCs	349200	24	34	21	30	4	3
Afghanistan	8399	...	...	...	...	...	...
Angola	45163	90	...	87	...	3	...
Bangladesh	61897	14	20	14	19	1	1
Benin	4775	23	20	17	15	6	4
Bhutan	942	30	39	26	33	4	5
Burkina Faso	6173	9	11	8	10	1	1
Burundi	903	7	7	7	6	0	1
Cambodia	7258	50	68	38	51	12	17
Cape Verde	1144	26	43	7	11	19	33
Central African Republic	1494	18	11	17	10	1	1
Chad	6541	15	53	13	51	2	1
Comoros	403	24	14	6	3	19	11
Congo, Dem. Rep. of	8543	22	...	21	...	2	...
Djibouti	769	18	21	6	7	13	13
Equatorial Guinea	8565	100	94	100	94	1	1
Eritrea	1085	14	...	6	...	9	...
Ethiopia	13315	11	14	6	8	5	7
Gambia	511	45	39	30	21	15	18
Guinea	3317	22	31	21	30	1	1
Guinea-Bissau	304	31	26	29	24	2	1
Haiti	4975	13	13	9	10	4	3
Kiribati	71	26	...	13	...	13	...
Lao People's Dem. Rep.	3437	28	35	20	29	9	6
Lesotho	1494	29	50	25	46	4	3
Liberia	631	...	25	...	25	...	0
Madagascar	5499	29	29	21	18	8	11
Malawi	3164	25	18	23	15	2	3
Maldives	927	72	74	17	23	55	51
Mali	5866	26	31	23	26	4	5
Mauritania	2663	36	55	33	51	3	3
Mozambique	6833	16	40	9	35	8	5
Myanmar	13123	24	37	19	35	5	2
Nepal	8938	22	12	14	9	7	3
Niger	3663	18	16	16	14	2	2
Rwanda	2494	6	9	4	6	2	3
Samoa	424	...	34	...	2	...	32
Sao Tome and Principe	123	...	13	...	6	...	7
Senegal	9186	27	25	20	17	7	8
Sierra Leone	1450	8	22	2	19	6	3
Solomon Islands	336	38	51	23	36	15	15
Somalia	...	...	...	...	...	...	...
Sudan	37442	15	16	15	15	0	0
Tanzania	12784	14	26	7	15	6	11
Timor Leste	356	...	...	...	...	...	...
Togo	2206	31	42	27	34	3	8
Tuvalu	...	...	...	...	...	...	...
Uganda	9419	11	17	8	13	3	5
Vanuatu	388	59	46	11	10	48	36
Yemen	19057	42	...	40	...	2	...
Zambia	10734	27	39	23	37	4	2
Memorandum item:							
World	**48461900**	**25**	**30**	**20**	**25**	**5**	**6**

Note: Trade in goods is derived from balance of payments statistics and does not correspond to the merchandise trade statistics given elsewhere in this report. Data are estimated for most countries. See the Metadata.

Table I.25

Merchandise exports and imports of the least-developed countries by selected country grouping, 2007

(Million dollars and percentage)

	Exports					Imports				
	Value	Annual percentage change				Value	Annual percentage change			
	2007	2000-07	2005	2006	2007	2007	2000-07	2005	2006	2007
LDCs	**123600**	**19**	**36**	**24**	**19**	**120723**	**15**	**20**	**15**	**20**
Oil exporters										
Angola	39900	26	79	32	25	11400	21	43	5	30
Equatorial Guinea	9950	37	52	18	21	3100	32	35	24	18
Sudan	8879	26	28	17	57	8775	28	66	19	9
Yemen	7310	9	37	14	0	6500	16	22	9	23
Chad	3450	52	44	8	1	1500	25	0	38	15
Exporters of manufactures										
Bangladesh	12453	10	12	27	6	18595	11	15	15	16
Myanmar	6257	21	60	20	36	3250	4	-12	33	27
Cambodia	4100	17	10	14	17	5500	16	23	21	16
Madagascar	1190	5	-14	14	22	2590	13	2	5	45
Lao People's Dem. Rep.	923	16	52	59	5	1065	10	24	20	0
Nepal	888	1	12	-3	6	2904	9	18	9	17
Lesotho	805	20	-8	7	16	1730	11	-2	4	18
Haiti	522	7	20	10	1	1682	7	11	12	4
Exporters of commodities										
Zambia	4619	32	15	108	22	3971	22	19	20	29
Mozambique	2700	33	19	34	13	3300	16	18	19	15
Congo, Dem. Rep. of	2650	18	18	6	14	3700	27	14	21	35
Tanzania	2022	16	13	4	16	5337	20	21	29	26
Senegal	1698	9	5	1	7	4452	17	13	7	30
Uganda	1623	20	34	17	37	3466	12	19	25	36
Mauritania	1510	23	42	119	10	1510	19	9	-18	29
Mali	1480	15	13	41	-5	2255	16	13	18	24
Ethiopia	1284	15	33	15	24	5395	23	34	16	12
Guinea	1100	7	15	18	9	1190	10	5	13	28
Niger	733	15	9	6	44	970	14	7	18	2
Malawi	710	9	4	8	31	1450	15	25	4	20
Togo	690	10	10	-7	13	1440	14	36	4	15
Benin	650	7	2	-2	14	1500	14	0	17	43
Burkina Faso	607	16	-2	26	3	1650	15	9	5	14
Bhutan	600	29	41	60	45	480	15	-6	9	14
Afghanistan	480	15	22	6	18	2950	14	13	5	14
Somalia	290	6	0	-3	0	680	10	0	8	3
Sierra Leone	244	52	14	46	6	445	17	20	13	14
Maldives	228	11	-10	39	1	1096	16	16	24	18
Central African Republic	195	3	2	23	23	230	10	16	16	13
Liberia	184	-8	26	20	17	499	-4	-8	51	7
Rwanda	177	19	27	14	24	737	20	41	24	49
Solomon Islands	168	14	6	17	38	240	15	52	8	20
Guinea-Bissau	95	6	18	-17	28	140	13	27	20	10
Burundi	62	3	19	4	7	319	12	53	60	-26
Djibouti	60	10	4	40	9	410	10	6	21	22
Vanuatu	30	2	1	-3	-18	215	14	17	7	35
Cape Verde	19	8	17	17	-7	750	18	2	24	38
Samoa	15	1	11	-10	45	227	12	15	17	4
Eritrea	15	-12	5	-5	43	515	1	3	2	2
Gambia	13	-2	-20	43	13	315	8	4	9	21
Comoros	9	-7	-35	-17	-14	120	16	15	17	4
Kiribati	9	13	45	76	35	95	13	25	-14	50
Sao Tome and Principe	3	0	-4	13	-21	70	13	20	42	-1
Tuvalu	1	100	-54	2687	-24	14	15	13	-2	8
Timor Leste	...	...	...	...	...	...	...	...	...	...
Memorandum item:										
World a	**13950000**	**12**	**14**	**16**	**15**	**14244000**	**11**	**13**	**14**	**15**

a Includes significant re-exports or imports for re-export.

Note: Data for 2007 are largely estimated.

Table I.26

Imports of agicultural products, fuels and manufactures of the European Union (27), Asia and North America from least-developed countries, 2007

(Million dollars and percentage)

European Union (27)				Asia a				North America b			
	Value	Annual percentage change			Value	Annual percentage change			Value	Annual percentage change	
	2007	2006	2007		2006	2005	2006		2007	2006	2007
A. Agricultural products											
Total LDCs	**4470**	**2**	**23**	**Total LDCs**	**4998**	**14**	**12**	**Total LDCs**	**675**	**9**	**-5**
Tanzania	457	2	28	Myanmar	1593	25	20	Bangladesh	181	34	-14
Uganda	427	-5	25	Tanzania	259	20	-14	Liberia	136	41	-10
Senegal	400	0	32	Burkina Faso	255	18	11	Ethiopia	86	6	32
Ethiopia	372	8	27	Ethiopia	240	71	40	Madagascar	48	-7	16
Madagascar	312	13	2	Bangladesh	225	29	25	Malawi	44	-52	-4
Bangladesh	308	12	10	Solomon Islands	212	13	15	Tanzania	30	18	43
Malawi	280	-6	41	Vanuatu	197	10	39	Haiti	26	14	6
Mozambique	269	17	49	Mali	181	-29	26	Uganda	18	-15	-6
Congo, Dem. Rep. of	191	29	27	Benin	170	0	-21	Senegal	12	1074	-29
Togo	177	1	29	Lao People's Dem. Rep.	150	7	31	Lao People's Dem. Rep.	9	-54	2378
Sudan	161	-35	47	Mozambique	141	11	22	Sudan	8	-53	23
Others (39)	1117	0	14	Others (39)	1375	7	3	Others (39)	75	-2	-32
B. Fuels and mining products											
Total LDCs	**11004**	**4**	**46**	**Total LDCs**	**35546**	**29**	**56**	**Total LDCs**	**18697**	**32**	**7**
Angola	4129	-16	82	Angola	14092	28	82	Angola	13985	40	11
Equatorial Guinea	2765	10	37	Yemen	6239	23	38	Chad	2227	28	12
Mozambique	1629	29	15	Sudan	5264	43	15	Equatorial Guinea	1842	-1	-5
Mauritania	626	22	17	Equatorial Guinea	3635	26	75	Yemen	305	59	-35
Guinea	501	-13	39	Myanmar	2221	45	31	Guinea	168	31	38
Zambia	483	222	27	Zambia	1298	15	76	Sierra Leone	60	2390	68
Congo, Dem. Rep. of	431	-18	75	Lao People's Dem. Rep.	484	1938	238	Congo, Dem. Rep. of	46	-97	1062
Yemen	226	25	131	Guinea	460	18	159	Zambia	44	-12	66
Others (42)	215	-20	3	Others (42)	1853	1	66	Others (42)	21	177	-89
C. Manufactures											
Total LDCs	**10759**	**12**	**-2**	**Total LDCs**	**2141**	**26**	**-2**	**Total LDCs**	**8681**	**14**	**10**
Bangladesh	6644	31	5	Bangladesh	678	14	21	Bangladesh	3953	20	5
Cambodia	924	25	11	Myanmar	282	-5	27	Cambodia	2778	25	14
Liberia	435	-4	-58	Nepal	213	-2	-19	Haiti	489	8	1
Madagascar	397	22	17	Cambodia	205	7	7	Lesotho	462	1	6
Congo, Dem. Rep. of	362	-18	-9	Angola	162	4598	67	Madagascar	325	-12	21
Angola	288	-29	-26	Bhutan	116	34	67	Equatorial Guinea	224	-41	134
Myanmar	253	11	-16	Liberia	114	256	-52	Congo, Dem. Rep. of	156	-37	105
Niger	242	13	48	Samoa	74	506	563	Nepal	108	-8	-9
Equatorial Guinea	184	-14	27	Senegal	60	75	-79	Angola	56	-13	11
Lesotho	168	21	113	Lao People's Dem. Rep.	25	-25	19	Malawi	21	-21	9
Lao People's Dem. Rep.	159	4	-7	Tanzania	24	-52	40	Lao People's Dem. Rep.	18	49	31
Sierra Leone	120	-14	7	Madagascar	23	59	21	Tanzania	15	-18	7
Nepal	112	0	3	Ethiopia	20	32	10	Niger	9	504	19
Others (37)	472	-37	-11	Others (37)	145	-5	-17	Others (37)	66	-18	-19

a Australia, China, Hong Kong, China; India, Indonesia, Japan, Korea Rep. of , Malaysia, New Zealand, Pakistan, Philippines, Singapore and Taipei Chinese.

b Canada and United States

Table I.27

Exports of commercial services of the least-developed countries by category, 2006

(Million dollars and percentage)

	Value	Share in commercial services					
	Commercial services	Transportation services		Travel		Other commercial services	
	2006	2000	2006	2000	2006	2000	2006
Least developed countries	11600	20	23	47	51	33	26
Afghanistan	...	...	...	...	...	...	...
Angola	...	6	...	...	...	94	...
Bangladesh	603	32	15	18	13	50	72
Benin	196	14	15	61	59	25	26
Bhutan	52	...	...	...	...	...	...
Burkina Faso	70	13	3	67	75	20	22
Burundi	6	43	15	37	24	20	62
Cambodia	1244	17	13	72	77	11	9
Cape Verde	372	44	34	40	58	16	8
Central African Republic	14	4	5	51	69	45	26
Chad	81	2	...	65	...	33	...
Comoros	42	13	11	81	63	6	26
Congo, Dem. Rep. of	...	...	...	...	...	...	...
Djibouti	103	76	78	12	9	12	13
Equatorial Guinea	46	3	...	50	...	47	...
Eritrea	...	18	...	64	...	18	...
Ethiopia	890	56	66	15	18	30	16
Gambia	92	...	17	76	72	...	11
Guinea	34	58	26	7	...	34	...
Guinea-Bissau	4	12	13	...	71	...	16
Haiti	150	...	...	81	90	...	...
Kiribati	...	12	...	8	...	81	...
Lao People's Dem. Rep.	221	13	16	76	72	11	11
Lesotho	51	2	1	67	54	31	45
Liberia	1	...	31	...	69	...	0
Madagascar	587	16	26	39	42	45	32
Malawi	80	26	...	74	...	0	...
Maldives	470	6	6	93	92	1	2
Mali	291	36	13	44	60	20	27
Mauritania	87	1	...	20	...	79	...
Mozambique	355	30	30	23	39	47	31
Myanmar	256	17	51	35	18	48	31
Nepal	252	15	14	38	51	47	35
Niger	84	24	11	64	43	12	46
Rwanda	74	34	41	57	42	8	17
Samoa	134	...	4	...	67	...	29
Sao Tome and Principe	8	2	2	76	83	22	16
Senegal	713	10	16	44	35	47	49
Sierra Leone	40	46	34	27	58	27	8
Solomon Islands	51	3	27	9	3	89	69
Somalia	...	...	...	...	...	...	...
Sudan	178	63	11	22	71	15	19
Tanzania	1467	10	23	65	65	25	12
Timor Leste	...	...	...	...	...	...	...
Togo	175	23	39	18	12	59	50
Tuvalu	...	...	...	...	...	...	...
Uganda	437	15	3	81	71	4	27
Vanuatu	140	24	17	47	66	28	17
Yemen	...	12	...	42	...	46	...
Zambia	228	37	38	58	48	5	14
Memorandum item:							
World	**2777900**	**24**	**23**	**32**	**27**	**44**	**50**

Note: Data are estimated for most countries. The improvement of the quality of data in recent years may have resulted in changes relating to the breakdown of exports of commercial services by category of services. See the Metadata, Section II.2.

7. Foreign affiliates trade in services

Table I.28

Sales by foreign affiliates of resident companies - affiliates located abroad primarily engaged in services activities (outward FATS), 2003-2005

(Billion dollars and percentage)

	Value			Annual percentage change		
	2003	2004	2005	2000-03	2004	2005
Australia a	24.6	...	...	...	...	...
Austria b	*9.1*	*9.4*	*13.9*	...	*4*	*48*
Belgium b, c	31.7	41.8	47.8	31	32	14
Canada d	*70.6*	*74.8*	*85.3*	*-6*	*6*	*14*
Czech Republic e	0.3	0.4	1.0	-3	58	139
Finland f	...	13.0	12.4	...	...	-4
France b, c, g	145.6	...	...	-12	...	...
Germany	...	...	383.4	...	...	...
Greece	...	...	*3.5*	...	...	...
Hungary f	...	*0.4*	...	...	...	...
Italy	...	...	80.2	...	...	...
Japan	*40.3*	*44.5*	...	...	*10*	...
Portugal b	5.6	7.1	9.9	1	27	40
Slovak Republic f	...	...	*0.0*	...	...	...
United States	*521.8*	*583.5*	*653.3*	*6*	*12*	*12*

Excluding wholesale and retail trade and repair activities. *Economies shown in italics exclude most or a large part of financial intermediation activities.*
a Refers to fiscal year 2002-03 (July-June). Community, social and personal (except health), hotels and restaurants and communications services are not covered. Only includes affiliates directly controlled.
b Only includes affiliates directly owned.
c Classified under services according to actvity of parent company.
d Branches are excluded.
e Only the first level of indirect ownership is covered
f Community, social and personal services are not covered.
g Refers to 2002 value and annual percentage change for 2000-02.
Note: Given the recent development of this statistical framework, comparability and coverage of economy data may not always be complete. See the Metadata, Section II.2.

Table I.29

Sales by affiliates of foreign companies - resident affiliates primarily engaged in services activities (inward FATS), 2003-2005

(Billion dollars and percentage)

	Value			Annual percentage change		
	2003	2004	2005	2000-03	2004	2005
Austria a	24.9	...	...	...	...	...
Belgium	*25.0*	*28.2*	*28.9*	...	*12*	*3*
Bulgaria b	...	*2.5*	*2.9*	...	...	*19*
Cyprus b, c	...	0.9	0.9	...	...	8
Czech Republic	18.6	23.0	28.5	40	23	24
Denmark b, d, e	*4.9*	...	...	*29*	...	...
Estonia	...	*1.6*	...	...	...	...
Finland	*9.9*	*12.7*	*12.2*	*27*	*28*	*-4*
France	*102.6*	*128.8*	*148.0*	...	*26*	*15*
Germany	...	...	183.9	...	...	...
Greece d	*4.5*	...	...	...	...	...
Hong Kong, China b, f	...	83.1	91.6	...	...	10
Hungary	8.4	11.8	...	...	41	...
Israel	*3.8*	...	...	...	...	...
Italy	*60.4*	*71.9*	*78.1*	...	*19*	*9*
Japan g, h	*14.8*	*20.8*	...	...	*40*	...
Latvia b	*0.9*	*1.3*	...	...	*52*	...
Lithuania b	...	*1.9*	*2.3*	...	...	*23*
Netherlands a, b, h	*35.7*	*43.9*	*54.5*	*27*	*23*	*24*
New Zealand i	11.9	...	...	...	...	...
Norway b	*17.2*	*18.6*	...	*22*	*8*	...
Poland	*6.9*	*9.0*	*11.3*	...	*31*	*25*
Portugal b	*10.4*	*7.5*	*10.0*	...	*-28*	*33*
Romania b, c	*2.3*	*5.0*	*4.4*	...	*122*	*-11*
Slovak Republic b	...	*3.6*	*5.0*	...	...	*39*
Slovenia	*0.8*	*1.2*	...	...	*55*	...
Spain a, b	*40.6*	*52.3*	*52.5*	...	*29*	*0*
Sweden	*36.4*	*43.5*	*46.0*	*25*	*19*	*6*
Trinidad and Tobago d	0.2	...	...	29	...	...
United Kingdom	*174.8*	*222.1*	*253.3*	...	*27*	*14*
United States	*416.0*	*425.7*	*456.3*	*1*	*2*	*7*

Excluding wholesale and retail trade as well as repair activities. For economies shown in italics data exclude all or a large part of financial intermediation activities.

a Only direct control.
b Some or all community, social and personal services activities are not covered.
c Hotels and restaurants activities are not covered.
d Refers to 2002 value and annual percentage change for 2000-02.
e Transport, storage and communications activities are not covered.
f Includes other income.
g No estimation for non-response.
h Real estate activities are also not covered.
i Preliminary results based on 53 per cent of foreign affiliates.
Note : Given the recent development of this statistical framework, comparability and coverage of data may not always be complete. See the Metadata, Section II.2.

1. Overview

Table II. 1

World merchandise exports by major product group, 2007

(Billion dollars and percentage)

	Agricultural products	Fuels and mining products		Manufactures						
		Total	Fuels	Total	Iron and steel	Chemicals	Office and telecom equipment	Automotive products	Textiles	Clothing
Value	**1128**	**2659**	**2038**	**9500**	**474**	**1483**	**1514**	**1183**	**238**	**345**
Share in world merchandise trade	**8.3**	**19.5**	**15.0**	**69.8**	**3.5**	**10.9**	**11.1**	**8.7**	**1.7**	**2.5**
Annual percentage change										
1980 85	2	5	5	2	2	1	9	5	1	4
1985 90	9	3	0	15	9	14	18	14	15	18
1990 95	7	2	1	9	8	10	15	8	8	8
1995 00	1	10	12	5	2	4	10	5	0	5
2000 07	13	21	20	12	22	17	8	13	7	10
2005	8	38	43	10	17	12	11	7	4	6
2006	11	28	23	13	18	13	14	11	8	12
2007	19	15	13	15	27	19	4	16	9	12

Table II.2

World merchandise exports by major product group and region, 2007

	Agricultural products	Fuels and mining products		Manufactures						
		Total	Fuels	Total	Iron and steel	Chemicals	Office and telecom equipment	Automotive products	Textiles	Clothing
World	1127.7	2658.6	2038.4	9499.5	474.2	1483.2	1514.3	1182.9	238.1	345.3
Share in total exports	**8.3**	**19.5**	**15.0**	**69.8**	**3.5**	**10.9**	**11.1**	**8.7**	**1.7**	**2.5**
Annual percentage change										
2000 2007	11	17	17	11	19	14	7	11	6	8
2006	11	28	23	13	18	13	14	11	8	12
2007	19	15	13	15	27	19	4	16	9	12
North America	177.7	257.5	171.9	1338.0	26.9	199.3	204.0	219.9	16.9	11.0
Share in total exports	**9.6**	**13.9**	**9.3**	**72.2**	**1.5**	**10.8**	**11.0**	**11.9**	**0.9**	**0.6**
Annual percentage change										
2000 2007	6.4	15.4	14.7	4.8	13.3	9.9	0.3	4.8	1.0	7.7
2006	10.9	23.8	15.2	11.7	11.2	12.8	11.7	8.5	1.4	8.2
2007	17.4	16.3	13.8	8.5	16.2	14.8	3.0	7.6	1.8	15.1
South and Central America	125.2	205.5	118.4	154.2	19.3	29.9	6.5	21.2	3.4	12.5
Share in total exports	**25.1**	**41.2**	**23.7**	**30.9**	**3.9**	**6.0**	**1.3**	**4.2**	**0.7**	**2.5**
Annual percentage change										
2000 2007	13	17	14	11	17	15	6	16	7	1
2006	12	35	25	10	4	16	13	14	2	4
2007	23	13	8	15	18	17	5	12	22	0
Europe	519.3	605.5	392.6	4538.2	228.2	883.3	402.7	654.5	92.7	122.4
Share in total exports	**9.0**	**10.5**	**6.8**	**78.6**	**4.0**	**15.3**	**7.0**	**11.3**	**1.6**	**2.1**
Annual percentage change										
2000 2007	11	17	16	11	18	15	5	12	6	10
2006	10	30	22	12	19	12	14	9	5	7
2007	19	13	9	16	27	19	7	18	11	14
Commonwealth of Independent States (CIS)	38.6	334.1	289.3	128.2	45.4	27.4	1.1	7.5	2.0	1.8
Share in total exports	**7.6**	**65.5**	**56.7**	**25.1**	**8.9**	**5.4**	**0.2**	**1.5**	**0.4**	**0.3**
Annual percentage change										
2000 2007	17	21	24	17	19	16	11	21	7	5
2006	17	29	28	17	10	16	35	32	8	1
2007	31	19	20	23	21	23	3	34	14	9
Africa	34.3	295.8	260.0	79.8	9.4	13.0	2.4	5.3	2.2	11.4
Share in total exports	**8.1**	**69.7**	**61.3**	**18.8**	**2.2**	**3.1**	**0.6**	**1.3**	**0.5**	**2.7**
Annual percentage change										
2000 2007	9	19	19	12	17	14	14	18	6	6
2006	6	23	21	9	0	11	28	14	22	1
2007	13	16	15	15	18	18	0	5	16	19
Middle East	19.2	565.4	554.5	159.3	4.5	43.1	16.6	9.8	7.0	5.3
Share in total exports	**2.5**	**74.4**	**73.0**	**21.0**	**0.6**	**5.7**	**2.2**	**1.3**	**0.9**	**0.7**
Annual percentage change										
2000 2007	15	16	16	15	24	20	9	25	5	10
2006	22	26	25	14	29	17	8	37	28	29
2007	20	12	13	18	20	18	9	23	20	7
Asia	213.3	394.8	251.7	3101.9	140.4	287.0	880.9	264.6	113.8	181.0
Share in total exports	**5.6**	**10.4**	**6.6**	**81.6**	**3.7**	**7.6**	**23.2**	**7.0**	**3.0**	**4.8**
Annual percentage change										
2000 2007	11	19	17	12	22	16	10	13	7	10
2006	14	30	22	16	27	15	15	15	10	20
2007	20	18	16	16	32	21	10	18	9	12

Table II.3

Share of agricultural products in trade in total merchandise and in primary products by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**8.3**	**8.3**
North America	9.6	6.0
South and Central America	25.1	8.7
Europe	9.0	9.2
Commonwealth of Independent States (CIS)	7.6	10.9
Africa	8.1	14.0
Middle East	2.5	10.2
Asia	5.6	7.4
Share in primary products		
World	**29.8**	**29.8**
North America	40.8	23.9
South and Central America	37.9	31.3
Europe	46.2	35.2
Commonwealth of Independent States (CIS)	10.3	49.6
Africa	10.4	47.5
Middle East	3.3	47.8
Asia	35.1	21.8

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.4

Share of fuels and mining products in trade in total merchandise and in primary products by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**19.5**	**19.5**
North America	13.9	19.0
South and Central America	41.2	19.2
Europe	10.5	16.9
Commonwealth of Independent States (CIS)	65.5	11.1
Africa	69.7	15.4
Middle East	74.4	11.1
Asia	10.4	26.6
Share in primary products		
World	**70.2**	**70.2**
North America	59.2	76.1
South and Central America	62.1	68.7
Europe	53.8	64.8
Commonwealth of Independent States (CIS)	89.7	50.4
Africa	89.6	52.5
Middle East	96.7	52.2
Asia	64.9	78.2

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.5

Share of fuels in trade in total merchandise and in primary products by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**15.0**	**15.0**
North America	9.3	15.9
South and Central America	23.7	16.5
Europe	6.8	12.2
Commonwealth of Independent States (CIS)	56.7	8.9
Africa	61.3	13.2
Middle East	73.0	9.1
Asia	6.6	19.8
Share in primary products		
World	**53.8**	**53.8**
North America	39.5	63.8
South and Central America	35.8	59.1
Europe	34.9	47.0
Commonwealth of Independent States (CIS)	77.6	40.4
Africa	78.8	44.8
Middle East	94.9	42.5
Asia	41.4	58.1

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.6

Share of manufactures in total merchandise trade by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**69.8**	**69.8**
North America	72.2	72.8
South and Central America	30.9	69.1
Europe	78.6	72.1
Commonwealth of Independent States (CIS)	25.1	76.7
Africa	18.8	68.0
Middle East	21.0	75.7
Asia	81.6	63.7

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II 7

Share of iron and steel in trade in total merchandise and in manufactures by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**3.5**	**3.5**
North America	1.5	2.2
South and Central America	3.9	2.8
Europe	4.0	3.9
Commonwealth of Independent States (CIS)	8.9	4.3
Africa	2.2	4.4
Middle East	0.6	6.8
Asia	3.7	3.2
Share in manufactures		
World	**5.0**	**5.0**
North America	2.0	3.0
South and Central America	12.5	4.1
Europe	5.0	5.5
Commonwealth of Independent States (CIS)	35.4	5.6
Africa	11.8	6.5
Middle East	2.8	9.0
Asia	4.5	5.0

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II 8

Share of chemicals in trade in total merchandise and in manufactures by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**10.9**	**10.9**
North America	10.8	8.7
South and Central America	6.0	13.3
Europe	15.3	12.9
Commonwealth of Independent States (CIS)	5.4	9.8
Africa	3.1	10.0
Middle East	5.7	7.4
Asia	7.6	9.5
Share in manufactures		
World	**15.6**	**15.6**
North America	14.9	11.9
South and Central America	19.4	19.3
Europe	19.5	17.9
Commonwealth of Independent States (CIS)	21.4	12.7
Africa	16.3	14.7
Middle East	27.1	9.8
Asia	9.3	14.9

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.9

Share of office and telecom equipment in trade in total merchandise and in manufactures by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**11.1**	**11.1**
North America	11.0	12.7
South and Central America	1.3	7.7
Europe	7.0	8.8
Commonwealth of Independent States (CIS)	0.2	6.2
Africa	0.6	5.7
Middle East	2.2	7.1
Asia	23.2	16.8
Australia, Japan and New Zealand	12.0	11.1
Other Asia	26.6	18.6
Share in manufactures		
World	**15.9**	**15.9**
North America	15.2	17.4
South and Central America	4.2	11.1
Europe	8.9	12.2
Commonwealth of Independent States (CIS)	0.9	8.0
Africa	3.1	8.4
Middle East	10.4	9.4
Asia	28.4	26.5
Australia, Japan and New Zealand	15.6	19.6
Other Asia	31.9	28.3

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.10

Share of automotive products in trade in total merchandise and in manufactures by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**8.7**	**8.7**
North America	11.9	12.6
South and Central America	4.2	9.5
Europe	11.3	9.8
Commonwealth of Independent States (CIS)	1.5	12.6
Africa	1.3	9.6
Middle East	1.3	10.2
Asia	7.0	3.1
Australia, Japan and New Zealand	18.5	5.0
Other Asia	3.5	2.5
Share in manufactures		
World	**12.5**	**12.5**
North America	16.4	17.3
South and Central America	13.8	13.8
Europe	14.4	13.6
Commonwealth of Independent States (CIS)	5.9	16.4
Africa	6.7	14.1
Middle East	6.2	13.5
Asia	8.5	4.8
Australia, Japan and New Zealand	24.2	8.8
Other Asia	4.2	3.8

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.11

Share of textiles in trade in total merchandise and in manufactures by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**1.7**	**1.7**
North America	0.9	1.3
South and Central America	0.7	2.7
Europe	1.6	1.6
Commonwealth of Independent States (CIS)	0.4	2.2
Africa	0.5	4.0
Middle East	0.9	2.7
Asia	3.0	1.8
Australia, Japan and New Zealand	0.9	1.3
Other Asia	3.6	2.0
Share in manufactures		
World	**2.5**	**2.5**
North America	1.3	1.8
South and Central America	2.2	3.9
Europe	2.0	2.2
Commonwealth of Independent States (CIS)	1.6	2.8
Africa	2.8	5.9
Middle East	4.4	3.5
Asia	3.7	2.8
Australia, Japan and New Zealand	1.2	2.3
Other Asia	4.4	3.0

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

Table II.12

Share of clothing in trade in total merchandise and in manufactures by region, 2007

(Percentage)

	Exports	Imports
Share in total merchandise		
World	**2.5**	**2.5**
North America	0.6	3.5
South and Central America	2.5	1.7
Europe	2.1	2.8
Commonwealth of Independent States (CIS)	0.3	5.3
Africa	2.7	2.1
Middle East	0.7	2.3
Asia	4.8	1.4
Australia, Japan and New Zealand	0.1	3.5
Other Asia	6.2	0.7
Share in manufactures		
World	**3.6**	**3.6**
North America	0.8	4.8
South and Central America	8.1	2.5
Europe	2.7	3.8
Commonwealth of Independent States (CIS)	1.4	6.9
Africa	14.3	3.1
Middle East	3.3	3.1
Asia	5.8	2.1
Australia, Japan and New Zealand	0.1	6.2
Other Asia	7.4	1.1

Note: Import shares are derived from the Secretariat's network of world merchandise trade by product and region.

2. Agriculture products

Table II.13

Exports of agricultural products of regions by destination, 2007

(Billion dollars and percentage)

	Value	Share in region's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**1127.7**	**100.0**	**100.0**	**100.0**	**100.0**	**11**	**11**	**19**
Europe								
World	**519.3**	**100.0**	**100.0**	**44.2**	**46.1**	**11**	**10**	**19**
Europe	419.6	79.0	80.8	34.9	37.2	12	9	19
Asia	26.7	6.1	5.2	2.7	2.4	9	10	14
North America	23.9	5.4	4.6	2.4	2.1	9	11	6
Commonwealth of Independent States (CIS)	16.6	2.0	3.2	0.9	1.5	19	25	25
Africa	15.3	3.3	2.9	1.4	1.4	10	13	24
Middle East	11.2	2.5	2.1	1.1	1.0	9	7	20
South and Central America	4.7	1.2	0.9	0.6	0.4	6	20	17
Asia								
World	**213.3**	**100.0**	**100.0**	**18.3**	**18.9**	**11**	**14**	**20**
Asia	119.3	60.8	55.9	11.1	10.6	10	12	18
Europe	35.4	15.2	16.6	2.8	3.1	13	17	25
North America	28.7	13.8	13.4	2.5	2.5	11	14	13
Middle East	11.9	4.5	5.6	0.8	1.1	15	19	30
Africa	9.3	2.7	4.4	0.5	0.8	19	10	36
Commonwealth of Independent States (CIS)	4.9	1.1	2.3	0.2	0.4	23	22	32
South and Central America	3.2	1.0	1.5	0.2	0.3	18	25	35
North America								
World	**177.7**	**100.0**	**100.0**	**20.8**	**15.8**	**6**	**11**	**17**
North America	74.8	42.6	42.1	8.9	6.6	6	9	8
Asia	55.6	31.6	31.3	6.6	4.9	6	13	21
Europe	20.7	13.7	11.7	2.9	1.8	4	7	17
South and Central America	12.0	5.4	6.8	1.1	1.1	10	15	32
Africa	6.8	2.8	3.8	0.6	0.6	11	15	60
Middle East	5.0	2.7	2.8	0.6	0.4	7	35	46
Commonwealth of Independent States (CIS)	2.1	0.9	1.2	0.2	0.2	11	0	48
South and Central America								
World	**125.2**	**100.0**	**100.0**	**9.6**	**11.1**	**13**	**12**	**23**
Europe	40.8	33.9	32.6	3.2	3.6	12	12	27
Asia	25.1	15.8	20.1	1.5	2.2	17	5	31
North America	20.5	22.0	16.4	2.1	1.8	9	12	8
South and Central America	19.2	18.6	15.3	1.8	1.7	10	15	33
Africa	7.2	3.0	5.7	0.3	0.6	24	18	23
Middle East	6.4	3.9	5.1	0.4	0.6	18	21	23
Commonwealth of Independent States (CIS)	5.7	2.2	4.6	0.2	0.5	25	21	4
Commonwealth of Independent States (CIS)								
World	**38.6**	**100.0**	**100.0**	**2.4**	**3.4**	**17**	**17**	**31**
Commonwealth of Independent States (CIS)	12.4	27.7	32.2	0.7	1.1	19	12	36
Asia	10.3	29.3	26.6	0.7	0.9	15	25	19
Europe	9.3	31.7	24.0	0.8	0.8	12	15	29
Africa	2.7	1.7	7.0	0.0	0.2	43	-4	118
Middle East	2.4	2.2	6.2	0.1	0.2	35	14	44
North America	0.8	3.2	2.0	0.1	0.1	9	13	3
South and Central America	0.0	0.3	0.1	0.0	0.0	-4	117	-38
Africa								
World	**34.3**	**100.0**	**100.0**	**3.4**	**3.0**	**9**	**6**	**13**
Europe	16.5	49.5	48.0	1.7	1.5	8	7	12
Africa	6.9	18.9	20.2	0.6	0.6	10	12	14
Asia	5.7	18.2	16.5	0.6	0.5	7	-7	15
Middle East	1.7	5.4	4.9	0.2	0.1	7	18	9
North America	1.6	5.2	4.7	0.2	0.1	7	-4	1
Commonwealth of Independent States (CIS)	0.6	1.0	1.8	0.0	0.1	20	-8	42
South and Central America	0.2	0.9	0.6	0.0	0.0	3	20	69
Middle East								
World	**19.2**	**100.0**	**100.0**	**1.3**	**1.7**	**15**	**22**	**20**
Middle East	10.8	54.8	56.3	0.7	1.0	15	31	22
Europe	3.0	22.6	15.8	0.3	0.3	9	-3	15
Asia	1.7	8.7	8.7	0.1	0.1	15	8	12
Africa	1.4	3.2	7.3	0.0	0.1	29	28	24
Commonwealth of Independent States (CIS)	0.8	4.0	4.3	0.1	0.1	16	51	20
North America	0.4	2.7	1.9	0.0	0.0	9	7	10
South and Central America	0.1	0.6	0.3	0.0	0.0	7	47	16

Table II.14

Imports of agricultural products of selected economies by origin, 2007

(Million dollars and percentage)

Canada a	Value	Share	Annual percentage change			United States	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**28026**	**100.0**	**9**	**12**	**14**	**World**	**109573**	**100.0**	**7**	**8**	**6**
North America	17584	62.7	8	10	16	North America	39428	36.0	5	5	5
Europe	3582	12.8	10	15	14	Asia	25879	23.6	9	12	8
Asia	3541	12.6	12	13	13	Europe	21630	19.7	8	9	7
South and Central America	2664	9.5	11	19	10	South and Central America	19760	18.0	7	11	5
Africa	460	1.6	11	25	7	Africa	1764	1.6	6	0	5
CIS	118	0.4	12	32	7	CIS	715	0.7	8	21	7
Middle East	77	0.3	9	8	18	Middle East	397	0.4	9	7	18
Economy						Economy					
United States	16362	58.4	7	12	14	Canada	27323	24.9	3	2	3
European Union (27)	3300	11.8	10	15	13	European Union (27)	20012	18.3	8	9	6
Mexico	1151	4.1	22	45	43	Mexico	12103	11.0	9	12	8
China	1020	3.6	24	19	17	China	5907	5.4	21	25	13
Brazil	704	2.5	12	25	6	Brazil	4226	3.9	9	10	6
Above 5	**22537**	**80.4**	**-**	**-**	**-**	**Above 5**	**69571**	**63.5**	**-**	**-**	**-**
Thailand	523	1.9	8	17	19	Chile	3968	3.6	9	17	1
Chile	522	1.9	15	19	14	Thailand	3597	3.3	4	18	4
Australia	422	1.5	6	8	2	Indonesia	3219	2.9	11	13	6
New Zealand	333	1.2	9	9	18	Australia	2773	2.5	7	1	5
Colombia	259	0.9	7	16	8	New Zealand	1899	1.7	5	4	2
Indonesia	235	0.8	11	19	3	Colombia	1806	1.6	4	4	4
Costa Rica	194	0.7	12	12	12	Costa Rica	1509	1.4	5	27	7
India	188	0.7	10	34	1	Ecuador	1481	1.4	6	10	2
Guatemala	185	0.7	9	29	2	Viet Nam	1467	1.3	15	8	18
Argentina	182	0.7	7	7	26	Malaysia	1442	1.3	17	24	27
Malaysia	172	0.6	16	2	56	India	1393	1.3	3	4	1
Viet Nam	153	0.5	16	7	12	Guatemala	1268	1.2	6	1	16
Peru	141	0.5	14	23	9	Argentina	1240	1.1	6	18	4
South Africa	136	0.5	6	6	1	Philippines	1088	1.0	6	9	8
Ecuador	128	0.5	8	25	21	Peru	967	0.9	17	26	11
Russian Federation	109	0.4	11	36	8	Japan	940	0.9	4	9	9
Turkey	108	0.4	24	30	49	Honduras	723	0.7	6	1	16
Morocco	96	0.3	12	22	39	Korea, Republic of	667	0.6	7	5	3
Switzerland	93	0.3	13	16	8	Russian Federation	656	0.6	8	22	6
Côte d'Ivoire	90	0.3	14	26	15	Dominican Republic	626	0.6	4	22	0
Philippines	88	0.3	10	18	6	Turkey	611	0.6	12	9	18
Korea, Republic of	84	0.3	8	9	7	Taipei, Chinese	541	0.5	1	0	10
Japan	84	0.3	6	17	11	Côte d'Ivoire	505	0.5	8	22	6
Uruguay	82	0.3	7	45	111	Nicaragua	427	0.4	8	22	15
Taipei, Chinese	77	0.3	9	6	17	Switzerland	423	0.4	9	16	53
Canada	67	0.2	...	22	12	Uruguay	395	0.4	21	36	8
Norway	51	0.2	1	4	21	Norway	362	0.3	8	33	27
Honduras	41	0.1	21	17	28	South Africa	283	0.3	1	4	9
Nicaragua	36	0.1	16	5	55	Israel	233	0.2	7	6	8
Nigeria	35	0.1	32	489	51	El Salvador	220	0.2	2	10	31
Hong Kong, China	29	0.1	3	1	4	Panama	178	0.2	2	3	4
Jamaica	27	0.1	2	9	13	Fiji	176	0.2	22	1	13
Iran, Islamic Rep. of	26	0.1	4	9	8	Bangladesh	175	0.2	2	36	15
Israel	24	0.1	13	4	11	Singapore	170	0.2	3	11	25
Singapore	19	0.1	7	17	26	Bolivarian Rep. of Venezuela	149	0.1	7	5	8
Above 40	**27575**	**98.4**	**-**	**-**	**-**	**Above 40**	**107150**	**97.8**	**-**	**-**	**-**

Table II.14 *(continued)*

Imports of agricultural products of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**528536**	**100.0**	**11**	**9**	**20**
Europe	397576	75.2	12	9	19
South and Central America	45762	8.7	12	9	28
Asia	33492	6.3	11	15	18
Africa	20619	3.9	9	2	17
North America	19381	3.7	3	6	16
CIS	8077	1.5	11	13	25
Middle East	2892	0.5	8	1	15
Economy					
European Union (27)	379079	71.7	12	9	20
Brazil	19351	3.7	14	5	36
United States	14057	2.7	3	5	16
Argentina	9126	1.7	13	14	30
China	7086	1.3	16	20	27
Above 5	**428699**	**81.1**	**-**	**-**	**-**
Norway	5036	1.0	8	18	11
Russian Federation	4866	0.9	10	12	21
Turkey	4677	0.9	13	3	9
Canada	4356	0.8	2	7	15
Indonesia	4127	0.8	10	14	13
Chile	3959	0.7	15	15	22
Switzerland	3883	0.7	13	20	26
Thailand	3665	0.7	10	24	26
South Africa	3204	0.6	10	4	23
Malaysia	3202	0.6	11	15	6
New Zealand	2980	0.6	8	1	6
India	2892	0.5	10	18	24
Côte d'Ivoire	2711	0.5	7	2	20
Viet Nam	2542	0.5	23	57	36
Morocco	2519	0.5	12	5	12
Australia	2441	0.5	3	3	5
Ecuador	2334	0.4	14	4	20
Colombia	2249	0.4	10	4	20
Ukraine	2031	0.4	23	23	37
Costa Rica	1773	0.3	11	13	24
Peru	1703	0.3	15	27	17
Israel	1697	0.3	10	1	24
Iceland	1658	0.3	9	9	11
Ghana	1375	0.3	16	7	26
Kenya	1309	0.2	10	12	11
Cameroon	1262	0.2	7	3	16
Mexico	960	0.2	11	11	27
Croatia	944	0.2	18	26	4
Serbia	854	0.2	...	95	18
Tunisia	851	0.2	13	44	9
Uruguay	834	0.2	14	19	18
Egypt	826	0.2	19	9	28
Philippines	752	0.1	9	5	13
Japan	693	0.1	7	6	24
Nigeria	622	0.1	13	14	23
Above 40	**510487**	**96.6**	**-**	**-**	**-**

Japan	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**68939**	**100.0**	**1**	**0**	**5**
Asia	28393	41.2	2	2	1
North America	22620	32.8	1	3	8
Europe	8872	12.9	3	2	11
South and Central America	5303	7.7	4	2	6
CIS	2125	3.1	1	2	9
Africa	1471	2.1	1	7	3
Middle East	155	0.2	3	11	24
Economy					
United States	17153	24.9	1	2	9
China	8852	12.8	3	2	3
European Union (27)	7864	11.4	4	2	10
Australia	5323	7.7	4	3	3
Canada	4833	7.0	1	4	4
Above 5	**44024**	**63.9**	**-**	**-**	**-**
Thailand	3519	5.1	3	10	2
Russian Federation	2049	3.0	1	1	7
Indonesia	1979	2.9	3	20	5
Chile	1967	2.9	5	4	3
Brazil	1885	2.7	7	7	7
New Zealand	1397	2.0	2	7	7
Korea, Republic of	1343	1.9	5	11	0
Malaysia	1267	1.8	3	11	18
Viet Nam	1082	1.6	8	6	1
Philippines	1007	1.5	3	3	8
Taipei, Chinese	973	1.4	3	19	5
India	714	1.0	3	7	8
South Africa	638	0.9	5	11	4
Mexico	632	0.9	5	1	12
Norway	475	0.7	4	20	13
Argentina	416	0.6	8	48	73
Singapore	378	0.5	3	12	17
Colombia	278	0.4	3	2	4
Peru	242	0.4	12	40	1
Turkey	173	0.3	12	3	26
Morocco	147	0.2	10	9	18
Ecuador	135	0.2	7	16	13
Myanmar	126	0.2	7	22	5
Ghana	123	0.2	15	11	55
Iceland	119	0.2	3	8	1
Sri Lanka	107	0.2	2	17	4
Mauritania	102	0.1	4	22	4
Guatemala	97	0.1	2	16	4
Switzerland	85	0.1	12	4	66
Croatia	83	0.1	24	103	8
Ethiopia	79	0.1	4	24	14
Papua New Guinea	69	0.1	9	13	3
Israel	68	0.1	5	3	7
Greenland	65	0.1	5	8	2
Tanzania	54	0.1	3	11	2
Above 40	**67898**	**98.5**	**-**	**-**	**-**

a Imports are valued f.o.b.

Table II.15

Leading exporters and importers of agricultural products, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	487.74	-	-	41.7	43.3	11	7	10	19
extra-EU (27) exports	108.66	-	-	10.1	9.6	10	8	13	15
United States	113.51	17.0	14.3	12.9	10.1	7	4	12	22
Canada	48.67	5.0	5.4	6.3	4.3	5	2	7	10
Brazil	48.22	3.4	2.4	2.8	4.3	18	14	13	22
China	38.85	1.5	2.4	3.0	3.4	13	19	13	19
Argentina	28.81	1.9	1.8	2.2	2.6	13	12	11	35
Thailand	24.96	1.2	1.9	2.2	2.2	11	4	21	16
Russian Federation a	23.52	-	-	1.4	2.1	18	23	23	36
Indonesia	23.43	1.6	1.0	1.4	2.1	17	16	27	31
Australia	22.35	3.3	2.9	3.0	2.0	4	-4	5	1
Malaysia	20.51	2.0	1.8	1.4	1.8	14	2	16	32
New Zealand	16.04	1.3	1.4	1.4	1.4	11	7	2	21
India	16.02	1.0	0.8	1.1	1.4	15	19	20	30
Mexico	15.59	0.8	0.8	1.6	1.4	8	13	15	8
Chile	13.63	0.4	0.7	1.2	1.2	11	11	14	19
Above 15	**941.87**	**-**	**-**	**83.4**	**83.5**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	528.54	-	-	42.3	44.4	11	6	9	20
extra-EU (27) imports	149.46	-	-	13.2	12.5	10	5	9	20
United States	109.40	8.7	9.0	11.5	9.2	7	9	8	6
Japan	68.86	9.6	11.5	10.4	5.8	1	1	0	5
China	65.24	2.1	1.8	3.3	5.5	19	7	14	26
Canada b	27.34	1.8	2.0	2.5	2.3	9	11	12	14
Russian Federation a, b	26.88	-	-	1.5	2.3	16	23	22	15
Korea, Republic of	21.94	1.5	2.2	2.1	1.8	8	5	11	18
Mexico b	21.90	1.2	1.2	1.8	1.8	10	7	12	19
Hong Kong, China	13.43	1.2	1.9	2.0	1.1	2	-1	7	13
retained imports	8.60	1.0	1.0	1.1	0.7	4	3	7	10
Saudi Arabia	12.45	1.5	0.8	0.9	1.0	12	31	8	26
United Arab Emirates a	11.29	0.3	0.4	0.6	0.9	17	17	22	28
Taipei, Chinese	10.78	1.1	1.4	1.3	0.9	5	5	2	12
Malaysia	10.61	0.5	0.5	0.8	0.9	13	3	17	25
Indonesia	10.46	0.6	0.5	1.0	0.9	9	11	2	40
Switzerland	10.37	1.2	1.3	0.9	0.9	9	4	7	17
Above 15	**944.68**	**-**	**-**	**82.1**	**79.3**	**-**	**-**	**-**	**-**

a Includes Secretariat estimates.

b Imports are valued f.o.b.

Table II.16

Exports of agricultural products of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	414723	553051	849007	943676	1127667	8.8	8.3
Argentina	7482	11954	19182	21266	28806	45.4	51.5
Australia	11875	16446	21209	22178	22353	25.7	15.8
Belarus	-	761	1720	1844	2231	10.4	9.2
Brazil	9779	15464	35052	39528	48222	28.1	30.0
Cameroon b	695	438	735	1011	1099	23.9	30.5
Canada	22339	34789	41214	44210	48672	12.6	11.6
Chile	2779	6399	10098	11490	13632	33.3	20.0
China	10060	16384	28711	32543	38853	6.6	3.2
Colombia	2514	3106	4569	4922	5858	23.8	19.5
Costa Rica	927	1812	2337	2675	3091	30.9	33.0
Côte d'Ivoire b	2374	2308	3368	3508	3898	59.4	45.9
Croatia	...	595	1216	1518	1730	13.4	14.0
Ecuador	1236	1948	3215	3945	4245	39.5	30.8
Egypt b	669	613	1180	1105	1528	13.1	9.4
Ethiopia	260	406	822	908	1034	83.5	80.5
European Union (27)	-	230390	374939	410972	487736	9.4	9.2
intra-EU (27) exports	-	174774	291489	316861	379079	10.5	10.5
extra-EU (27) exports	-	55616	83450	94111	108657	7.1	6.4
Ghana b	...	621	1643	1616	...	37.2	43.6
Guatemala	849	1618	1996	2229	2845	60.0	41.1
Honduras	680	782	859	1133	1300	23.4	23.2
Hong Kong, China	4556	5693	4314	4688	5478	2.8	1.6
domestic exports	821	454	535	576	652	1.9	3.6
re-exports	3735	5240	3779	4113	4826	2.9	1.5
Iceland	1274	1257	1833	1857	2083	66.1	43.6
India	3506	5931	10271	12353	16020	14.0	11.0
Indonesia	4154	7764	14063	17907	23432	11.9	19.9
Iran, Islamic Rep. of b	601	932	2279	2911	3512	3.2	4.1
Israel	1327	1182	1725	1799	2253	3.8	4.2
Japan	3298	4395	6007	6482	7558	0.9	1.1
Kenya	559	1062	1628	1898	2231	61.3	54.7
Korea, Republic of	2985	4298	5285	5346	6319	2.5	1.7
Malawi b	382	342	413	454	617	90.2	86.9
Malaysia	7500	8015	13377	15573	20515	8.2	11.6
Mexico	3466	9100	12557	14468	15589	5.5	5.7
Morocco	1228	1746	2575	2629	2804	23.5	19.1
New Zealand	5966	7642	13006	13235	16045	57.6	59.5
Nicaragua	295	547	716	843	976	84.8	81.2
Norway	3077	4244	5926	6615	7508	7.1	5.5
Pakistan b	1081	1234	2155	2210	2327	13.7	13.0
Panama	263	580	827	864	937	67.5	80.6
Paraguay	863	699	1432	1582	2377	80.4	85.4
Peru	789	1911	3163	3812	4184	27.2	15.0
Philippines	1683	2026	2729	2830	3190	5.1	6.3
Russian Federation b	-	7527	14097	17351	23523	7.1	6.6
Serbia	...	...	...	1372	1822	...	20.7
Serbia and Montenegro	...	389	1020	...	...	22.6	20.1
Singapore	4095	3723	4542	5088	5964	2.7	2.0
domestic exports	1183	1202	1879	2359	2399	1.5	1.5
re-exports	2912	2521	2662	2730	3565	4.3	2.5
South Africa	1691	3227	5246	5022	5573	10.8	8.0
Sri Lanka b	758	1093	1496	1695	2049	20.1	26.5
Switzerland	2244	2521	4000	4693	5993	3.1	3.5
Syrian Arab Republic	767	621	1084	2133	...	13.4	19.5
Taipei, Chinese	3732	3509	4468	4316	4503	2.4	1.9
Tanzania	...	432	732	704	889	65.9	43.9
Thailand	7786	12220	17816	21552	24960	17.7	16.3
Tunisia	418	548	1155	1456	1516	9.4	10.1
Turkey b	3300	3828	8093	8633	10042	13.8	9.4
Uganda	...	292	559	598	825	63.4	50.8
Ukraine	-	1585	4734	5132	6778	10.9	13.8
United Arab Emirates b	501	2818	3760	4683	6228	5.7	3.6
United States	59404	71408	82674	92664	113511	9.1	9.8
Uruguay	1025	1278	2129	2566	2863	55.7	63.7
Viet Nam b	...	3954	7579	9304	11697	27.3	24.2

a Or nearest year.

b Includes Secretariat estimates.

Table II.17

Imports of agricultural products of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	2766	2815	4280	4506	6103	30.7	22.1
Argentina	326	1644	1247	1396	2225	6.5	5.0
Australia b	2735	4234	6579	7268	8919	5.9	5.7
Bangladesh c, d	835	1716	2732	3228	4584	19.3	24.7
Belarus	-	1227	1843	2244	2487	14.2	8.7
Bolivarian Rep. of Venezuela b	986	1970	2404	3277	4487	13.5	10.7
Bosnia and Herzegovina	...	...	1313	1378	1659	...	17.0
Brazil e	2690	4762	4341	5487	7235	8.5	6.0
Canada b	9009	15272	21436	23956	27341	6.4	7.2
Chile	461	1421	2156	2653	3442	7.7	7.3
China	7855	19544	45189	51653	65236	8.7	6.8
Colombia	593	1736	2191	2704	3466	15.0	10.5
Côte d'Ivoire b	...	453	884	1038	1202	16.3	19.5
Croatia	...	777	1785	2023	2340	9.9	9.1
Cuba d	...	826	1571	1556	...	17.1	16.4
Dominican Republic b, d	413	964	1172	1336	1697	10.2	12.3
Ecuador	206	423	900	985	1289	11.4	9.5
Egypt d	4793	4208	4791	4733	6242	30.0	23.1
El Salvador d	158	692	1024	983	1377	14.0	15.9
European Union (27) f	-	253703	405084	441077	528536	9.8	9.5
extra-EU (27) imports	-	78952	113596	124259	149457	8.6	7.7
Guatemala	196	673 |	1267	1379	1568	14.1	11.6
Hong Kong, China	8325	11728	11087	11904	13427	5.5	3.6
retained imports	4591	6488	7308	7792	8601	18.6	22.1
India	1721	3953	7547	7870	9580	7.7	4.4
Indonesia	2126	5727	7316	7487	10464	13.1	11.3
Iran, Islamic Rep. of d	3830	2943	3794	4270	5196	21.2	11.3
Israel	1565	2288	2930	3253	3979	6.1	6.7
Japan	50762	62185	65947	65623	68865	16.4	11.1
Jordan	709	942	1547	1671	2199	20.5	16.3
Kazakhstan d	-	506	1413	1849	2140	10.0	6.5
Korea, Republic of	9531	12837	16773	18579	21943	8.0	6.1
Kuwait d	589	1312	2282	2373	2848	18.3	12.0
Lebanon b, d	...	1210	1603	1607	2017	19.4	16.5
Malaysia	2404	4610	7245	8505	10612	5.6	7.2
Mexico b	5374	10989	16457	18462	21901	6.3	7.8
Morocco	1096	1941	2774	2832	4622	16.8	14.6
New Zealand	756	1204	2200	2329	2841	8.7	9.2
Nigeria d	658	1212	2963	4261	6989	13.9	23.7
Norway	2090	2956	4823	5239	6770	8.6	8.4
Oman d	506	1158	1104	1230	1657	22.6	10.3
Pakistan	1568	1882	3656	4131	4518	17.3	13.9
Peru	668	998	1654	1795	2466	13.5	12.2
Philippines d	1665	3104	3860	4073	4300	8.4	7.4
Russian Federation b, d	-	9262	19154	23377	26884	20.7	12.0
Saudi Arabia	3487	5663	9138	9851	12445	18.7	13.8
Senegal d	372	394	950	917	1292	25.9	29.0
Singapore	4702	4890 |	6408	6985	8332	3.6	3.2
retained imports	1789	2369 |	3745	4255	4768	3.1	4.0
South Africa b	1219	1650	3048	3687	4832	6.2	6.0
Sri Lanka d	549	934	1131	1333	1509	13.0	13.4
Sudan	...	376	957	1090	...	24.2	13.5
Switzerland	5920	5693	8248	8854	10375	6.9	6.4
Syrian Arab Republic	791	850 |	1719	1810	...	22.3	15.8
Taipei, Chinese	6203	7899	9480	9659	10780	5.6	4.9
Thailand	3230	4484	7120	7347	8446	7.2	5.5
Tunisia	819	968	1461	1574	2298	11.3	12.1
Turkey d	2806	4133	6480	7286	10055	7.6	5.9
Ukraine	-	1092	3075	3574	4582	7.8	7.6
United Arab Emirates d	1726	3857	7241	8811	11295	11.0	8.6
United States	39966	69115	95803	103648	109403	5.5	5.4
Viet Nam d	236	1269	3668	4411	6086	8.1	10.0
Yemen d	...	...	1201	1084	1700	...	26.2

a Or nearest year.
b Imports are valued f.o.b.
c Figures refer to fiscal year.
d Includes Secretariat estimates.
e Beginning 2000, imports are valued f.o.b.
f See the Metadata for information on intra-EU (27) imports.

2.1 Food

Table II.18

Exports of food of regions by destination, 2007

(Million dollars and percentage)

	Value	Share in region's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**913.0**	**100.0**	**100.0**	**100.0**	**100.0**	**11**	**11**	**21**
Europe	.	.	.	.	.	.	.	.
World	**435.4**	**100.0**	**100.0**	**46.6**	**47.7**	**12**	**9**	**19**
Europe	352.7	78.3	81.0	36.5	38.6	12	9	19
North America	21.3	5.9	4.9	2.7	2.3	9	13	8
Asia	19.2	5.6	4.4	2.6	2.1	8	7	17
Commonwealth of Independent States (CIS)	15.0	2.2	3.4	1.0	1.6	19	25	24
Africa	12.5	3.4	2.9	1.6	1.4	9	12	21
Middle East	9.7	2.8	2.2	1.3	1.1	8	6	18
South and Central America	4.1	1.4	0.9	0.6	0.4	6	19	17
Asia	.	.	.	.	.	.	.	.
World	**164.3**	**100.0**	**100.0**	**17.9**	**18.0**	**11**	**11**	**23**
Asia	87.3	59.2	53.2	10.6	9.6	10	8	20
Europe	27.2	14.0	16.5	2.5	3.0	14	14	30
North America	23.3	15.0	14.2	2.7	2.5	10	13	14
Middle East	10.8	5.5	6.6	1.0	1.2	14	17	30
Africa	8.5	3.2	5.2	0.6	0.9	19	9	37
Commonwealth of Independent States (CIS)	4.5	1.4	2.7	0.2	0.5	23	19	34
South and Central America	2.1	0.9	1.3	0.2	0.2	16	18	42
North America	.	.	.	.	.	.	.	.
World	**134.1**	**100.0**	**100.0**	**18.5**	**14.7**	**8**	**13**	**22**
North America	58.6	41.0	43.7	7.6	6.4	9	13	13
Asia	38.4	32.1	28.6	5.9	4.2	6	11	26
Europe	13.6	11.8	10.2	2.2	1.5	5	11	18
South and Central America	10.0	6.2	7.5	1.1	1.1	11	15	36
Africa	6.3	3.7	4.7	0.7	0.7	11	15	63
Middle East	4.5	3.5	3.4	0.7	0.5	7	38	46
Commonwealth of Independent States (CIS)	2.0	1.3	1.5	0.2	0.2	10	-1	50
South and Central America	.	.	.	.	.	.	.	.
World	**110.8**	**100.0**	**100.0**	**10.6**	**12.1**	**13**	**12**	**24**
Europe	36.2	34.0	32.7	3.6	4.0	13	12	26
Asia	21.1	14.8	19.0	1.6	2.3	18	4	30
South and Central America	17.7	19.6	16.0	2.1	1.9	10	14	34
North America	16.7	20.8	15.1	2.2	1.8	8	13	11
Africa	7.0	3.4	6.4	0.4	0.8	24	18	23
Middle East	6.2	4.3	5.6	0.5	0.7	18	22	21
Commonwealth of Independent States (CIS)	5.6	2.5	5.0	0.3	0.6	25	21	3
Africa	.	.	.	.	.	.	.	.
World	**26.6**	**100.0**	**100.0**	**3.3**	**2.9**	**9**	**6**	**12**
Europe	13.4	51.4	50.3	1.7	1.5	9	8	11
Africa	5.9	20.1	22.3	0.7	0.6	11	12	13
Asia	2.9	13.4	10.9	0.4	0.3	6	-9	16
Middle East	1.5	6.7	5.7	0.2	0.2	7	19	8
North America	1.3	5.6	4.8	0.2	0.1	7	-6	-1
Commonwealth of Independent States (CIS)	0.6	1.2	2.3	0.0	0.1	19	-11	44
South and Central America	0.2	0.6	0.6	0.0	0.0	9	29	72

Table II.19

Imports of food of selected economies by origin, 2007

(Million dollars and percentage)

Canada a						United States					
	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**28026**	**100.0**	**9**	**12**	**14**	**World**	**109573**	**100.0**	**7**	**8**	**6**
North America	17584	62.7	8	10	16	North America	39428	36.0	5	5	5
Europe	3582	12.8	10	15	14	Asia	25879	23.6	9	12	8
Asia	3541	12.6	12	13	13	Europe	21630	19.7	8	9	7
South and Central America	2664	9.5	11	19	10	South and Central America	19760	18.0	7	11	5
Africa	460	1.6	11	25	7	Africa	1764	1.6	6	0	5
CIS	118	0.4	12	32	7	CIS	715	0.7	8	21	7
Middle East	77	0.3	9	8	18	Middle East	397	0.4	9	7	18
Economy						Economy					
United States	16362	58.4	7	12	14	Canada	27323	24.9	3	2	3
European Union (27)	3300	11.8	10	15	13	European Union (27)	20012	18.3	8	9	6
Mexico	1151	4.1	22	45	43	Mexico	12103	11.0	9	12	8
China	1020	3.6	24	19	17	China	5907	5.4	21	25	13
Brazil	704	2.5	12	25	6	Brazil	4226	3.9	9	10	6
Above 5	**22537**	**80.4**	**-**	**-**	**-**	**Above 5**	**69571**	**63.5**	**-**	**-**	**-**
Thailand	523	1.9	8	17	19	Chile	3968	3.6	9	17	1
Chile	522	1.9	15	19	14	Thailand	3597	3.3	4	18	4
Australia	422	1.5	6	8	2	Indonesia	3219	2.9	11	13	6
New Zealand	333	1.2	9	9	18	Australia	2773	2.5	7	1	5
Colombia	259	0.9	7	16	8	New Zealand	1899	1.7	5	4	2
Indonesia	235	0.8	11	19	3	Colombia	1806	1.6	4	4	4
Costa Rica	194	0.7	12	12	12	Costa Rica	1509	1.4	5	27	7
India	188	0.7	10	34	1	Ecuador	1481	1.4	6	10	2
Guatemala	185	0.7	9	29	2	Viet Nam	1467	1.3	15	8	18
Argentina	182	0.7	7	7	26	Malaysia	1442	1.3	17	24	27
Malaysia	172	0.6	16	2	56	India	1393	1.3	3	4	1
Viet Nam	153	0.5	16	7	12	Guatemala	1268	1.2	6	1	16
Peru	141	0.5	14	23	9	Argentina	1240	1.1	6	18	4
South Africa	136	0.5	6	6	1	Philippines	1088	1.0	6	9	8
Ecuador	128	0.5	8	25	21	Peru	967	0.9	17	26	11
Russian Federation	109	0.4	11	36	8	Japan	940	0.9	4	9	9
Turkey	108	0.4	24	30	49	Honduras	723	0.7	6	1	16
Morocco	96	0.3	12	22	39	Korea, Republic of	667	0.6	7	5	3
Switzerland	93	0.3	13	16	8	Russian Federation	656	0.6	8	22	6
Côte d'Ivoire	90	0.3	14	26	15	Dominican Republic	626	0.6	4	22	0
Philippines	88	0.3	10	18	6	Turkey	611	0.6	12	9	18
Korea, Republic of	84	0.3	8	9	7	Taipei, Chinese	541	0.5	1	0	10
Japan	84	0.3	6	17	11	Côte d'Ivoire	505	0.5	8	22	6
Uruguay	82	0.3	7	45	111	Nicaragua	427	0.4	8	22	15
Taipei, Chinese	77	0.3	9	6	17	Switzerland	423	0.4	9	16	53
Canada	67	0.2	...	22	12	Uruguay	395	0.4	21	36	8
Norway	51	0.2	1	4	21	Norway	362	0.3	8	33	27
Honduras	41	0.1	21	17	28	South Africa	283	0.3	1	4	9
Nicaragua	36	0.1	16	5	55	Israel	233	0.2	7	6	8
Nigeria	35	0.1	32	489	51	El Salvador	220	0.2	2	10	31
Hong Kong, China	29	0.1	3	1	4	Panama	178	0.2	2	3	4
Jamaica	27	0.1	2	9	13	Fiji	176	0.2	22	1	13
Iran, Islamic Rep. of	26	0.1	4	9	8	Bangladesh	175	0.2	2	36	15
Israel	24	0.1	13	4	11	Singapore	170	0.2	3	11	25
Singapore	19	0.1	7	17	26	Bolivarian Rep. of Venezuela	149	0.1	7	5	8
Above 40	**27575**	**98.4**	**-**	**-**	**-**	**Above 40**	**107150**	**97.8**	**-**	**-**	**-**

Table II.20

Leading exporters and importers of food, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	406.83			43.8	44.6	12	7	9	19
extra EU (27) exports	87.93			10.7	9.6	10	7	12	16
United States	87.59	17.6	13.4	12.6	9.6	7	3	12	27
Brazil	42.10	4.2	2.8	3.0	4.6	19	13	13	23
China	33.15	1.4	2.5	3.1	3.6	14	18	13	19
Canada	31.86	3.5	3.5	4.1	3.5	9	5	12	18
Argentina	28.12	2.3	2.2	2.7	3.1	14	13	11	36
Thailand	17.69	1.3	2.1	2.3	1.9	9	3	15	20
Australia	17.57	3.3	2.5	2.9	1.9	5	5	5	2
Indonesia	16.31	0.7	0.9	1.3	1.8	17	15	16	42
Malaysia	16.20	0.9	1.1	1.3	1.8	17	3	14	45
Mexico	14.62	0.9	1.0	1.9	1.6	9	13	17	9
New Zealand	13.44	1.1	1.4	1.3	1.5	13	9	1	23
India	13.20	1.1	0.9	1.2	1.4	14	16	14	29
Russian Federation a	12.62			0.9	1.4	19	30	23	45
Chile	9.65	0.3	0.6	1.0	1.1	12	14	15	13
Above 15	**760.96**	**-**	**-**	**83.3**	**83.3**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	436.38			42.5	45.3	12	7	9	20
extra EU (27) imports	117.48			12.2	12.2	11	6	9	21
United States	87.50	8.8	8.9	10.9	9.1	8	9	10	9
Japan	55.28	7.2	10.1	10.3	5.7	2	2	3	6
China	32.29	1.4	1.4	1.9	3.3	20	2	6	41
Russian Federation a, b	25.18			1.8	2.6	17	24	21	16
Canada b	23.25	1.8	2.1	2.6	2.4	10	11	14	16
Mexico b	18.24	1.4	1.3	1.8	1.9	12	7	13	22
Korea, Republic of	15.69	0.9	1.2	1.6	1.6	11	6	12	20
Saudi Arabia	11.83	1.8	1.0	1.1	1.2	12	31	8	26
Hong Kong, China	11.19	1.2	1.9	1.9	1.2	3	1	7	18
retained imports	7.89	1.0	1.2	1.2	0.8	4	2	4	14
United Arab Emirates a	10.49	0.4	0.5	0.8	1.1	16	17	22	27
Switzerland	8.67	1.2	1.3	1.0	0.9	10	4	7	18
Malaysia	8.55	0.5	0.6	0.7	0.9	13	2	16	25
Indonesia	7.85	0.6	0.3	0.7	0.8	13	7	13	44
Australia b	7.65	0.4	0.6	0.7	0.8	13	13	12	23
Above 15	**756.74**	**-**	**-**	**79.7**	**78.5**	**-**	**-**	**-**	**-**

a Includes Secretariat estimates.
b Imports are valued f.o.b.

Table II.21

Exports of food of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	315559	432811	682768	755657	913020	6.9	6.7
Argentina	6949	11491	18635	20677	28115	43.6	50.3
Australia	7937	12583	17075	17937	17574	19.7	12.4
Belarus	-	495	1319	1478	1762	6.8	7.2
Brazil	8697	12808	30432	34341	42099	23.3	26.2
Cameroon b	409	272	418	430	472	14.9	13.1
Canada	10898	17630	24282	27108	31864	6.4	7.6
Chile	1965	4424	7440	8555	9651	23.0	14.1
China	7868	13559	24635	27864	33152	5.4	2.7
Colombia	2222	2502	3611	3859	4576	19.2	15.3
Costa Rica	848	1648	2122	2447	2845	28.1	30.4
Côte d'Ivoire	...	1806	2770	2856	3185	46.4	37.5
Croatia	...	394	918	1177	1291	8.9	10.4
Ecuador	1198	1758	2785	3431	3742	35.7	27.1
Egypt	251	377	932	898	1268	8.0	7.8
Ethiopia	186	321	681	736	780	66.0	60.8
European Union (27)	-	189387	313560	342440	406827	7.7	7.6
intra-EU (27) exports	-	143213	245975	266676	318900	8.6	8.8
extra-EU (27) exports	-	46174	67585	75764	87927	5.9	5.2
Ghana b	...	513	1570	1516	...	30.7	40.9
Guatemala	778	1518	1820	2010	2576	56.3	37.2
Honduras	649	730	821	1079	1246	21.8	22.3
Hong Kong, China	3385	3664	2594	2988	3777	1.8	1.1
domestic exports	742	363	422	445	478	1.5	2.6
re-exports	2644	3302	2172	2543	3298	1.8	1.0
Iceland	1266	1240	1807	1829	2059	65.2	43.1
India	2782	5398	9002	10261	13204	12.7	9.1
Indonesia	2853	5526	9872	11453	16308	8.4	13.8
Iran, Islamic Rep. of b	...	818	2108	2690	3286	2.8	3.8
Israel	1022	824	1307	1393	1799	2.6	3.3
Japan	1706	2170	2949	3147	3615	0.5	0.5
Kenya	502	927	1306	1483	1745	53.5	42.8
Korea, Republic of	2162	2665	3009	2985	3343	1.5	0.9
Malawi b	374	331	394	431	584	87.4	82.2
Malaysia	3434	5440	9800	11175	16203	5.5	9.2
Mexico	3057	8179	11482	13473	14623	4.9	5.4
Morocco	1105	1596	2370	2414	2587	21.5	17.6
New Zealand	4272	5825	10779	10929	13442	43.9	49.8
Nicaragua	251	534	697	830	962	82.8	80.0
Norway	2365	3827	5411	6024	6822	6.4	5.0
Pakistan	516	964	1933	2002	2116	10.7	11.9
Panama	258	569	819	854	925	66.2	79.5
Paraguay	502	564	1277	1445	2219	64.9	79.7
Peru	703	1736	2911	3490	3839	24.7	13.7
Philippines	1532	1815	2504	2589	2938	4.6	5.8
Russian Federation b	-	3805	7059	8697	12619	3.6	3.6
Serbia	...	...	...	1224	1642	...	18.6
Serbia and Montenegro	...	290	887	...	...	16.9	17.5
Singapore	2747	3091	3795	4226	5099	2.2	1.7
domestic exports	1077	1092	1698	1878	2220	1.4	1.4
re-exports	1671	1999	2097	2348	2879	3.4	2.0
South Africa	...	2232	3990	3785	4213	7.4	6.0
Sri Lanka	649	...	1369	1514	1834	...	23.7
Switzerland	1756	2007	3442	4097	5281	2.5	3.1
Syrian Arab Republic	577	408	864	1899	...	8.8	17.4
Taipei, Chinese	2703	1819	2205	1917	1983	1.2	0.8
Tanzania	...	359	574	585	726	54.8	35.9
Thailand	6611	9924	12820	14684	17690	14.4	11.6
Tunisia	384	510	1088	1384	1444	8.7	9.6
Turkey b	2906	3521	7714	7932	9243	12.7	8.6
Uganda	...	241	473	523	739	52.4	45.6
Ukraine	-	1339	4232	4609	6141	9.2	12.5
United Arab Emirates b	73	2706	3510	4378	5824	5.4	3.4
United States	42422	54341	61704	69206	87593	6.9	7.5
Uruguay	670	1064	1823	2181	2388	46.4	53.1
Viet Nam b	...	3666	6566	7684	9533	25.3	19.7

a Or nearest year.

b Shares include significant exports from processing zones.

Table II.22

Imports of food of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	2306	2578	3935	4062	5473	28.1	19.8
Argentina	164	1267	814	889	1654	5.0	3.7
Australia b	1943	3245	5530	6196	7650	4.6	4.9
Bangladesh c, d	650	1254	1817	2153	3124	14.1	16.8
Belarus	-	1027	1562	1905	2091	11.9	7.3
Bolivarian Rep. of Venezuela b	739	1704	2166	2928	4045	11.7	9.7
Bosnia and Herzegovina	...	...	1226	1272	1542	...	15.8
Brazil e	2112	3665	3210	4095	5522	6.6	4.6
Canada b	7143	12027	17564	20033	23252	5.0	6.1
Chile	308	1228	1851	2348	3085	6.6	6.5
China	4619	9043	21541	22917	32290	4.0	3.4
Colombia	395	1405	1847	2277	3008	12.2	9.1
Côte d'Ivoire b	...	427	858	1006	1163	15.3	18.9
Croatia	...	653	1543	1775	2053	8.3	7.9
Cuba d	...	765	1517	1502	...	15.8	15.8
Ecuador	156	310	772	856	1145	8.3	8.4
Egypt	2903	3531	3979	3936	5242	25.2	19.4
El Salvador d	128	613	934	897	1251	12.4	14.4
European Union (27) f	-	200032	334643	363492	436381	7.8	7.8
extra-EU (27) imports	-	57170	88689	96856	117481	6.2	6.0
Guatemala	169	592 |	1140	1236	1418	12.4	10.4
Hong Kong, China	6551	9165	8823	9467	11189	4.3	3.0
retained imports	3908	5864	6651	6924	7890	16.8	20.3
India	771	2215	4681	4905	5832	4.3	2.7
Indonesia	1104	3336	4841	5455	7848	7.7	8.5
Iran, Islamic Rep. of d	...	2585	3051	3177	3884	18.6	8.4
Israel	1197	1923	2460	2724	3283	5.1	5.6
Japan	34154	48580	53637	52173	55283	12.8	8.9
Jordan	672	851	1424	1523	2028	18.5	15.0
Kazakhstan d	-	459	1263	1644	1894	9.1	5.8
Kenya	199	403	507	668	990	13.0	11.0
Korea, Republic of	3912	7722	11609	13041	15692	4.8	4.4
Kuwait d	561	1249	2195	2261	2713	17.5	11.5
Lebanon b, d	...	1107	1425	1438	1800	17.8	14.7
Malaysia	2021	3526	5884	6841	8549	4.3	5.8
Mexico b	4326	8485	13327	14998	18239	4.9	6.5
Morocco	677	1585	2195	2168	3822	13.7	12.1
New Zealand	643	1074	1994	2122	2624	7.7	8.5
Nigeria	...	1159	2864	4116	6613	13.3	22.4
Norway	1584	2221	3791	4254	5458	6.5	6.8
Oman d	486	1122	1060	1167	1573	21.9	9.8
Pakistan	1276	1524	2606	3061	2889	14.0	8.9
Peru	621	864	1431	1564	2136	11.6	10.6
Philippines d	1348	2598	3431	3648	3900	7.0	6.7
Russian Federation b, d	-	8292	17946	21782	25184	18.6	11.3
Saudi Arabia	3319	5375	8716	9388	11827	17.8	13.1
Senegal d	350	362	898	858	1221	23.8	27.4
Singapore	3685	4354 |	5639	6093	7397	3.2	2.8
retained imports	2014	2354 |	3543	3745	4519	3.1	3.8
South Africa b	846	1255	2451	3008	4072	4.7	5.1
Sri Lanka	502	...	1030	1198	1354	...	12.0
Sudan	...	360	907	1053	...	23.2	13.0
Switzerland	4371	4519	6861	7369	8667	5.5	5.4
Syrian Arab Republic	745	726 |	1404	1519	...	19.0	13.2
Taipei, Chinese	3495	5013	6619	6653	7421	3.6	3.4
Thailand	1672	2677	4700	4972	5903	4.3	3.9
Tunisia	582	706	1114	1231	1873	8.2	9.9
Turkey d	1856	2128	3284	3486	5250	3.9	3.1
Ukraine	-	882	2597	3049	3964	6.3	6.5
United Arab Emirates d	1627	3622	6794	8271	10487	10.3	7.9
United States	30055	51226	72879	80283	87503	4.1	4.3
Viet Nam d	...	814	2314	2695	3932	5.2	6.5
Yemen d	...	...	1155	1044	1655	...	25.5

a Or nearest year.

b Imports are valued f.o.b.

c Figures refer to fiscal year.

d Includes Secretariat estimates.

e Beginning 2000, imports are valued f.o.b.

f See the Metadata for information on intra-EU (27) imports.

3. Fuels and mining products

Table II.23

Exports of fuels and mining products of regions by destination, 2007

(Billion dollars and percentage)

	Value	Share in region's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**2658.6**	**100.0**	**100.0**	**100.0**	**100.0**	**17**	**28**	**15**
Europe								
World	**605.5**	**100.0**	**100.0**	**23.8**	**22.8**	**17**	**30**	**13**
Europe	486.2	79.9	80.3	19.0	18.3	17	30	11
North America	50.9	11.0	8.4	2.6	1.9	12	20	10
Asia	23.3	3.5	3.8	0.8	0.9	18	37	28
Africa	14.7	1.6	2.4	0.4	0.6	24	38	33
Middle East	8.1	0.9	1.3	0.2	0.3	24	18	9
Commonwealth of Independent States (CIS)	4.9	0.6	0.8	0.1	0.2	22	46	37
South and Central America	4.0	0.6	0.7	0.2	0.1	17	46	19
Middle East								
World	**565.4**	**100.0**	**100.0**	**23.3**	**21.3**	**16**	**26**	**12**
Asia	364.2	62.0	64.4	14.4	13.7	17	28	13
Europe	76.6	16.0	13.6	3.7	2.9	13	16	14
North America	58.3	12.6	10.3	2.9	2.2	13	17	19
Middle East	23.5	2.6	4.2	0.6	0.9	24	17	14
Africa	15.4	2.7	2.7	0.6	0.6	16	22	9
South and Central America	2.7	0.7	0.5	0.2	0.1	9	21	-10
Commonwealth of Independent States (CIS)	0.1	0.0	0.0	0.0	0.0	16	-2	7
Asia								
World	**394.8**	**100.0**	**100.0**	**14.0**	**14.9**	**19**	**30**	**18**
Asia	316.4	83.3	80.1	11.6	11.9	18	26	17
Europe	28.9	5.7	7.3	0.8	1.1	23	34	23
North America	20.7	7.0	5.2	1.0	0.8	14	34	11
Middle East	12.0	0.9	3.0	0.1	0.5	41	103	34
South and Central America	6.3	0.6	1.6	0.1	0.2	35	23	54
Africa	5.7	0.3	1.5	0.0	0.2	48	171	15
Commonwealth of Independent States (CIS)	1.1	0.2	0.3	0.0	0.0	25	27	24
Commonwealth of Independent States (CIS)								
World	**334.1**	**100.0**	**100.0**	**10.0**	**12.6**	**21**	**29**	**19**
Europe	233.8	63.4	70.0	6.3	8.8	23	30	16
Commonwealth of Independent States (CIS)	37.5	14.3	11.2	1.4	1.4	17	27	25
Asia	34.4	7.7	10.3	0.8	1.3	26	37	43
North America	16.2	7.1	4.8	0.7	0.6	15	14	6
Middle East	6.2	1.1	1.8	0.1	0.2	30	53	27
South and Central America	2.3	5.5	0.7	0.5	0.1	-10	-29	-23
Africa	0.6	0.2	0.2	0.0	0.0	23	-7	30
Africa								
World	**295.8**	**100.0**	**100.0**	**10.2**	**11.1**	**19**	**23**	**16**
Europe	107.8	46.1	36.4	4.7	4.1	15	22	10
North America	82.2	24.4	27.8	2.5	3.1	21	25	15
Asia	63.2	17.4	21.4	1.8	2.4	23	37	19
Africa	14.3	5.2	4.8	0.5	0.5	18	20	21
South and Central America	13.2	4.2	4.5	0.4	0.5	20	20	31
Middle East	1.8	0.9	0.6	0.1	0.1	12	26	-3
Commonwealth of Independent States (CIS)	0.1	0.0	0.0	0.0	0.0	9	-34	28
North America								
World	**257.5**	**100.0**	**100.0**	**11.0**	**9.7**	**15**	**24**	**16**
North America	172.4	75.4	66.9	8.3	6.5	13	16	12
Europe	32.8	9.8	12.7	1.1	1.2	20	49	30
Asia	32.7	9.5	12.7	1.0	1.2	20	45	23
South and Central America	16.4	4.3	6.4	0.5	0.6	22	43	26
Africa	1.7	0.5	0.7	0.1	0.1	19	76	49
Middle East	1.3	0.4	0.5	0.0	0.1	18	106	-3
Commonwealth of Independent States (CIS)	0.2	0.0	0.1	0.0	0.0	31	-28	78
South and Central America								
World	**205.5**	**100.0**	**100.0**	**7.9**	**7.7**	**17**	**35**	**13**
North America	78.0	48.2	38.0	3.8	2.9	13	20	8
Asia	43.4	10.6	21.1	0.8	1.6	29	61	35
South and Central America	41.7	23.5	20.3	1.8	1.6	15	20	12
Europe	37.5	14.1	18.3	1.1	1.4	22	75	5
Africa	2.2	0.5	1.1	0.0	0.1	31	61	15
Middle East	0.9	0.7	0.4	0.1	0.0	10	3	1
Commonwealth of Independent States (CIS)	0.1	0.1	0.1	0.0	0.0	4	-8	-25

3.1. Fuels

Table II.24

Imports of fuels of selected economies by origin, 2007

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
European Union (27)						United States					
Region						**Region**					
World	**661780**	**100.0**	**17**	**24**	**6**	**World**	**372251**	**100.0**	**15**	**16**	**8**
Europe	271281	41.0	16	20	5	North America	114556	30.8	14	16	6
CIS	187240	28.3	23	29	10	Africa	79778	21.4	21	25	14
Africa	85732	13.0	14	23	5	South and Central America	67496	18.1	13	8	5
Middle East	60739	9.2	10	15	1	Middle East	53764	14.4	12	16	7
South and Central America	10946	1.7	21	60	1	Europe	30413	8.2	12	6	0
North America	10870	1.6	15	13	14	CIS	15039	4.0	49	23	24
Asia	9846	1.5	25	22	3	Asia	11205	3.0	13	26	17
Economy						**Economy**					
European Union (27)	207346	31.3	17	22	6	Canada	80039	21.5	14	12	8
Russian Federation	156097	23.6	22	28	9	Bolivarian Rep. of Venezuela	39106	10.5	12	11	8
Norway	59478	9.0	14	15	3	Saudi Arabia	36452	9.8	14	16	12
Libyan Arab Jamahiriya	33190	5.0	16	28	13	Mexico	34516	9.3	15	28	1
Saudi Arabia	20295	3.1	7	7	19	Nigeria	33666	9.0	17	16	16
Algeria	20270	3.1	9	13	6	European Union (27)	26148	7.0	15	10	3
Iran, Islamic Rep. of	16674	2.5	14	23	4	Algeria	18384	4.9	30	49	14
Kazakhstan	14853	2.2	29	31	1	Angola	12867	3.5	19	38	6
Nigeria	11982	1.8	12	34	6	Russian Federation	11519	3.1	44	24	8
Azerbaijan	9768	1.5	41	117	53	Iraq	11366	3.1	8	27	4
Above 10	**549952**	**83.1**	**-**	**-**	**-**	**Above 10**	**304064**	**81.7**	**-**	**-**	**-**
Japan						China					
Region						**Region**					
World	**172777**	**100.0**	**12**	**22**	**7**	**World**	**104930**	**100.0**	**26**	**39**	**18**
Middle East	111334	64.4	13	25	4	Middle East	39242	37.4	24	35	15
Asia	47191	27.3	9	12	5	Africa	26099	24.9	32	44	24
Africa	5628	3.3	35	72	4	Asia	20584	19.6	18	21	17
CIS	5395	3.1	53	6	181	CIS	12701	12.1	46	51	17
North America	2187	1.3	0	2	3	South and Central America	5287	5.0	80	209	15
South and Central America	566	0.3	44	463	105	North America	614	0.6	29	30	85
Europe	440	0.3	22	14	142	Europe	403	0.4	6	2	8
Economy						**Economy**					
Saudi Arabia	34666	20.1	14	30	5	Saudi Arabia	13644	13.0	37	28	15
United Arab Emirates	31955	18.5	12	25	2	Angola	12880	12.3	32	66	18
Qatar	16891	9.8	16	39	15	Iran, Islamic Rep. of	11643	11.1	33	49	29
Australia	15486	9.0	14	14	10	Russian Federation	9354	8.9	43	44	1
Indonesia	12687	7.3	6	12	5	Oman	6596	6.3	11	48	8
Iran, Islamic Rep. of	12455	7.2	13	7	13	Korea, Republic of	6532	6.2	18	66	12
Kuwait	9911	5.7	10	19	9	Sudan	4143	3.9	28	27	121
Malaysia	6457	3.7	10	2	29	Kazakhstan	3226	3.1	59	127	141
Russian Federation	5210	3.0	52	6	171	Bolivarian Rep. of Venezuela	2505	2.4	80	293	11
Oman	3562	2.1	8	2	34	United Arab Emirates	2465	2.3	32	37	3
Above 10	**149280**	**86.4**	**-**	**-**	**-**	**Above 10**	**72987**	**69.6**	**-**	**-**	**-**

Table II.25

Imports of fuels of selected regions and economies from the Middle East, 2000 and 2007

(Billion dollars and percentage)

	Value		Annual percentage change			
	2000	2007	2000-07	2005	2006	2007
Asia						
Japan	47.5	111.3	13	40	25	4
Korea, Republic of	24.4	63.5	15	44	31	7
China	8.7	39.2	24	47	35	15
India	...	45.3	...	...	...	...
Taipei, Chinese	6.6	27.5	23	38	31	11
Singapore	10.4	23.1	12	33	16	9
Thailand	5.5	16.6	17	45	23	-1
Pakistan	3.5	7.6	12	36	50	5
Indonesia	2.3	4.8	11	128	20	-2
Europe	34.4	67.7	10	42	15	3
European Union (27)	31.9	60.7	10	42	15	1
Turkey a	2.2	6.9	17	51	20	22
North America	25.8	57.7	12	24	16	7
United States	24.4	53.8	12	23	16	7
Canada b	1.1	3.3	17	36	32	1

a 2005 instead of 2006.
b Imports are valued f.o.b.

Table II.26

Exports of fuels of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
World	362586	668000	1461010	1799441	2038447	10.6	15.0
Algeria	10623	21610	45264	53581	59188	98.1	98.4
Angola b	3655	7105	23310	31167	39354	89.7	98.6
Argentina	985	4642	6576	6785	6095	17.6	10.9
Australia	7473	13324	27119	29637	31648	20.9	22.4
Azerbaijan	-	1485	3337	5390	9331	85.1	88.9
Bahrain b	2313	4490	7787	9221	10809	72.5	79.3
Belarus	-	1452	5557	7563	8513	19.8	35.0
Bolivarian Rep. of Venezuela b	14447	29203	49204	58438	62555	87.1	90.4
Bolivia b	227	160	1338	2063	2306	13.0	51.4
Brazil	682	908	7100	10590	13297	1.6	8.3
Brunei Darussalam b	2137	...	4278	7356	7386	...	96.3
Cameroon b	998	987	1212	2203	2187	53.8	60.7
Canada	12672	36344	72829	77533	87540	13.1	20.9
China	5119	7855	17622	17770	19951	3.2	1.6
Colombia	2496	5636	8283	9374	10872	43.2	36.3
Côte d'Ivoire	...	737	2010	3004	2629	19.0	30.9
Croatia	...	486	1219	1567	1599	11.0	12.9
Ecuador	1409	2442	5869	7544	8279	49.6	60.1
Egypt	762	1975	5459	7629	8407	42.1	51.9
European Union (27)	-	95995	217286	268657	291536	3.9	5.5
intra-EU (27) exports	-	69486	160547	195489	207346	4.2	5.7
extra-EU (27) exports	-	26509	56739	73168	84190	3.4	5.0
Gabon	...	2168	4260	4585	...	83.4	84.1
India	522	121	10400	17881	24114	0.3	16.6
Indonesia	11239	15066	24731	27619	29210	23.0	24.8
Iran, Islamic Rep. of b	15307	25611	48269	64139	72894	89.1	84.8
Iraq b	9587	20548	23084	31458	41235	99.7	99.1
Japan	1260	1520	4454	5897	9280	0.3	1.3
Kazakhstan b	-	4567	19525	26279	32156	51.8	67.3
Korea, Republic of	697	9376	15709	20920	24631	5.4	6.6
Kuwait	6500	18141	42440	53174	59756	93.3	95.8
Libyan Arab Jamahiriya b	10608	...	30047	38142	44147	...	97.2
Malaysia	5397	9448	18760	22062	25104	9.6	14.2
Mexico	9868	16050	31886	38636	42426	9.6	15.6
Morocco	152	272	565	471	642	3.7	4.4
New Zealand	362	345	333	368	1076	2.6	4.0
Nigeria b	13191	20876	47570	54835	62496	99.5	95.4
Norway	16288	38274	69496	82521	87668	63.7	64.3
Oman b	5057	8952	16871	20512	23493	79.1	95.0
Pakistan	71	131	675	841	994	1.5	5.6
Peru	332	404	1596	1902	2410	5.7	8.6
Philippines b	225	505	775	1093	1196	1.3	2.4
Qatar b	2967	10665	23872	31226	39073	92.0	93.0
Russian Federation b	-	53095	151630	193291	225299	50.3	63.4
Saudi Arabia	40128	70857	161391	188399	205839	91.3	87.9
Singapore	9566	13403	28006	35656	41333	9.7	13.8
domestic exports	9479	13290	25205	28766	30416	16.9	19.5
re-exports	88	113	2801	6890	10917	0.2	7.6
South Africa b	1152	2664	4866	5065	6759	8.9	9.7
Sudan b	...	1088	3745	4796	7550	60.2	85.0
Switzerland	45	287	2789	3750	4089	0.4	2.4
Syrian Arab Republic	1903	3538	4375	4406	...	76.3	40.3
Taipei, Chinese	401	1657	8854	10772	13497	1.1	5.8
Thailand	192	2206	4768	6507	6840	3.2	4.5
Trinidad and Tobago b	1285	2790	6747	10718	8850	65.3	58.6
Tunisia	604	707	1357	1518	2456	12.1	16.3
Turkey b	296	294	2641	3356	6982	1.1	6.5
Ukraine	-	808	3343	2554	2630	5.5	5.3
United Arab Emirates b	14141	31723	66335	89540	100191	63.7	57.9
United States	12321	13340	26383	34881	41957	1.7	3.6
Viet Nam b	...	3825	8358	9709	10202	26.4	21.1
Yemen	...	...	5167	5747	5653	...	77.3

a Or nearest year.

b Includes Secretariat estimates.

Note: Includes economies exporting petroleum products.

Table II.27

Imports of fuels of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Argentina	333	928	1425	1604	2691	3.7	6.0
Australia b	2188	5898	13185	17518	20176	8.3	13.0
Bahrain c	1827	2107	4364	4981	5960	45.5	51.9
Bangladesh c, d	566	554	1090	1147	1738	6.2	9.3
Belarus	-	2585	5519	7324	10084	29.9	35.2
Brazil e	6045	8290	13465	17141	22320	14.8	18.5
Cameroon c	21	344	720	1010	987	23.1	26.2
Canada b	7313	12481	28859	31901	35218	5.2	9.3
Chile	1099	3014	6465	8423	11316	16.3	24.0
China	1259	20637	63947	89001	104930	9.2	11.0
Costa Rica	219	486	988	1542	1804	7.6	13.9
Côte d'Ivoire	...	838	1644	1850	2016	30.1	32.7
Croatia	...	1145	2806	3405	3929	14.5	15.2
Cuba c	...	1158	1946	2746	...	23.9	28.9
Dominican Republic b	...	1505	2451	2788	3267	15.9	23.6
Ecuador	38	281	1154	2564	2824	7.5	20.8
Egypt	243	1063	2676	3376	3971	7.6	14.7
European Union (27) f	-	218179	499767	621858	661780	8.5	11.9
extra-EU (27) imports	-	148790	339081	426296	454434	16.2	23.3
FYR Macedonia	...	290	618	760	979	13.8	18.7
Guatemala	278	620 |	1632	1901	2306	12.9	17.0
Hong Kong, China	1996	4533	7967	9772	11339	2.1	3.1
retained imports	1561	4102	7396	9141	10767	11.8	27.7
India	6495	17861	47356	62326	73541	34.7	33.9
Indonesia	1937	6071	17389	17648	21994	13.9	23.8
Iran, Islamic Rep. of c	...	311	3750	5323	4009	2.2	8.7
Israel	1354	3587	6759	7447	8926	9.5	15.1
Jamaica c	380	586	1384	1530	1645	17.6	27.9
Japan	56777	77425	133069	161691	172785	20.4	27.8
Jordan	471	194	2416	2720	2943	4.2	21.8
Kazakhstan c	-	564	2062	3051	3915	11.2	12.0
Kenya	424	642	1308	1745	1917	20.7	21.3
Korea, Republic of	11023	38077	67501	86707	96503	23.7	27.0
Lebanon b, c	...	1029	2019	2188	2737	16.5	22.3
Malaysia	1487	3940	9229	11745	12885	4.8	8.8
Mexico b	1125	5232	12164	14471	19399	3.0	6.9
Morocco	1168	2039	4460	5041	6181	17.7	19.5
New Zealand	727	1446	3167	3911	4458	10.4	14.4
Norway	1178	1193	2173	2873	3404	3.5	4.2
Pakistan	1529	3598	5299	7680	8350	33.1	25.6
Peru	327	1156	2471	2960	3829	15.6	19.0
Philippines c	1943	4095	6537	8300	10025	11.1	17.3
Russian Federation b, c	-	1639	1671	2035	2768	3.7	1.2
Senegal c	194	317	731	950	1298	20.9	29.1
Serbia	...	...	...	2595	3166	...	17.3
Serbia and Montenegro	...	745	1989	...	...	20.1	17.1
Singapore	9632	16219 |	35494	44794	52619	12.1	20.0
retained imports	9545	16106 |	32694	37904	41702	21.3	34.8
South Africa b	88	3826	7846	12678	14847	14.3	18.6
Sri Lanka c	333	551	1115	1634	2681	7.7	23.7
Switzerland	3155	3747	9053	11237	10967	4.5	6.8
Syrian Arab Republic	72	143 |	152	3112	...	3.7	27.1
Taipei, Chinese	5953	13030	28097	36633	43558	9.3	19.9
Tanzania c	...	294	721	1076	1595	18.5	29.9
Thailand	3084	7549	20943	25623	25895	12.2	16.9
Trinidad and Tobago c	143	1068	1982	2270	2567	32.3	34.5
Tunisia	493	902	1798	2218	2443	10.5	12.9
Turkey c	4622	7515	15764	23014	28771	13.8	16.9
Ukraine	-	5997	10661	12711	15984	43.0	26.3
United States	68741	139622	298037	345059	372251	11.1	18.4
Uruguay	238	530	941	1313	1235	15.3	21.6
Viet Nam c	...	2113	5366	6699	8247	13.5	13.6
Yemen c	...	...	1040	1082	1429	...	22.0

a Or nearest year.
b Imports are valued f.o.b.
c Includes Secretariat estimates.
d Figures refer to fiscal year.
e Beginning 2000, imports are valued f.o.b.
f See the Metadata for information on intra-EU (27) imports.

4. Manufactures

Table II.28

Exports of manufactures of regions by destination, 2007

(Billion dollars and percentage)

	Value	Share in region's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**9499.5**	**100.0**	**100.0**	**100.0**	**100.0**	**11**	**13**	**15**
Europe								
World	**4538.2**	**100.0**	**100.0**	**45.3**	**47.8**	**11**	**12**	**16**
Europe	3279.5	72.1	72.3	32.6	34.5	11	12	16
North America	375.8	11.2	8.3	5.1	4.0	7	7	6
Asia	375.2	8.2	8.3	3.7	3.9	12	10	17
Commonwealth of Independent States (CIS)	165.4	1.3	3.6	0.6	1.7	30	31	33
Middle East	131.4	2.4	2.9	1.1	1.4	15	5	19
Africa	116.0	2.3	2.6	1.1	1.2	13	5	21
South and Central America	70.4	1.9	1.6	0.9	0.7	8	14	22
Asia								
World	**3101.9**	**100.0**	**100.0**	**29.7**	**32.7**	**12**	**16**	**16**
Asia	1404.8	45.5	45.3	13.5	14.8	12	13	14
North America	697.4	29.1	22.5	8.6	7.3	8	16	6
Europe	637.1	18.7	20.5	5.6	6.7	14	19	20
Middle East	124.0	2.5	4.0	0.7	1.3	20	19	37
South and Central America	77.6	1.8	2.5	0.5	0.8	17	37	31
Commonwealth of Independent States (CIS)	73.3	0.4	2.4	0.1	0.8	43	35	63
Africa	72.6	1.3	2.3	0.4	0.8	22	26	33
North America								
World	**1338.0**	**100.0**	**100.0**	**20.5**	**14.1**	**5**	**12**	**9**
North America	669.9	55.5	50.1	11.4	7.1	3	8	3
Asia	253.6	18.8	19.0	3.8	2.7	5	15	9
Europe	249.9	17.4	18.7	3.6	2.6	6	14	15
South and Central America	96.0	5.7	7.2	1.2	1.0	8	22	20
Middle East	40.9	1.6	3.1	0.3	0.4	15	22	17
Africa	17.5	0.8	1.3	0.2	0.2	13	24	17
Commonwealth of Independent States (CIS)	9.8	0.2	0.7	0.0	0.1	24	33	51
Middle East								
World	**159.3**	**100.0**	**100.0**	**1.3**	**1.7**	**15**	**14**	**18**
Middle East	56.5	23.4	35.5	0.3	0.6	22	34	28
Asia	28.4	17.9	17.8	0.2	0.3	15	10	15
Europe	26.2	24.3	16.4	0.3	0.3	9	-13	11
North America	24.5	24.6	15.4	0.3	0.3	8	10	8
Africa	10.4	3.5	6.5	0.0	0.1	26	26	19
Commonwealth of Independent States (CIS)	3.7	1.8	2.3	0.0	0.0	19	31	8
South and Central America	1.2	1.1	0.8	0.0	0.0	9	17	13
South and Central America								
World	**154.2**	**100.0**	**100.0**	**1.6**	**1.6**	**11**	**10**	**15**
South and Central America	60.7	33.9	39.4	0.5	0.6	14	17	24
North America	51.4	46.0	33.3	0.7	0.5	6	3	0
Europe	23.3	13.6	15.1	0.2	0.2	13	17	25
Asia	11.6	4.9	7.5	0.1	0.1	18	0	25
Africa	4.3	1.1	2.8	0.0	0.0	27	20	22
Middle East	1.8	0.4	1.2	0.0	0.0	28	43	2
Commonwealth of Independent States (CIS)	0.6	0.0	0.4	0.0	0.0	51	58	32
Commonwealth of Independent States (CIS)								
World	**128.2**	**100.0**	**100.0**	**0.9**	**1.4**	**17**	**17**	**23**
Commonwealth of Independent States (CIS)	51.3	31.2	40.0	0.3	0.5	21	31	31
Europe	40.7	29.9	31.7	0.3	0.4	18	18	24
Asia	13.4	19.4	10.5	0.2	0.1	7	-21	8
Middle East	7.6	4.3	5.9	0.0	0.1	22	-2	46
North America	6.3	8.5	4.9	0.1	0.1	9	35	-13
South and Central America	4.0	2.5	3.1	0.0	0.0	21	36	45
Africa	3.4	3.1	2.7	0.0	0.0	15	6	8
Africa								
World	**79.8**	**100.0**	**100.0**	**0.8**	**0.8**	**12**	**9**	**15**
Europe	39.2	58.4	49.2	0.5	0.4	9	10	12
Africa	17.2	16.6	21.5	0.1	0.2	16	15	23
Asia	9.6	9.6	12.0	0.1	0.1	15	-4	14
North America	7.8	9.5	9.8	0.1	0.1	12	15	8
Middle East	3.3	3.3	4.2	0.0	0.0	15	8	21
South and Central America	1.2	1.3	1.5	0.0	0.0	14	9	32
Commonwealth of Independent States (CIS)	0.2	0.2	0.3	0.0	0.0	19	62	13

Table II.29

Trade in manufactures of the United States, the European Union (27) and China by origin and destination, 2007

(Billion dollars and percentage)

Exports							Imports					
Value	Share		Annual percentage change				Value	Share		Annual percentage change		
2007	2000	2007	2000-07	2006	2007		2007	2000	2007	2000-07	2006	2007
						United States						
909.3	**100.0**	**100.0**	**5**	**13**	**10**	**World**	**1409.5**	**100.0**	**100.0**	**6**	**9**	**4**
307.4	38.0	33.8	3	9	3	North America	327.0	27.2	23.2	3	6	4
78.4	7.5	8.6	7	21	18	South and Central America	41.2	3.1	2.9	5	1	-3
21.7	2.2	2.4	6	27	27	Brazil	16.1	1.0	1.1	8	3	-9
222.2	24.0	24.4	5	13	14	Europe	312.5	21.6	22.2	6	6	6
205.8	22.4	22.6	5	12	15	European Union (27)	292.5	20.2	20.7	6	6	7
8.4	0.3	0.9	22	32	49	CIS	6.5	0.4	0.5	7	37	-13
5.8	0.2	0.6	23	31	56	Russian Federation	4.2	0.3	0.3	7	39	-17
15.4	1.1	1.7	11	23	14	Africa	8.1	0.4	0.6	11	16	6
38.7	2.3	4.3	15	22	17	Middle East	23.2	1.5	1.6	6	9	7
238.8	26.8	26.3	5	15	9	Asia	691.1	45.7	49.0	7	12	5
44.5	1.9	4.9	20	30	18	China	327.0	10.7	23.2	18	17	11
44.0	7.2	4.8	-1	8	2	Japan	141.7	14.9	10.1	0	7	-2
104.6	13.6	11.5	2	13	4	Six East Asian traders	153.3	15.3	10.9	0	7	-3
						European Union (27)						
4249.1	**100.0**	**100.0**	**11**	**12**	**16**	**World**	**4029.7**	**100.0**	**100.0**	**11**	**12**	**16**
349.8	11.0	8.2	7	7	6	North America	233.1	9.4	5.8	3	6	13
65.6	1.9	1.5	8	14	21	South and Central America	26.2	0.7	0.7	11	7	9
25.9	0.7	0.6	9	10	31	Brazil	14.1	0.3	0.4	11	11	24
3093.7	72.5	72.8	11	12	16	Europe	3017.4	72.5	74.9	11	13	16
2842.6	66.9	66.9	11	13	16	European Union (27)	2842.6	68.5	70.5	11	13	16
153.8	1.2	3.6	30	31	33	CIS	34.8	0.6	0.9	18	12	23
106.8	0.8	2.5	30	28	36	Russian Federation	20.7	0.4	0.5	16	8	23
108.4	2.4	2.6	12	3	21	Africa	41.0	1.1	1.0	9	-4	16
115.3	2.3	2.7	14	4	18	Middle East	24.3	0.7	0.6	9	-19	13
344.2	8.0	8.1	11	10	17	Asia	647.4	14.6	16.1	12	15	18
84.4	1.1	2.0	22	22	23	China	302.4	3.3	7.5	25	23	29
48.8	1.7	1.1	5	2	5	Japan	103.5	4.3	2.6	3	5	10
116.7	3.3	2.7	8	7	13	Six East Asian traders	164.2	5.0	4.1	8	13	7
						China a						
1134.3	**100.0**	**100.0**	**26**	**28**	**27**	**World**	**677.5**	**100.0**	**100.0**	**22**	**18**	**17**
313.1	31.9	27.6	24	25	15	North America	59.3	11.8	8.7	17	23	16
36.9	2.5	3.3	32	53	47	South and Central America	5.6	0.3	0.8	38	20	30
10.6	0.5	0.9	38	58	52	Brazil	1.9	0.2	0.3	27	-7	19
301.8	21.5	26.6	30	31	30	Europe	104.9	17.5	15.5	20	22	21
284.6	20.4	25.1	30	30	30	European Union (27)	98.4	16.5	14.5	20	22	20
45.7	1.3	4.0	49	32	74	CIS	4.7	1.9	0.7	6	-37	23
26.8	0.9	2.4	45	19	83	Russian Federation	2.9	1.4	0.4	3	-37	9
34.4	2.0	3.0	35	42	41	Africa	2.6	0.2	0.4	30	11	40
41.9	2.5	3.7	33	34	51	Middle East	6.5	0.7	1.0	29	10	19
359.9	38.3	31.7	23	24	25	Asia	493.9	67.6	72.9	23	17	16
106.5	15.7	9.4	17	11	13	Japan	123.5	23.1	18.2	18	15	15
163.2	16.4	14.4	24	31	25	Six East Asian traders	253.6	37.3	37.4	22	13	15

a In 2007, China reported imports from China accounting for 12 percent of its manufacture imports For further information, see the Metadata

Table II.30

Imports of manufactures of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)	Value 2007	Share 2007	Annual percentage change 2000-07	2006	2007	United States	Value 2007	Share 2007	Annual percentage change 2000-07	2006	2007
Region						Region					
World	**4029721**	**100.0**	**11**	**12**	**16**	**World**	**1409460**	**100.0**	**6**	**9**	**4**
Europe	3017403	74.9	11	13	16	Asia	691146	49.0	7	12	5
Asia	647419	16.1	12	15	18	North America	326997	23.2	3	6	4
North America	233128	5.8	3	6	13	Europe	312456	22.2	6	6	6
Africa	40988	1.0	9	4	16	South and Central America	41150	2.9	5	1	3
CIS	34822	0.9	18	12	23	Middle East	23164	1.6	6	9	7
South and Central America	26232	0.7	11	7	9	Africa	8058	0.6	11	16	6
Middle East	24257	0.6	9	19	13	CIS	6489	0.5	7	37	13
Economy						Economy					
European Union (27)	2842557	70.5	11	13	16	China	326972	23.2	18	17	11
China	302441	7.5	25	23	29	European Union (27)	292461	20.8	6	6	7
United States	204484	5.1	3	5	12	Canada	173115	12.3	2	1	1
Japan	103493	2.6	3	5	10	Mexico	153881	10.9	5	14	7
Switzerland	88836	2.2	9	6	15	Japan	141739	10.1	0	7	2
Above 5	**3541811**	**87.9**	**-**	**-**	**-**	**Above 5**	**1088168**	**77.2**	**-**	**-**	**-**
Turkey	55911	1.4	21	16	25	Korea, Republic of	43313	3.1	1	3	1
Korea, Republic of	52266	1.3	12	19	5	Taipei, Chinese	36778	2.6	1	9	1
Taipei, Chinese	34434	0.9	5	11	6	Malaysia	30976	2.2	3	8	12
India	30105	0.7	17	18	28	India	22178	1.6	12	19	8
Singapore	23850	0.6	7	4	5	Israel	19755	1.4	7	14	8
Russian Federation	20713	0.5	16	8	23	Thailand	19207	1.4	4	9	1
Malaysia	20650	0.5	7	12	8	Singapore	16679	1.2	1	16	5
Thailand	18750	0.5	9	11	23	Brazil	16117	1.1	8	3	9
Canada	17814	0.4	7	13	24	Switzerland	13433	1.0	5	9	4
Norway	16832	0.4	9	9	15	Indonesia	10932	0.8	3	8	6
Hong Kong, China	14224	0.4	4	15	4	Viet Nam	9079	0.6	68	28	32
Brazil	14109	0.4	11	11	24	Philippines	8422	0.6	7	4	4
South Africa	14085	0.4	12	13	24	Hong Kong, China	6344	0.5	8	11	15
Israel	12243	0.3	6	2	24	Russian Federation	4184	0.3	7	39	17
Mexico	10597	0.3	13	22	21	Australia	3959	0.3	6	19	1
Indonesia	10259	0.3	4	9	13	South Africa	3947	0.3	11	22	7
Ukraine	9340	0.2	23	20	25	Pakistan	3730	0.3	7	13	3
Tunisia	9150	0.2	12	11	23	Turkey	3730	0.3	5	7	20
Viet Nam	8019	0.2	13	18	20	Bangladesh	3453	0.2	5	20	5
Morocco	7037	0.2	9	30	22	Dominican Republic	3376	0.2	2	6	9
Philippines	6855	0.2	2	4	4	Trinidad and Tobago	3211	0.2	22	12	17
Bangladesh	6644	0.2	14	31	5	Honduras	3185	0.2	3	2	3
Croatia	4766	0.1	14	17	16	Cambodia	2589	0.2	17	25	12
United Arab Emirates	4434	0.1	18	50	7	Costa Rica	2460	0.2	1	6	1
Pakistan	4383	0.1	10	8	14	Norway	2389	0.2	10	28	22
Australia	4334	0.1	6	1	17	Sri Lanka	2077	0.1	0	2	5
Saudi Arabia	4306	0.1	11	5	8	El Salvador	1797	0.1	0	9	10
Egypt	3580	0.1	16	15	25	Colombia	1781	0.1	5	7	1
Serbia	3381	0.1	...	157	51	Guatemala	1651	0.1	1	7	13
Sri Lanka	2402	0.1	6	18	19	Bolivarian Rep. of Venezuela	1379	0.1	1	19	10
Costa Rica	2327	0.1	10	7	1	Jordan	1333	0.1	52	14	8
Belarus	2132	0.1	15	23	13	Argentina	1313	0.1	3	2	4
FYR Macedonia	2024	0.1	20	23	62	Egypt	1252	0.1	10	50	8
Bosnia and Herzegovina	1779	0.0	29	34	23	Ukraine	1199	0.1	5	44	23
Argentina	1758	0.0	9	3	38	Nicaragua	1187	0.1	19	20	13
Above 40	**3997302**	**99.2**	**-**	**-**	**-**	**Above 40**	**1396562**	**99.1**	**-**	**-**	**-**

Table II.30 *(continued)*

Imports of manufactures of selected economies by origin, 2007

(Million dollars and percentage)

China a	Value	Share	Annual percentage change			Japan	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**677493**	**100.0**	**22**	**18**	**17**	**World**	**314325**	**100.0**	**6**	**8**	**6**
Asia	493894	72.9	23	17	16	Asia	195142	62.1	8	9	6
Europe	104855	15.5	20	22	21	Europe	59706	19.0	5	3	7
North America	59273	8.7	17	23	16	North America	53316	17.0	0	8	2
Middle East	6496	1.0	29	11	19	South and Central America	1820	0.6	11	14	33
South and Central America	5584	0.8	38	20	30	Africa	1797	0.6	17	11	1
CIS	4728	0.7	6	37	23	Middle East	1634	0.5	4	8	13
Africa	2616	0.4	30	11	40	CIS	909	0.3	18	3	15
Economy						Economy					
Japan	123509	18.2	18	15	15	China	112126	35.7	14	10	9
European Union (27)	98401	14.5	20	22	20	European Union (27)	54074	17.2	5	2	7
Taipei, Chinese	95199	14.1	22	16	15	United States	49786	15.8	0	9	2
Korea, Republic of	92399	13.6	25	14	16	Korea, Republic of	20873	6.6	5	13	1
China	84084	12.4	43	33	18	Taipei, Chinese	16193	5.2	0	10	2
Above 5	**493592**	**72.9**	**-**	**-**	**-**	**Above 5**	**253052**	**80.5**	**-**	**-**	**-**
United States	52017	7.7	17	25	15	Thailand	12489	4.0	8	5	8
Malaysia	22162	3.3	28	15	14	Malaysia	8332	2.7	2	5	2
Philippines	20895	3.1	48	33	28	Indonesia	5929	1.9	3	6	1
Thailand	17901	2.6	29	27	28	Philippines	5911	1.9	1	4	4
Singapore	15223	2.2	21	5	3	Switzerland	4820	1.5	6	10	2
Hong Kong, China	10757	1.6	3	10	14	Singapore	4407	1.4	2	3	1
Switzerland	4890	0.7	22	15	32	Viet Nam	3754	1.2	15	21	17
Canada	4679	0.7	13	4	27	Mexico	1813	0.6	6	9	17
Indonesia	4107	0.6	11	13	1	Canada	1717	0.5	2	8	5
Saudi Arabia	3653	0.5	35	8	19	India	1703	0.5	7	10	7
India	3276	0.5	27	5	17	South Africa	1621	0.5	19	11	0
Russian Federation	2943	0.4	3	37	9	Australia	891	0.3	1	3	24
Mexico	2576	0.4	29	20	21	Hong Kong, China	883	0.3	6	11	12
Costa Rica	2296	0.3	122	90	32	Brazil	883	0.3	8	12	30
South Africa	1956	0.3	28	7	48	Israel	800	0.3	0	3	10
Brazil	1858	0.3	27	7	19	Norway	624	0.2	11	18	28
Australia	1648	0.2	15	7	7	Saudi Arabia	549	0.2	11	27	19
Israel	1556	0.2	25	20	26	New Zealand	533	0.2	2	12	19
Norway	1095	0.2	24	18	58	Russian Federation	472	0.2	17	18	17
Viet Nam	974	0.1	46	49	44	Kazakhstan	375	0.1	27	8	29
Kazakhstan	948	0.1	16	28	79	New Caledonia	291	0.1	25	24	101
Pakistan	843	0.1	9	16	6	Chile	275	0.1	25	24	27
Colombia	625	0.1	84	1	232	Costa Rica	244	0.1	6	34	1
Belarus	558	0.1	34	13	38	Myanmar	164	0.1	30	24	29
Iran, Islamic Rep. of	486	0.1	31	14	44	Turkey	153	0.0	14	18	6
Turkey	391	0.1	28	1	37	Bangladesh	145	0.0	9	5	14
Morocco	373	0.1	32	34	11	Colombia	145	0.0	24	6	129
Argentina	364	0.1	16	13	4	Iran, Islamic Rep. of	143	0.0	17	81	63
New Zealand	275	0.0	6	6	3	Cambodia	136	0.0	17	13	15
Qatar	263	0.0	19	27	24	French Polynesia	130	0.0	2	29	6
Ukraine	243	0.0	7	65	36	Pakistan	111	0.0	8	4	5
Macao, China	211	0.0	13	8	1	Sri Lanka	93	0.0	1	11	4
United Arab Emirates	193	0.0	62	9	10	Dominican Republic	81	0.0	22	6	75
Kuwait	185	0.0	6	11	18	Jordan	74	0.0	1	3	9
Chile	169	0.0	25	59	22	Morocco	55	0.0	16	48	21
Above 40	**676181**	**99.8**	**-**	**-**	**-**	**Above 40**	**313800**	**99.8**	**-**	**-**	**-**

a In 2007, China reported imports from China accounting for 12 percent of its manufacture imports. For further information, see the Metadata.

Table II.31

Leading exporters and importers of manufactures, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	4249.1			42.8	44.7	11	6	12	16
extra EU (27) exports	1406.5			14.2	14.8	11	9	10	17
China a	1134.8	0.8	1.9	4.7	11.9	26	29	28	27
United States	909.4	13.0	12.1	13.8	9.6	5	10	13	10
Japan	640.9	11.2	11.5	9.6	6.7	5	4	7	9
Hong Kong, China	331.2	1.6	3.2	4.1	3.5	8	12	9	9
domestic exports	12.3	1.2	1.1	0.5	0.1	8	8	2	22
re exports	318.9	0.4	2.0	3.6	3.4	9	12	10	10
Korea, Republic of	330.4	1.4	2.5	3.3	3.5	11	12	12	14
Singapore	227.1	0.8	1.6	2.5	2.4	10	12	16	6
domestic exports	104.4	0.4	1.0	1.3	1.1	7	10	13	4
re exports	122.7	0.3	0.6	1.2	1.3	12	14	18	8
Canada	224.5	2.7	3.1	3.7	2.4	4	9	4	4
Taipei, Chinese	209.6	1.6	2.6	3.0	2.2	6	7	12	9
Mexico a	204.2	0.4	1.1	3.0	2.1	6	10	15	8
Switzerland	155.5	2.4	2.5	1.5	1.6	12	7	11	16
Malaysia a	125.0	0.2	0.7	1.7	1.3	7	10	12	6
Thailand	116.5	0.1	0.6	1.1	1.2	12	16	17	18
India	92.4	0.5	0.5	0.7	1.0	16	28	13	16
Turkey b	85.4	0.1	0.4	0.5	0.9	21	12	16	23
Above 15	**8716.9**	**-**	**-**	**92.4**	**91.8**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	4029.7			39.7	41.0	11	6	12	16
extra EU (27) imports	1187.2			12.5	12.1	10	8	10	17
United States	1409.6	11.2	15.4	19.7	14.3	6	9	9	4
China a, c	677.6	1.1	1.7	3.5	6.9	22	15	18	17
Hong Kong, China	333.6	1.5	2.9	3.9	3.4	8	11	11	10
retained imports	14.7	1.1	0.9	0.5	0.1	6	14	38	5
Japan	314.4	2.3	4.1	4.3	3.2	6	8	8	6
Canada d	293.8	3.7	3.8	4.1	3.0	6	12	10	7
Mexico a, d	227.9	1.5	1.3	3.0	2.3	6	11	14	8
Korea, Republic of	206.2	0.9	1.8	2.0	2.1	11	14	12	16
Singapore	188.1	1.2	1.8	2.2	1.9	8	11	15	8
retained imports	65.4	0.8	1.2	1.1	0.7	2	7	11	6
Russian Federation b, d	185.6			0.6	1.9	29	30	33	40
Taipei, Chinese	142.6	0.9	1.5	2.2	1.5	4	4	5	4
Switzerland	132.2	2.3	2.4	1.4	1.3	10	7	8	18
Australia d	118.1	1.3	1.3	1.2	1.2	10	12	6	17
Malaysia a	110.7	0.6	0.9	1.4	1.1	7	8	12	10
Turkey b	106.6	0.3	0.6	0.8	1.1	16	15	15	19
Above 15	**8158.0**	**-**	**-**	**86.6**	**83.0**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones

b Includes Secretariat estimates.

c In 2007, China reported imports of manufactures from China amounting to $84.1 billion. For further information, see the Metadata.

d Imports are valued f.o.b.

Table II.32

Exports of manufactures of selected economies, 1990-2007

(Billion dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	2391.2 |	4696.2	7297.0	8257.7	9499.5	74.8	69.8
Argentina	3.57	8.53	12.28	14.67	17.25	32.4	30.8
Australia	7.10	15.16	21.63	22.20	26.13	23.7	18.5
Bangladesh b, c	1.21	5.88	8.71	11.01	11.58	92.0	93.0
Belarus	-	4.88	8.30	9.92	12.91	66.6	53.0
Brazil	16.14	31.65	61.77	68.41	75.82	57.5	47.2
Cambodia c	...	1.33	3.01	3.43	3.99	95.7	97.4
Canada	73.31	175.64	206.26	215.40	224.50	63.5	53.6
Chile	0.83	2.79	5.14	6.00	6.69	14.5	9.8
China d	44.31	219.86	700.34	895.43	1134.80	88.2	93.2
Colombia	1.70	4.24	7.32	8.68	11.75	32.5	39.2
Costa Rica c, d	0.39	3.98	4.57	5.36	6.08	67.8	65.0
Croatia	...	3.21	5.99	6.80	8.42	72.5	68.1
Dominican Republic c, d	1.51 |	5.03	5.31	5.64	6.19	87.7	85.5
Egypt c	1.47	1.92	3.73	4.66	5.82	40.9	35.9
El Salvador c, d	0.33	2.25	2.68	2.90	2.99	76.5	75.2
European Union (27)	-	2012.01	3280.33	3662.93	4249.05	82.0	79.9
intra-EU (27) exports	-	1345.41	2180.73	2457.53	2842.56	80.7	78.5
extra-EU (27) exports	-	666.61	1099.61	1205.39	1406.50	84.9	82.8
Guatemala c	0.28	0.87 |	3.05	3.32	3.42	32.1	49.5
Hong Kong, China	75.64	192.50	279.91	304.75	331.16	95.0	94.8
domestic exports	27.41	22.14	16.11	15.76	12.26	94.1	67.7
re-exports	48.23	170.35	263.80	288.99	318.89	95.1	96.3
India e	12.52	32.76	70.38	79.45	92.36	77.3	63.6
Indonesia d	9.04	36.94	39.41	44.73	48.61	56.5	41.2
Iran, Islamic Rep. of c	0.69	1.98	5.00	6.07	7.44	6.9	8.7
Israel e	10.43	29.55	40.40	44.30	50.67	94.1	93.7
Japan	275.15	449.69	546.42	586.52	640.88	93.8	89.9
Jordan	0.59	0.95	3.08	3.60	4.49	50.2	78.9
Kazakhstan c	-	1.45	3.34	4.23	6.09	16.4	12.8
Korea, Republic of	60.60	154.90	258.20	290.13	330.41	89.9	88.9
Malaysia d	15.82	78.93	104.86	117.91	125.01	80.4	70.9
Mexico d	25.26	138.65	165.00	189.13	204.22	83.3	75.1
Morocco d	2.21	4.76	7.05	8.24	9.65	64.1	65.9
New Zealand	2.39	3.99	6.60	6.72	7.47	30.0	27.7
Norway	11.13	13.32	18.79	19.27	24.54	22.2	18.0
Pakistan c	4.39	7.64	13.03	13.77	14.29	84.7	80.1
Philippines c, d	5.59	34.77	36.75	40.84	43.54	87.4	86.3
Russian Federation c	-	24.81	50.81	58.48	69.06	23.5	19.4
Saudi Arabia	3.66	5.96	17.10	20.14	24.84	7.7	10.6
Serbia	...	...	...	4.05	5.79	...	65.6
Serbia and Montenegro	...	1.05	2.90	...	...	60.9	57.2
Singapore	37.49	117.68 |	185.20	214.09	227.11	85.4	75.9
domestic exports	23.20	63.28 |	89.42	100.73	104.40	80.4	66.9
re-exports	14.28	54.40 |	95.78	113.36	122.72	92.0	85.7
South Africa c, e	8.32	20.23	30.66	32.17	38.14	67.5	54.6
Sri Lanka c	1.02	4.14	4.32	4.78	5.28	76.3	68.2
Switzerland	59.59	72.43 |	120.29	133.81	155.49	90.0	90.4
Taipei, Chinese	62.03	141.04	171.74	191.80	209.59	95.1	89.3
Thailand	14.58	51.66	84.30	98.32	116.46	74.8	76.1
Trinidad and Tobago	0.56	1.23	2.52	2.93	3.82	28.8	25.3
Tunisia c	2.42	4.50	7.86	8.39	10.58	77.0	70.4
Turkey c	8.78	22.31	59.76	69.39	85.39	80.3	79.6
Ukraine	-	9.77	23.46	27.60	36.23	67.1	73.6
United Arab Emirates c	2.86	13.46	40.52	42.67	55.28	27.0	32.0
United States	290.49	648.91	732.47	828.62	909.39	83.0	78.2
Viet Nam c	...	6.18	16.18	20.38	25.85	42.6	53.4

a Or nearest year.

b Figures refer to fiscal year.

c Includes Secretariat estimates.

d Includes significant exports from processing zones.

e Includes significant exports of diamonds. For the most recent year, the share of diamonds in exports of manufactures was 13 per cent for India , 45 per cent for Israel and 8 per cent for South Africa.

Table II.33

Imports of manufactures of selected economies, 1990-2007

(Billion dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	6.66	6.10	15.57	16.16	20.70	66.5	74.9
Argentina	3.10	21.91	24.77	29.57	38.07	87.1	85.0
Australia b	32.40	59.08	95.05	101.02	118.06	83.0	75.8
Bangladesh c, d	1.92	5.14	8.79	9.99	10.42	57.9	56.0
Belarus	-	4.24	7.73	10.73	13.87	49.0	48.4
Bolivarian Rep. of Venezuela b	5.05	11.81	18.92	26.57	36.53	81.0	87.2
Brazil e	12.62	41.01	52.95	64.12	85.19	73.4	70.6
Canada b	92.90	200.75	248.05	273.49	293.81	83.6	77.3
Chile	5.29	11.86	20.05	22.48	26.38	64.1	56.0
China f	42.39	169.88	493.14	579.50	677.63	75.5	70.9
Colombia	4.28	9.19	17.58	21.53	27.01	79.6	82.1
Costa Rica d, f	1.50	5.28	8.00	8.51	9.61	82.8	74.2
Côte d'Ivoire	...	1.15	2.66	2.41	2.85	41.1	46.2
Croatia	...	5.78	13.53	15.47	18.86	73.3	73.0
Dominican Republic b, d, f	2.07	7.01	6.21	8.00	8.79	73.9	63.6
Ecuador	1.51	2.63	7.44	8.40	9.12	70.8	67.2
European Union (27) g	-	1953.94	3098.95	3470.78	4029.72	75.7	72.3
extra-EU (27) imports	-	615.86	919.60	1015.48	1187.16	67.2	60.8
Guatemala f	1.14	3.43	7.48	8.47	8.64	71.7	63.6
Hong Kong, China	70.53	192.66	275.03	304.53	333.63	90.0	90.1
retained imports	22.30	22.31	11.23	15.54	14.73	63.9	37.9
India h	12.17	22.44	67.54	78.55	100.40	43.6	46.3
Indonesia d, f	16.64	30.48	47.65	52.80	57.00	69.9	61.7
Iran, Islamic Rep. of d	15.49	9.96	26.83	27.81	33.36	71.6	72.5
Iraq d	...	...	...	25.42	30.17	...	94.3
Israel h	11.68	29.04	34.19	35.71	42.04	77.1	71.2
Japan	100.28	212.67	276.35	297.44	314.43	56.0	50.6
Jordan	1.34	2.65	6.03	6.53	7.75	57.5	57.4
Kazakhstan d	-	3.69	13.57	18.41	26.11	73.2	79.7
Kenya	1.40	1.72	3.91	4.54	5.58	55.3	62.1
Korea, Republic of	44.11	98.16	158.10	177.61	206.19	61.2	57.8
Kuwait d	2.61	5.55	12.67	13.13	20.26	77.5	85.7
Lebanon b, d	...	3.48	5.51	5.38	6.90	55.8	56.3
Malaysia f	22.87	68.13	90.51	101.00	110.68	83.1	75.3
Mexico b, f	32.49	149.80	185.24	211.56	227.88	85.9	80.8
Morocco f	4.22	7.25	12.86	14.59	18.71	62.9	59.0
New Zealand	7.56	10.81	20.07	19.25	22.53	77.7	72.9
Nigeria d	4.92	4.36	16.73	16.50	21.32	50.0	72.3
Norway	21.40	27.48	43.11	50.23	61.54	79.9	76.7
Oman d	1.81	3.46	6.80	8.54	12.95	67.5	80.4
Pakistan	3.99	5.09	14.81	16.59	17.85	46.8	54.8
Peru	1.61	5.21	8.25	10.39	13.39	70.3	66.4
Philippines d	8.96	28.83	37.80	40.18	41.83	77.9	72.1
Qatar d	1.32	2.75	8.98	13.65	19.19	84.4	87.2
Russian Federation b, d	-	31.17	100.08	132.71	185.62	69.8	83.1
Saudi Arabia	18.23	22.05	46.57	55.57	72.27	72.9	80.1
Serbia	...	...	...	8.57	12.72	...	69.3
Serbia and Montenegro d	...	2.35	7.54	...	...	63.3	64.8
Singapore	44.35	109.78	152.26	174.91	188.07	81.6	71.5
retained imports	30.07	55.39	55.56	61.55	65.35	73.4	54.5
South Africa b, d	13.43	19.21	41.70	49.03	56.28	71.7	70.5
Sri Lanka d	1.71	4.90	5.72	6.46	6.86	68.2	60.7
Switzerland	58.01	67.65	103.89	111.98	132.24	82.0	82.0
Syrian Arab Republic	1.48	2.47	5.63	5.98	...	64.7	52.1
Taipei, Chinese	36.77	110.41	131.00	137.70	142.62	78.9	65.2
Thailand	24.83	46.95	82.10	85.94	99.01	75.8	64.7
Trinidad and Tobago	0.64	1.86	2.91	3.34	3.85	56.1	51.7
Tunisia d	3.91	6.46	9.48	10.55	13.51	75.4	71.2
Turkey d	13.63	38.16	77.55	89.36	106.65	70.0	62.7
Ukraine	-	5.74	20.61	26.82	37.40	41.1	61.6
United Arab Emirates d	8.63	29.47	68.30	79.17	104.74	84.2	79.3
United States	375.65	968.21	1239.32	1350.22	1409.63	76.9	69.8
Viet Nam d	2.18	11.38	25.67	29.84	41.11	72.8	67.6

a Or nearest year.
b Imports are valued f.o.b.
c Figures refer to fiscal year.
d Includes Secretariat estimates.
e Beginning 2000, imports are valued f.o.b.
f Includes significant imports into processing zones.
g See the Metadata for information on intra-EU (27) imports.
h Includes significant imports of diamonds. For the most recent year, the share of diamonds in total imports of manufactures was 9 per cent for India and 24 per cent for Israel.

4.1. Iron and steel

Table II.34

Exports of iron and steel of selected regions and economies by destination, 2007

(Billion dollars and percentage)

	Value	Share in region/economy's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**474.2**	**100.0**	**100.0**	**100.0**	**100.0**	**19**	**18**	**27**
Europe								
World	**228.2**	**100.0**	**100.0**	**49.9**	**48.1**	**18**	**19**	**27**
Europe	183.2	80.0	80.3	39.9	38.6	18	21	30
Asia	11.8	4.4	5.2	2.2	2.5	21	-4	24
North America	11.1	8.9	4.8	4.5	2.3	8	14	-2
Middle East	9.7	2.4	4.3	1.2	2.1	28	25	22
Africa	6.5	2.1	2.8	1.1	1.4	23	24	30
Commonwealth of Independent States (CIS)	3.2	0.8	1.4	0.4	0.7	29	37	29
South and Central America	2.2	1.2	1.0	0.6	0.5	14	4	17
Asia								
World	**140.4**	**100.0**	**100.0**	**25.1**	**29.6**	**22**	**27**	**32**
Asia	79.1	68.0	56.3	17.0	16.7	18	4	28
Europe	23.1	7.9	16.4	2.0	4.9	35	123	62
North America	16.7	17.5	11.9	4.4	3.5	15	62	-4
Middle East	12.6	3.6	9.0	0.9	2.7	39	77	69
Africa	3.7	1.4	2.7	0.3	0.8	34	43	55
South and Central America	3.0	1.5	2.2	0.4	0.6	28	121	67
Commonwealth of Independent States (CIS)	2.2	0.2	1.6	0.1	0.5	61	54	102
China								
World	**51.5**	**100.0**	**100.0**	**3.1**	**10.9**	**42**	**69**	**58**
Asia	20.2	56.4	39.2	1.7	4.3	35	25	52
Europe	13.7	13.7	26.6	0.4	2.9	56	173	75
North America	7.5	23.9	14.5	0.7	1.6	32	77	1
Middle East	5.2	3.6	10.1	0.1	1.1	65	194	193
Africa	1.7	1.1	3.2	0.0	0.4	66	116	85
South and Central America	1.7	1.0	3.2	0.0	0.3	69	219	113
Commonwealth of Independent States (CIS)	1.6	0.4	3.2	0.0	0.3	93	91	190
Other economies in Asia								
World	**88.9**	**100.0**	**100.0**	**22.0**	**18.8**	**16**	**14**	**21**
Asia	58.9	69.6	66.2	15.3	12.4	15	0	22
Europe	9.4	7.1	10.5	1.6	2.0	23	83	46
North America	9.3	16.6	10.4	3.6	2.0	9	53	-7
Middle East	7.4	3.6	8.3	0.8	1.6	31	57	30
Africa	2.1	1.4	2.3	0.3	0.4	25	20	37
South and Central America	1.4	1.6	1.6	0.3	0.3	16	80	33
Commonwealth of Independent States (CIS)	0.6	0.2	0.6	0.0	0.1	38	28	9
Commonwealth of Independent States (CIS)								
World	**45.4**	**100.0**	**100.0**	**9.7**	**9.6**	**19**	**10**	**21**
Europe	17.2	26.8	37.8	2.6	3.6	25	22	26
Commonwealth of Independent States (CIS)	11.5	16.2	25.2	1.6	2.4	26	31	41
Middle East	5.8	8.3	12.8	0.8	1.2	26	-6	64
Asia	5.2	31.1	11.5	3.0	1.1	3	-43	14
Africa	2.4	5.9	5.2	0.6	0.5	17	1	7
North America	2.1	8.0	4.7	0.8	0.4	10	92	-42
South and Central America	0.9	2.9	1.9	0.3	0.2	12	58	-14

Table II.35

Imports of iron and steel of the European Union (27) and the United States by origin, 2007

(Million dollars and percentage)

European Union (27)	Value	Share	Annual percentage change			United States	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**217906**	**100.0**	**20**	**24**	**35**	**World**	**38249**	**100.0**	**10**	**30**	**-3**
Europe	170020	78.0	18	21	30	Asia	13090	34.2	14	66	-1
Asia	21311	9.8	36	106	102	Europe	8840	23.1	7	17	-3
CIS	13994	6.4	26	19	26	North America	8467	22.1	10	3	8
South and Central America	4850	2.2	21	17	38	South and Central America	4633	12.1	11	5	5
Africa	4005	1.8	19	17	22	CIS	2320	6.1	8	81	-37
North America	3217	1.5	20	7	72	Africa	845	2.2	6	60	-31
Middle East	448	0.2	14	53	-26	Middle East	54	0.1	1	46	-32
Economy						Economy					
European Union (27)	160269	73.6	18	21	29	European Union (27)	8274	21.6	7	12	7
China	11660	5.4	62	179	132	Canada	5839	15.3	10	8	12
Russian Federation	7608	3.5	24	14	28	China	5274	13.8	34	83	13
Ukraine	4878	2.2	30	25	23	Brazil	2943	7.7	11	7	-4
Turkey	4063	1.9	27	46	54	Mexico	2628	6.9	10	-7	0
Above 5	**188478**	**86.5**	**-**	**-**	**-**	**Above 5**	**24958**	**65.3**	**-**	**-**	**-**
India	2789	1.3	42	56	73	Japan	1979	5.2	4	33	-7
South Africa	2584	1.2	17	7	19	Korea, Republic of	1799	4.7	7	42	-14
Korea, Republic of	2394	1.1	25	76	127	Taipei, Chinese	1399	3.7	10	115	-17
Brazil	2344	1.1	20	20	48	India	1296	3.4	17	49	14
United States	2181	1.0	19	5	79	Russian Federation	1248	3.3	12	91	-51
Switzerland	1767	0.8	12	12	23	South Africa	814	2.1	6	37	0
Norway	1671	0.8	11	-3	35	Ukraine	746	1.9	6	81	-21
Taipei, Chinese	1474	0.7	24	103	84	Australia	510	1.3	10	86	-8
FYR Macedonia	1087	0.5	32	25	89	Trinidad and Tobago	420	1.1	25	33	153
Japan	1036	0.5	13	28	24	Bolivarian Rep. of Venezuela	387	1.0	2	-21	-25
Serbia	886	0.4	...	264	35	Dominican Republic	375	1.0	26	81	47
Bolivarian Rep. of Venezuela	789	0.4	36	27	27	Turkey	335	0.9	7	65	-70
Mexico	694	0.3	25	21	40	Thailand	281	0.7	4	71	-22
Colombia	673	0.3	21	59	29	Colombia	249	0.7	27	17	27
Egypt	668	0.3	33	54	32	Kazakhstan	246	0.6	4	-4	73
New Caledonia	565	0.3	22	76	81	Malaysia	242	0.6	19	112	-35
Belarus	547	0.3	35	58	15	Argentina	150	0.4	-3	-33	2
Kazakhstan	525	0.2	18	40	4	Norway	116	0.3	-1	44	-24
Indonesia	503	0.2	24	61	67	Chile	95	0.2	28	39	72
Chile	404	0.2	70	7	4	Switzerland	75	0.2	5	26	12
Canada	342	0.2	21	-7	110	New Zealand	75	0.2	9	82	-13
Dominican Republic	331	0.2	18	65	46	Georgia	73	0.2	53	280	107
Iran, Islamic Rep. of	319	0.1	16	60	-37	New Caledonia	73	0.2	12	77	77
Australia	286	0.1	13	161	115	Singapore	51	0.1	37	320	103
Thailand	281	0.1	12	37	52	Philippines	47	0.1	20	-10	82
Libyan Arab Jamahiriya	273	0.1	27	38	22	FYR Macedonia	39	0.1	1	...	289
Argentina	261	0.1	7	-57	90	Israel	32	0.1	-1	11	6
Malaysia	254	0.1	19	270	11	Indonesia	29	0.1	-19	115	-30
Armenia	212	0.1	63	-35	39	Hong Kong, China	26	0.1	43	121	8
Moldova	202	0.1	35	32	207	Zimbabwe	24	0.1	-5	-9	-46
Above 35	**216820**	**99.5**	**-**	**-**	**-**	**Above 35**	**38190**	**99.8**	**-**	**-**	**-**

Table II.36

Leading exporters and importers of iron and steel, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	212.37			47.1	44.8	18	14	19	27
extra EU (27) exports	52.10			11.6	11.0	18	28	12	21
China a	51.51	0.3	1.2	3.1	10.9	42	39	69	58
Japan	34.40	20.1	11.8	10.4	7.3	13	18	9	15
Russian Federation b	22.34			5.1	4.7	17	18	6	16
Ukraine	18.84			3.6	4.0	20	11	17	27
Korea, Republic of	18.80	2.2	3.4	4.7	4.0	16	23	10	19
United States	15.14	4.2	3.3	4.4	3.2	13	32	11	19
Taipei, Chinese	12.14	0.4	0.8	3.2	2.6	15	14	14	21
Brazil	10.11	1.1	3.4	2.5	2.1	16	28	4	7
Turkey b	8.73	0.0	1.4	1.3	1.8	25	3	24	21
India	8.22	0.1	0.2	0.9	1.7	30	26	27	25
South Africa	7.46	1.6	2.0	1.9	1.6	15	4	2	30
Canada	7.11	2.3	1.9	2.3	1.5	12	20	11	14
Mexico a	4.68	0.1	0.7	1.2	1.0	15	21	11	12
Thailand	3.84	0.1	0.1	0.6	0.8	23	7	12	108
Above 15	**435.68**	**-**	**-**	**92.3**	**91.9**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	217.91			40.1	43.8	20	11	24	35
extra EU (27) imports	57.64			7.3	11.6	26	16	36	52
United States	38.25	10.1	9.5	12.3	7.7	10	8	30	3
China a	24.14	2.7	2.5	6.2	4.9	14	13	18	12
Korea, Republic of	21.45	1.2	2.9	3.4	4.3	22	23	6	35
Thailand	12.46	0.6	2.4	1.8	2.5	24	38	10	58
Turkey b	11.20	0.4	1.1	1.5	2.3	25	27	21	38
Canada c	10.54	1.6	2.0	3.4	2.1	10	25	15	4
Taipei, Chinese	9.19	1.4	2.5	3.0	1.8	10	2	8	16
Russian Federation b, c	8.42			1.0	1.7	27	35	40	46
India	8.36	1.0	1.0	0.5	1.7	39	96	27	48
Japan	8.35	1.1	4.1	2.3	1.7	13	30	10	28
Iran, Islamic Rep. of b	8.28	...	...	1.0	1.7	27	19	9	51
Mexico a, c	7.88	2.2	1.0	2.5	1.6	10	21	24	1
United Arab Emirates b	7.81	0.7	0.4	0.7	1.6	34	25	52	54
Saudi Arabia	7.61	2.3	0.7	0.7	1.5	33	53	71	33
Above 15	**401.85**	**-**	**-**	**80.5**	**80.8**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones

b Includes Secretariat estimates.

c Imports are valued f.o.b.

4.2. Chemicals

Table II.37

Exports of chemicals of selected regions and economies by destination, 2007

(Billion dollars and percentage)

	Value	Share in region's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**1483.2**	**100.0**	**100.0**	**100.0**	**100.0**	**14**	**13**	**19**
Europe								
World	**883.3**	**100.0**	**100.0**	**58.5**	**59.6**	**15**	**12**	**19**
Europe	639.4	70.8	72.4	41.4	43.1	15	11	20
North America	96.3	11.8	10.9	6.9	6.5	13	14	11
Asia	63.1	8.4	7.1	4.9	4.3	12	9	15
Commonwealth of Independent States (CIS)	26.9	1.4	3.0	0.8	1.8	28	34	25
Africa	17.8	2.2	2.0	1.3	1.2	13	10	20
Middle East	17.0	2.1	1.9	1.2	1.1	13	12	18
South and Central America	15.1	2.2	1.7	1.3	1.0	10	17	24
Asia								
World	**287.0**	**100.0**	**100.0**	**17.3**	**19.4**	**16**	**15**	**21**
Asia	182.8	65.1	63.7	11.3	12.3	16	14	20
Europe	45.1	14.5	15.7	2.5	3.0	17	16	26
North America	32.2	14.2	11.2	2.5	2.2	12	14	13
Middle East	7.7	1.9	2.7	0.3	0.5	22	20	39
Africa	7.7	1.7	2.7	0.3	0.5	24	29	39
South and Central America	7.2	1.8	2.5	0.3	0.5	22	24	38
Commonwealth of Independent States (CIS)	4.4	0.7	1.5	0.1	0.3	31	30	36
Japan								
World	**65.2**	**100.0**	**100.0**	**6.0**	**4.4**	**9**	**10**	**13**
Asia	47.5	60.9	72.8	3.7	3.2	12	13	15
North America	8.3	21.1	12.7	1.3	0.6	2	0	3
Europe	8.0	15.8	12.2	1.0	0.5	5	6	7
South and Central America	0.6	1.1	0.9	0.1	0.0	6	7	28
Middle East	0.5	0.6	0.7	0.0	0.0	13	13	32
Africa	0.3	0.4	0.4	0.0	0.0	10	19	35
Commonwealth of Independent States (CIS)	0.1	0.1	0.2	0.0	0.0	25	42	17
Other economies in Asia								
World	**221.9**	**100.0**	**100.0**	**11.3**	**15.0**	**19**	**17**	**24**
Asia	135.3	67.4	61.0	7.6	9.1	17	15	21
Europe	37.1	13.8	16.7	1.6	2.5	22	19	31
North America	23.9	10.6	10.8	1.2	1.6	19	20	17
Africa	7.4	2.4	3.3	0.3	0.5	25	30	39
Middle East	7.2	2.6	3.3	0.3	0.5	23	21	40
South and Central America	6.6	2.1	3.0	0.2	0.4	25	26	39
Commonwealth of Independent States (CIS)	4.3	1.0	1.9	0.1	0.3	31	30	37
North America								
World	**199.3**	**100.0**	**100.0**	**17.6**	**13.4**	**10**	**13**	**15**
North America	72.0	39.1	36.1	6.9	4.9	9	12	6
Europe	58.5	25.3	29.4	4.5	3.9	12	15	20
Asia	43.0	23.3	21.6	4.1	2.9	9	8	18
South and Central America	20.1	10.0	10.1	1.8	1.4	10	20	25
Middle East	2.7	1.1	1.4	0.2	0.2	14	9	40
Africa	2.0	0.9	1.0	0.2	0.1	12	27	27
Commonwealth of Independent States (CIS)	0.8	0.3	0.4	0.1	0.1	15	20	38

Table II.38

Leading exporters and importers of chemicals, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	813.1			54.1	54.8	14	10	12	19
extra EU (27) exports	270.3			18.8	18.2	14	8	13	17
United States	154.4	14.8	13.3	14.1	10.4	9	6	13	14
Japan	65.2	4.7	5.3	6.0	4.4	9	10	10	13
China a	60.3	0.8	1.3	2.1	4.1	26	36	24	35
Switzerland	59.3	4.0	4.7	3.7	4.0	15	10	14	15
Korea, Republic of	37.5	0.5	0.8	2.4	2.5	15	20	15	18
Canada	34.7	2.5	2.2	2.5	2.3	13	20	13	18
Singapore	33.7	0.5	1.1	1.6	2.3	20	14	18	9
domestic exports	26.7	0.2	0.7	1.1	1.8	23	13	20	7
re exports	7.0	0.3	0.4	0.6	0.5	11	14	11	17
Taipei, Chinese	28.1	0.4	0.9	1.6	1.9	17	23	10	28
Russian Federation b	18.4			1.2	1.2	15	23	14	24
Hong Kong, China	17.1	0.5	1.5	1.8	1.2	7	8	10	10
domestic exports	1.4	0.1	0.3	0.1	0.1	8	25	13	14
re exports	15.7	0.4	1.2	1.6	1.1	7	7	10	9
India	16.3	0.3	0.4	0.7	1.1	21	30	24	16
Saudi Arabia	14.3	0.1	0.8	0.7	1.0	19	35	9	19
Thailand	12.2	0.0	0.2	0.7	0.8	17	29	17	17
Israel	10.8	0.6	0.6	0.7	0.7	15	19	19	17
Above 15	**1359.7**	**-**	**-**	**92.4**	**91.7**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	707.5			44.7	46.7	15	10	12	20
extra EU (27) imports	164.7			10.7	10.9	14	9	14	20
United States	159.4	6.2	7.7	12.5	10.5	11	14	11	9
China a	107.6	2.0	2.2	5.0	7.1	20	19	12	24
Japan	45.6	4.1	5.0	4.3	3.0	8	10	8	12
Canada c	39.0	2.2	2.5	3.3	2.6	10	13	13	9
Switzerland	36.1	2.5	2.6	2.2	2.4	15	10	9	21
Korea, Republic of	32.4	1.3	2.4	2.2	2.1	13	19	13	18
Mexico a, c	30.3	1.5	1.2	2.5	2.0	10	15	12	10
Taipei, Chinese	28.7	1.3	2.3	2.6	1.9	9	11	14	10
Brazil	23.0	2.4	1.1	1.6	1.5	13	6	13	39
Turkey b	22.4	0.8	0.9	1.2	1.5	17	15	14	21
Hong Kong, China	21.4	1.1	2.0	2.2	1.4	7	13	8	7
retained imports	5.7	0.7	0.9	0.6	0.4	6	31	3	1
Russian Federation b, c	21.0			0.8	1.4	23	34	35	15
India	21.0	...	1.0	0.8	1.4	23	47	18	28
Australia c	16.6	1.2	1.3	1.3	1.1	11	15	4	19
Above 15	**1296.4**	**-**	**-**	**85.6**	**85.6**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones
b Includes Secretariat estimates.
c Imports are valued f.o.b.

Table II.39

Leading exporters and importers of pharmaceuticals, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
European Union (27)	255.4	65.1	69.3	20	9	12	18
extra EU (27) exports	100.4	28.6	27.2	18	10	16	19
Switzerland	36.2	9.6	9.8	19	12	20	16
United States	33.5	12.1	9.1	14	8	12	15
Singapore	6.3	0.9	1.7	30	149	79	19
domestic exports	5.4	0.5	1.5	38	231	95	19
re exports	0.9	0.4	0.3	11	29	19	24
Canada	6.2	1.1	1.7	26	17	34	32
China a	6.0	1.6	1.6	19	17	19	34
India	4.4	1.1	1.2	21	22	24	31
Israel	3.5	0.4	1.0	35	52	53	11
Australia	3.3	1.1	0.9	16	29	6	25
Japan	3.2	2.5	0.9	2	6	4	0
Mexico a	1.5	0.8	0.4	8	2	4	10
Hong Kong, China	1.2	0.7	0.3	8	6	41	25
domestic exports	0.2	0.1	0.1	12	24	8	15
re exports	1.0	0.6	0.3	7	1	53	28
Brazil	0.8	0.2	0.2	17	29	31	22
Korea, Republic of	0.8	0.3	0.2	13	10	20	34
Norway	0.7	0.2	0.2	16	20	3	27
Above 15	**361.9**	**97.3**	**98.2**	**-**	**-**	**-**	**-**
Importers							
European Union (27)	204.1	51.3	55.3	20	7	11	16
extra EU (27) imports	49.1	15.3	13.3	16	3	15	11
United States	54.0	13.4	14.6	20	11	18	17
Switzerland	16.7	4.7	4.5	18	12	14	13
Canada b	10.3	3.4	2.8	15	13	20	10
Japan	9.2	4.3	2.5	10	15	4	8
Russian Federation b, c	6.8	1.1	1.8	28	48	52	20
Australia b	6.6	2.1	1.8	16	14	1	21
Turkey c	4.1	1.2	1.1	17	5	5	22
Brazil	4.0	1.6	1.1	13	13	26	32
China a	3.9	0.9	1.1	22	22	18	43
Mexico a, b	3.9	1.3	1.0	15	11	22	12
Korea, Republic of	3.1	0.7	0.9	21	15	30	23
Saudi Arabia	2.2	0.8	0.6	14	14	12	15
Ukraine	2.0	0.3	0.5	32	40	32	40
Singapore	1.7	0.6	0.5	14	72	2	7
retained imports	0.8	0.2	0.2	17	118	8	7
Above 15	**332.7**	**87.6**	**90.2**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones
b Imports are valued f.o.b.
c Includes Secretariat estimates.

4.3. Office and telecom equipment

Table II.40

Exports of office and telecom equipment of selected regions and economies by destination, 2007

(Billion dollars and percentage)

	Value	Share in region's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**1514.3**	**100.0**	**100.0**	**100.0**	**100.0**	**7**	**14**	**4**
Asia								
World	**880.9**	**100.0**	**100.0**	**47.3**	**58.2**	**10**	**15**	**10**
Asia	452.3	48.5	51.3	22.9	29.9	11	15	11
North America	204.7	29.4	23.2	13.9	13.5	6	17	2
Europe	189.4	20.0	21.5	9.5	12.5	11	11	15
South and Central America	11.3	0.9	1.3	0.4	0.7	16	34	15
Middle East	10.4	0.8	1.2	0.4	0.7	17	21	17
Commonwealth of Independent States (CIS)	6.6	0.1	0.8	0.1	0.4	40	28	55
Africa	6.1	0.3	0.7	0.2	0.4	22	26	24
China								
World	**347.7**	**100.0**	**100.0**	**4.5**	**23.0**	**35**	**27**	**21**
Asia	114.7	37.3	33.0	1.7	7.6	32	27	21
North America	108.5	34.2	31.2	1.5	7.2	33	28	11
Europe	105.8	25.2	30.4	1.1	7.0	38	23	30
South and Central America	6.2	1.4	1.8	0.1	0.4	39	58	44
Middle East	4.5	0.9	1.3	0.0	0.3	41	37	38
Commonwealth of Independent States (CIS)	4.3	0.3	1.2	0.0	0.3	61	57	49
Africa	3.7	0.6	1.1	0.0	0.2	47	45	43
Other economies in Asia								
World	**533.2**	**100.0**	**100.0**	**42.8**	**35.2**	**4**	**9**	**4**
Asia	337.6	49.7	63.3	21.2	22.3	7	11	8
North America	96.2	28.9	18.0	12.4	6.4	-3	9	-5
Europe	83.6	19.4	15.7	8.3	5.5	1	2	1
Middle East	6.0	0.8	1.1	0.3	0.4	10	13	4
South and Central America	5.2	0.8	1.0	0.3	0.3	7	20	-7
Commonwealth of Independent States (CIS)	2.4	0.1	0.4	0.1	0.2	25	-7	68
Africa	2.4	0.3	0.4	0.1	0.2	9	10	3
Europe								
World	**402.7**	**100.0**	**100.0**	**29.7**	**26.6**	**5**	**14**	**-7**
Europe	301.2	74.7	74.8	22.2	19.9	5	20	-11
Asia	38.8	11.0	9.6	3.3	2.6	3	6	7
North America	17.6	7.7	4.4	2.3	1.2	-3	-11	-3
Commonwealth of Independent States (CIS)	16.2	1.0	4.0	0.3	1.1	28	5	16
Middle East	13.4	1.8	3.3	0.5	0.9	15	-18	-7
Africa	11.5	1.9	2.9	0.6	0.8	11	10	8
South and Central America	3.3	0.9	0.8	0.3	0.2	3	0	-10
North America								
World	**204.0**	**100.0**	**100.0**	**21.5**	**13.5**	**0**	**12**	**3**
North America	94.0	44.3	46.1	9.5	6.2	0	11	5
Asia	59.0	31.2	28.9	6.7	3.9	-1	12	-2
Europe	29.2	17.4	14.3	3.7	1.9	-3	8	2
South and Central America	17.5	5.4	8.6	1.2	1.2	7	23	11
Middle East	2.3	1.1	1.1	0.2	0.2	0	0	7
Africa	1.2	0.4	0.6	0.1	0.1	6	33	-18
Commonwealth of Independent States (CIS)	0.6	0.1	0.3	0.0	0.0	11	25	17

Table II.41

Imports of office and telecom equipment of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**515385**	**100.0**	**6**	**17**	**-4**
Europe	282406	54.8	5	21	11
Asia	193497	37.5	11	15	8
North America	31657	6.1	3	11	1
South and Central America	2547	0.5	9	11	5
Middle East	1929	0.4	1	58	34
Africa	1227	0.2	13	17	16
CIS	633	0.1	22	40	80
Economy					
European Union (27)	276779	53.7	5	22	11
China	95401	18.5	31	29	19
United States	27609	5.4	4	11	2
Japan	21840	4.2	1	5	0
Korea, Republic of	20106	3.9	10	7	8
Above 5	**441735**	**85.7**	**-**	**-**	**-**
Taipei, Chinese	17023	3.3	4	7	0
Malaysia	12776	2.5	5	9	1
Singapore	8851	1.7	3	3	21
Thailand	5659	1.1	8	14	14
Philippines	4636	0.9	1	5	7
Hong Kong, China	3926	0.8	4	1	13
Turkey	2639	0.5	16	2	16
Canada	2169	0.4	4	20	7
Costa Rica	2168	0.4	9	8	3
Mexico	1877	0.4	6	10	2
Switzerland	1854	0.4	1	33	27
Indonesia	1820	0.4	5	6	13
Israel	1333	0.3	4	8	11
Norway	874	0.2	4	20	15
India	551	0.1	25	16	35
Above 20	**509891**	**98.9**	**-**	**-**	**-**

United States	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**262583**	**100.0**	**3**	**9**	**4**
Asia	201427	76.7	4	9	2
North America	45676	17.4	1	14	15
Europe	12596	4.8	3	7	2
Middle East	1530	0.6	4	15	3
South and Central America	1195	0.5	6	19	16
Africa	136	0.1	3	16	1
CIS	23	0.0	1	0	28
Economy					
China	103760	39.5	24	18	9
Mexico	38664	14.7	5	20	18
Malaysia	24172	9.2	3	6	16
Japan	20046	7.6	8	4	5
Taipei, Chinese	14640	5.6	4	16	2
Above 5	**201282**	**76.7**	**-**	**-**	**-**
Korea, Republic of	14295	5.4	5	7	4
European Union (27)	12041	4.6	3	7	3
Thailand	8727	3.3	6	7	2
Singapore	8642	3.3	7	2	4
Canada	7013	2.7	11	8	1
Philippines	3719	1.4	11	1	6
Israel	1515	0.6	4	14	1
Indonesia	1490	0.6	5	27	10
Hong Kong, China	977	0.4	9	11	2
Costa Rica	652	0.2	7	2	6
Viet Nam	462	0.2	191	99	51
Brazil	318	0.1	11	28	47
Norway	309	0.1	11	21	24
India	265	0.1	19	63	18
Switzerland	234	0.1	7	20	3
Above 20	**261941**	**99.8**	**-**	**-**	**-**

Table II.41 *(continued)*

Imports of office and telecom equipment of selected economies by origin, 2007

(Million dollars and percentage)

China a	Value	Share	Annual percentage change			Japan	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**226279**	**100.0**	**26**	**23**	**14**	**World**	**69675**	**100.0**	**2**	**3**	**1**
Asia	200703	88.7	30	23	15	Asia	57614	82.7	5	2	3
North America	12784	5.7	12	29	8	North America	8996	12.9	-7	8	-6
Europe	9641	4.3	5	18	8	Europe	2713	3.9	-8	0	-6
South and Central America	2287	1.0	118	92	29	South and Central America	232	0.3	1	31	-3
Middle East	501	0.2	24	61	40	Middle East	103	0.1	-3	-41	1
Africa	325	0.1	37	31	12	Africa	11	0.0	-3	75	-21
CIS	37	0.0	-1	12	-20	CIS	6	0.0	29	0	0
Economy						Economy					
China	42879	18.9	48	38	9	China	27096	38.9	23	2	7
Taipei, Chinese	36051	15.9	32	25	16	Taipei, Chinese	8264	11.9	-2	14	-8
Korea, Republic of	34045	15.0	34	25	14	United States	8123	11.7	-8	8	-7
Japan	28103	12.4	17	13	14	Korea, Republic of	8110	11.6	3	4	15
Philippines	19468	8.6	51	35	29	Malaysia	3940	5.7	-7	-5	-3
Above 5	**160546**	**71.0**	**-**	**-**	**-**	**Above 5**	**55534**	**79.7**	**-**	**-**	**-**
Malaysia	17163	7.6	32	14	14	Thailand	3480	5.0	5	-4	3
United States	10789	4.8	11	32	7	Philippines	2852	4.1	-5	-13	-4
Thailand	10703	4.7	35	25	36	European Union (27)	2642	3.8	-8	0	-7
European Union (27)	9390	4.2	4	18	8	Singapore	2571	3.7	-5	0	-8
Singapore	6623	2.9	20	-3	-7	Indonesia	725	1.0	-2	-14	3
Hong Kong, China	3564	1.6	7	-20	26	Mexico	503	0.7	0	3	11
Costa Rica	2269	1.0	123	93	32	Canada	370	0.5	-2	13	-15
Indonesia	1639	0.7	29	28	-1	Hong Kong, China	279	0.4	-9	-14	-1
Mexico	1295	0.6	24	14	28	Viet Nam	244	0.4	36	67	47
Canada	700	0.3	12	14	1	Costa Rica	229	0.3	6	34	0
Israel	500	0.2	24	65	40	Israel	103	0.1	-3	-41	1
Morocco	320	0.1	39	29	14	Switzerland	44	0.1	-10	9	28
Viet Nam	214	0.1	70	28	214	Norway	27	0.0	8	-4	45
Switzerland	195	0.1	23	1	15	Australia	24	0.0	-11	10	54
Australia	114	0.1	18	-6	146	Bangladesh	13	0.0	25	18	-6
Above 20	**226025**	**99.9**	**-**	**-**	**-**	**Above 20**	**69639**	**99.9**	**-**	**-**	**-**

a In 2007, China reported imports from China accounting for nearly 19 per cent of its office and telecom equipment imports. For further information, see the Metadata.

Table II.42

Leading exporters and importers of office and telecom equipment, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	394.7			29.2	26.1	5	13	15	8
extra EU (27) exports	117.9			8.7	7.8	5	17	3	4
China a	347.1	0.1	1.0	4.5	22.9	35	32	27	21
Hong Kong, China	136.2	2.8	4.3	5.2	9.0	15	20	14	9
domestic exports	1.8	2.0	1.6	0.4	0.1	11	82	1	47
re exports	134.4	0.8	2.7	4.8	8.9	17	19	14	11
United States	134.9	19.5	17.3	15.8	8.9	2	4	9	1
Singapore	119.9	3.2	6.4	7.6	7.9	7	10	16	2
domestic exports b	55.1	2.5	4.9	4.3	3.6	4	6	22	1
re exports b	64.9	0.7	1.5	3.3	4.3	10	14	11	4
Japan	103.1	21.1	22.5	11.2	6.8	1	4	2	4
Korea, Republic of	92.7	2.0	4.8	6.1	6.1	7	0	1	11
Malaysia a	68.4	1.4	2.7	5.4	4.5	4	7	13	1
Taipei, Chinese	65.4	3.2	4.7	6.0	4.3	2	0	14	1
Mexico a	53.9	0.1	1.5	3.5	3.6	7	5	22	16
Thailand	32.1	0.0	1.2	1.9	2.1	8	13	23	9
Philippines a, b	27.0	0.1	0.6	2.6	1.8	1	1	10	3
Canada	15.2	2.0	1.9	2.1	1.0	4	18	8	3
United Arab Emirates b	10.9	...	...	0.2	0.7	31	102	20	17
Israel b	6.5	0.2	0.4	0.7	0.4	1	1	12	9
Above 15	**1473.7**	**-**	**-**	**97.2**	**97.3**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	515.4			34.0	31.5	6	11	17	4
extra EU (27) imports	238.6			14.7	14.6	7	10	10	6
United States	262.1	15.9	21.1	21.3	16.0	3	10	9	3
China a, c	226.3	0.6	1.3	4.4	13.8	26	25	23	14
Hong Kong, China	142.0	2.4	4.1	5.9	8.7	13	15	16	10
retained imports	7.6	1.7	1.4	1.3	0.5	8	25	40	9
Singapore	87.3	2.6	4.5	5.4	5.3	7	12	15	2
retained imports b	22.4	1.9	2.9	2.2	1.4	0	6	25	2
Japan	69.7	2.6	3.7	6.0	4.3	2	4	3	1
Malaysia a	48.2	1.6	1.9	3.2	2.9	6	7	10	5
Korea, Republic of	45.5	1.3	2.6	3.4	2.8	4	6	7	13
Mexico a, d	43.9	0.9	1.5	2.9	2.7	6	5	18	4
Taipei, Chinese	40.3	1.4	2.5	3.8	2.5	1	5	7	3
Canada d	31.3	4.1	3.5	3.0	1.9	0	11	8	5
Philippines b, d	25.7	0.2	0.7	1.5	1.6	8	1	6	10
Thailand	21.8	0.2	1.1	1.4	1.3	7	12	9	5
Russian Federation b, d	18.9			0.3	1.2	30	32	14	32
Australia d	17.4	1.5	1.4	1.1	1.1	7	6	10	12
Above 15	**1461.4**	**-**	**-**	**93.0**	**89.2**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones

b Includes Secretariat estimates.

c In 2007, China reported imports of office and telecom equipment from China amounting to $42.9 billion. For further information, see the Metadata.

d Imports are valued f.o.b.

Table II.43

Exports of office and telecom equipment of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	298551 |	968279	1278447	1458222	1514309	15.4	11.1
Argentina	119	94	76	119	151	0.4	0.3
Australia	741	1781	1764	1759	1957	2.8	1.4
Belarus	-	99	150	90	99	1.4	0.4
Brazil	692	2317	3722	3979	2960	4.2	1.8
Canada	5622	20631	13649	14752	15175	7.5	3.6
China b	3126	43498	225964	287331	347113	17.5	28.5
Costa Rica b	0	1688	1681	2009	2513	28.8	26.9
Croatia	...	87	222	274	360	2.0	2.9
European Union (27)	-	282381	372658	426731	394699	11.5	7.4
intra-EU (27) exports	-	198419	255872	313166	276779	11.9	7.6
extra-EU (27) exports	-	83962	116786	113565	117920	10.7	6.9
Hong Kong, China	12886	50066	109557	124673	136229	24.7	39.0
domestic exports	4772	3997	3377	3424	1831	17.0	10.1
re-exports	8114	46069	106181	121250	134398	25.7	40.6
India	182	384	929	1163	1329	0.9	0.9
Indonesia	124	7280	6810	6063	5291	11.1	4.5
Israel c	1226	6939	5306	5934	6470	22.1	12.0
Japan	67032	108179	97950	99490	103124	22.6	14.5
Jordan	4	36	139	195	382	1.9	6.7
Korea, Republic of	14339	58686	82991	83671	92680	34.1	24.9
Macao, China c	14	19	53	73	147	0.8	5.8
Malaysia b	8207	52382	60091	67874	68400	53.3	38.8
Mauritius b, c	3	2	285	306	92	0.1	4.1
Mexico b	4535	34042	38044	46586	53911	20.5	19.8
Morocco b	110	506	672	782	825	6.8	5.6
New Zealand	95	231	362	369	416	1.7	1.5
Norway	655	1142	1319	1524	1703	1.9	1.2
Pakistan	4	6	77	94	83	0.1	0.5
Philippines b, c	1835	25138	23792	26092	26962	63.2	53.4
Russian Federation c	-	306	449	708	727	0.3	0.2
Saudi Arabia	14	29	125	166	188	0.0	0.1
Serbia	...	...	...	61	100	...	1.1
Singapore	19235	73820 |	101683	118023	119948	53.6	40.1
domestic exports c	14685	41523 |	45524	55561	55066	52.8	35.3
re-exports c	4549	32297 |	56159	62462	64882	54.6	45.3
South Africa	...	409	607	764	883	1.4	1.3
Switzerland	1520	2909 |	3145	2773	2910	3.6	1.7
Taipei, Chinese	14105	57821	56580	64462	65392	39.0	27.9
Thailand	3520	18653	23910	29354	32103	27.0	21.0
Tunisia	24	49	164	335	347	0.8	2.3
Turkey c	259	1008	3214	3158	2667	3.6	2.5
Ukraine	-	94	184	279	595	0.6	1.2
United Arab Emirates c	...	1633	11661	9377	10926	3.3	6.3
United States	51658	153399	125659	136750	134934	19.6	11.6
Viet Nam	...	652	1348	1713	...	4.5	4.3

a Or nearest year.

b Includes significant exports from processing zones.

c Includes Secretariat estimates.

Table II.44

Imports of office and telecom equipment of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	253	444	1531	1208	1134	4.8	4.1
Argentina	305	3477	3330	3961	4593	13.8	10.3
Australia b	4343	10771	14086	15511	17375	15.1	11.2
Bangladesh c, d	91	199	575	758	755	2.2	4.1
Belarus	-	194	400	573	622	2.2	2.2
Bolivarian Rep. of Venezuela b	367	1189	2577	4436	5492	8.2	13.1
Brazil e	1514	7601	8786	11040	12349	13.6	10.2
Canada b	10475	30418	27598	29697	31260	12.7	8.2
Chile	456	1681	2246	2867	3180	9.1	6.7
China f	4058	44427	160468	197948	226279	19.7	23.7
Colombia	365	1048	2764	3127	3615	9.1	11.0
Costa Rica f	84	977	2078	2362	2293	15.3	17.7
Croatia	...	418	1128	1289	1538	5.3	6.0
Ecuador	57	200	1068	926	931	5.4	6.9
Egypt	226	593	887	858	1164	4.2	4.3
El Salvador f	...	325	349	465	613	6.6	7.1
European Union (27) g	-	343708	458177	536443	515385	13.3	9.2
extra-EU (27) imports	-	148928	203136	224214	238606	16.2	12.2
Guatemala f	61	419	625	822	843	8.7	6.2
Hong Kong, China	12326	59370	112118	129590	142012	27.7	38.4
retained imports	4212	13301	5937	8340	7614	38.1	19.6
India	662	2664	10350	12974	15419	5.2	7.1
Indonesia	892	705	2088	2150	3522	1.6	3.8
Iran, Islamic Rep. of d	...	530	2210	2591	2421	3.8	5.3
Israel	939	4894	4340	4495	4859	13.0	8.2
Japan	11273	60866	66955	68657	69680	16.0	11.2
Jordan	56	201	718	732	1052	4.4	7.8
Kazakhstan d	-	261	684	825	1251	5.2	3.8
Kenya	124	142	238	354	465	4.6	5.2
Korea, Republic of	7741	34012	37613	40279	45536	21.2	12.8
Kuwait d	128	409	900	892	844	5.7	3.6
Macao, China d	64	104	438	480	619	4.6	11.5
Malaysia f	5744	32405	41893	46062	48198	39.5	32.8
Mexico b, f	4640	29011	36059	42418	43928	16.6	15.6
Morocco f	306	1212	1432	1473	1828	10.5	5.8
New Zealand	905	1618	2468	2356	2670	11.6	8.6
Norway	1732	3352	4893	5487	6375	9.7	7.9
Pakistan	236	372	2151	2530	2125	3.4	6.5
Panama	65	244	371	398	416	7.2	6.1
Paraguay	320	224	524	1578	1681	10.2	23.1
Peru	100	656	1035	1329	1455	8.9	7.2
Philippines d	2044	15150	21982	23299	25745	40.9	44.4
Qatar	52	143	499	721	...	4.4	4.4
Russian Federation b, d	-	3002	12528	14298	18888	6.7	8.5
Saudi Arabia	811	1242	3859	4789	6023	4.1	6.7
Serbia	...	...	...	700	1051	...	5.7
Serbia and Montenegro	...	145	579	...	...	3.9	5.0
Singapore	13392	54107	74365	85262	87251	40.2	33.2
retained imports d	8842	21810	18206	22801	22370	28.9	18.7
South Africa b	...	3364	6190	7112	7349	12.6	9.2
Sri Lanka d	51	259	368	496	535	3.6	4.7
Sudan	...	96	308	549	...	6.2	6.8
Switzerland	4797	8045	9242	8971	9754	9.7	6.0
Taipei, Chinese	7438	38646	38615	41477	40338	27.6	18.4
Thailand	3421	14055	19117	20863	21841	22.7	14.3
Tunisia	149	318	596	799	790	3.7	4.2
Turkey d	1234	5522	6977	7945	9109	10.1	5.4
Ukraine	-	327	1423	1438	1389	2.3	2.3
United Arab Emirates d	698	4002	14452	15561	15403	11.4	11.7
United States	63365	215544	233142	253703	262074	17.1	13.0
Viet Nam	...	1038	2328	2990	...	6.6	6.7

a Or nearest year.
b Imports are valued f.o.b.
c Figures refer to fiscal year.
d Includes Secretariat estimates.
e Beginning 2000, imports are valued f.o.b.
f Includes significant imports into processing zones.
g See the Metadata for information on intra-EU (27) imports.

4.3.1. EDP equipment

Table II.45

Imports of EDP and office equipment of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)						United States					
	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**223581**	**100.0**	**6**	**13**	**-2**	**World**	**110631**	**100.0**	**2**	**8**	**2**
Europe	125716	56.2	6	12	2	Asia	95624	86.4	4	10	3
Asia	82290	36.8	8	15	4	North America	9082	8.2	5	3	3
North America	12508	5.6	4	13	29	Europe	4809	4.3	7	1	15
South and Central America	2102	0.9	12	36	4	Middle East	564	0.5	5	20	48
Middle East	622	0.3	1	8	8	South and Central America	541	0.5	8	2	16
Africa	249	0.1	19	5	38	Africa	9	0.0	4	43	10
CIS	63	0.0	5	5	6	CIS	2	0.0	10	0	0
Economy						Economy					
European Union (27)	124382	55.6	6	13	2	China	54598	49.4	25	15	10
China	45980	20.6	29	25	15	Malaysia	14372	13.0	8	15	3
United States	10760	4.8	5	12	33	Japan	8552	7.7	9	2	4
Japan	8494	3.8	3	16	1	Mexico	6948	6.3	4	2	0
Taipei, Chinese	6236	2.8	6	5	29	Singapore	5251	4.7	9	4	15
Above 5	**195852**	**87.6**	**-**	**-**	**-**	**Above 5**	**89721**	**81.1**	**-**	**-**	**-**
Malaysia	5790	2.6	7	46	2	European Union (27)	4665	4.2	7	1	16
Singapore	4579	2.0	3	3	18	Thailand	3929	3.6	5	25	10
Thailand	2907	1.3	8	7	11	Taipei, Chinese	3475	3.1	15	7	25
Korea, Republic of	2588	1.2	7	9	6	Korea, Republic of	3337	3.0	12	4	1
Costa Rica	2024	0.9	12	40	3	Canada	2134	1.9	8	6	15
Philippines	1950	0.9	4	3	11	Philippines	1063	1.0	13	10	3
Hong Kong, China	1715	0.8	2	4	19	Israel	560	0.5	5	21	49
Canada	884	0.4	6	42	2	Indonesia	447	0.4	7	17	16
Switzerland	849	0.4	3	20	39	Costa Rica	422	0.4	9	35	22
Mexico	840	0.4	1	1	2	Viet Nam	254	0.2	272	74	31
Indonesia	455	0.2	4	25	2	Hong Kong, China	209	0.2	8	19	18
Israel	446	0.2	1	2	36	Switzerland	88	0.1	12	2	1
Viet Nam	268	0.1	90	95	24	Dominican Republic	65	0.1	147	64	6
Norway	173	0.1	2	23	10	Australia	63	0.1	4	7	33
India	142	0.1	31	17	60	Norway	52	0.0	7	12	25
Above 20	**221461**	**99.1**	**-**	**-**	**-**	**Above 20**	**110485**	**99.9**	**-**	**-**	**-**

Table II.45 *(continued)*

Imports of EDP and office equipment of selected economies by origin, 2007

(Million dollars and percentage)

China a	Value	Share	Annual percentage change			Japan	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**45459**	**100.0**	**23**	**14**	**12**	**World**	**23637**	**100.0**	**-2**	**-5**	**-10**
Asia	41089	90.4	26	15	13	Asia	20581	87.1	1	3	7
North America	2612	5.7	4	4	8	North America	1917	8.1	14	9	34
Europe	1696	3.7	11	1	5	Europe	1078	4.6	12	14	8
Middle East	50	0.1	13	11	67	Middle East	38	0.2	8	37	33
South and Central America	7	0.0	32	267	36	South and Central America	22	0.1	10	0	27
Africa	2	0.0	...	...	...	Africa	1	0.0	9	50	0
CIS	2	0.0	10	...	...	CIS	0	0.0	...	...	...
Economy						Economy					
China	15306	33.7	45	23	15	China	14279	60.4	25	1	1
Thailand	6609	14.5	38	31	44	United States	1657	7.0	15	11	34
Korea, Republic of	5379	11.8	37	32	49	Thailand	1244	5.3	1	2	11
Japan	3926	8.6	13	1	5	Singapore	1174	5.0	8	11	20
Philippines	2647	5.8	32	11	2	European Union (27)	1048	4.4	12	14	9
Above 5	**33866**	**74.5**	**-**	**-**	**-**	**Above 5**	**19402**	**82.1**	**-**	**-**	**-**
United States	2196	4.8	3	6	5	Korea, Republic of	1011	4.3	12	26	10
Taipei, Chinese	2136	4.7	10	8	16	Taipei, Chinese	962	4.1	22	15	33
Singapore	2086	4.6	13	20	8	Philippines	840	3.6	11	6	7
European Union (27)	1655	3.6	11	1	4	Malaysia	661	2.8	16	5	33
Malaysia	1630	3.6	13	15	2	Indonesia	255	1.1	2	17	7
Indonesia	907	2.0	25	29	20	Mexico	194	0.8	3	13	26
Mexico	366	0.8	8	6	12	Hong Kong, China	78	0.3	13	13	46
Hong Kong, China	258	0.6	10	12	50	Canada	66	0.3	18	14	57
Viet Nam	141	0.3	120	20	235	Viet Nam	57	0.2	34	73	9
Israel	50	0.1	16	12	68	Israel	38	0.2	8	36	34
Canada	50	0.1	13	30	47	Switzerland	25	0.1	15	38	41
India	45	0.1	72	190	55	Costa Rica	20	0.1	11	4	10
Switzerland	32	0.1	13	6	76	Australia	10	0.0	17	5	19
Australia	18	0.0	4	32	64	India	8	0.0	...	50	167
Costa Rica	4	0.0	31	185	224	Norway	5	0.0	3	24	16
Above 20	**45441**	**100.0**	**-**	**-**	**-**	**Above 20**	**23632**	**100.0**	**-**	**-**	**-**

a In 2007, China reported imports from China accounting for nearly 34 per cent of its EDP and office equipment imports. For further information, see the Metadata.

Table II.46

Leading exporters and importers of EDP and office equipment, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
China a	165.9	5.0	30.7	37	27	22	23
European Union (27)	157.6	30.5	29.2	5	9	10	4
extra EU (27) exports	37.5	7.0	6.9	5	16	2	3
United States	46.2	15.5	8.5	3	7	5	6
Hong Kong, China	34.7	4.4	6.4	11	31	9	14
domestic exports	0.4	0.3	0.1	12	160	42	85
re exports	34.3	4.2	6.4	12	28	8	10
Singapore	32.3	8.4	6.0	1	9	0	0
domestic exports b	20.0	6.0	3.7	2	5	0	4
re exports b	12.3	2.4	2.3	5	17	1	7
Malaysia a	27.1	5.6	5.0	4	14	22	3
Japan	23.8	9.5	4.4	5	5	1	1
Korea, Republic of	19.7	5.3	3.6	0	18	1	10
Thailand	16.6	2.4	3.1	10	27	27	13
Mexico a	12.3	3.2	2.3	1	16	6	0
Taipei, Chinese	11.9	7.9	2.2	12	23	8	14
Philippines a, b	8.2	1.9	1.5	2	3	5	0
Canada	4.3	1.5	0.8	3	4	6	10
United Arab Emirates b	2.3	0.2	0.4	20	27	23	27
Indonesia	1.8	0.8	0.3	7	4	11	27
Above 15	**530.4**	**97.7**	**98.1**	-	-	-	-
Importers							
European Union (27)	223.6	39.8	40.6	6	7	13	2
extra EU (27) imports	99.2	17.5	18.0	6	7	14	2
United States	110.6	24.7	20.1	2	5	8	2
China a, c	45.5	2.8	8.2	23	21	14	12
Hong Kong, China	33.1	4.8	6.0	9	20	14	10
retained imports	...	...	...	...	...	...	...
Japan	23.6	7.2	4.3	2	2	5	10
Singapore	19.7	4.4	3.6	2	13	1	2
retained imports b	7.4	2.1	1.4	1	9	3	7
Canada d	13.2	3.2	2.4	1	11	6	3
Mexico a, d	11.3	1.5	2.0	10	6	3	3
Malaysia a	10.8	1.2	2.0	14	15	5	6
Korea, Republic of	8.9	2.0	1.6	2	20	14	11
Australia d	8.0	1.3	1.5	7	9	7	14
Thailand	7.0	1.0	1.3	9	19	12	10
United Arab Emirates b	6.4	0.3	1.2	26	44	25	10
Russian Federation b, d	5.8	0.4	1.0	23	44	15	17
Taipei, Chinese	5.2	2.7	0.9	9	10	7	3
Above 15 e	**499.6**	**92.4**	**90.7**	-	-	-	-

a Includes significant shipments through processing zones
b Includes Secretariat estimates.
c In 2007, China reported imports of EDP and office equipment imports from China amounting to $15.3 billion. For further information, see the Metadata.
d Imports are valued f.o.b.
e Excludes retained imports of Hong Kong, China.

Table II.47

Exports of EDP and office equipment of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	...	371884	467938	518632	540470	5.9	4.0
Australia	494	811	878	864	975	1.3	0.7
Brazil	172	490	481	501	449	0.9	0.3
Canada	2708	5516	3687	3912	4307	2.0	1.0
China b	375	18638	110695	134507	165880	7.5	13.6
Costa Rica b	...	1628	684	639	1024	27.8	10.9
Croatia	...	11	62	75	123	0.2	1.0
European Union (27)	-	113286	149046	164271	157646	4.6	3.0
intra-EU (27) exports	-	87387	113392	127761	120184	5.2	3.3
extra-EU (27) exports	-	25899	35654	36510	37462	3.3	2.2
Hong Kong, China	3518	16402	37100	40583	34722	8.1	9.9
domestic exports	2086	937	1764	2508	379	4.0	2.1
re-exports	1432	15465	35335	38075	34343	8.6	10.4
India	112	209	434	482	446	0.5	0.3
Indonesia	1	3041	2758	2461	1798	4.6	1.5
Israel	421	902	903	845	957	2.9	1.8
Japan	24832	35209	24418	24131	23826	7.3	3.3
Jordan	2	13	27	22	26	0.7	0.5
Korea, Republic of	2702	19633	17757	17884	19710	11.4	5.3
Macao, China	...	12	37	52	88	0.5	3.5
Malaysia b	676	20689	22920	27982	27119	21.1	15.4
Mexico b	...	11757	11624	12283	12340	7.1	4.5
New Zealand	53	82	140	150	157	0.6	0.6
Norway	350	460	313	399	392	0.8	0.3
Philippines b, c	180	7208	7816	8178	8151	18.1	16.2
Russian Federation c	-	71	82	133	162	0.1	0.0
Saudi Arabia	...	8	60	82	68	0.0	0.0
Serbia	...	...	...	33	53	...	0.6
Serbia and Montenegro	...	3	16	...	...	0.2	0.3
Singapore	9205	31118 |	32233	32195	32305	22.6	10.8
domestic exports c	8022	22320 |	20866	20767	20033	28.4	12.8
re-exports c	1183	8799 |	11367	11427	12272	14.9	8.6
South Africa	...	141	156	270	257	0.5	0.4
Sri Lanka	...	...	55	39	25	...	0.3
Switzerland	617	1359 |	747	741	1048	1.7	0.6
Taipei, Chinese	6673	29309	14931	13790	11876	19.8	5.1
Thailand	1562	8769	11561	14658	16610	12.7	10.8
Tunisia	2	2	36	59	111	0.0	0.7
Turkey c	20	63	69	89	106	0.2	0.1
Ukraine	-	16	67	46	36	0.1	0.1
United Arab Emirates c	...	613	1452	1781	2261	1.2	1.3
United States	27766	57595	46882	49144	46192	7.4	4.0
Viet Nam	...	486	893	1180	...	3.4	3.0

a Or nearest year.
b Includes significant exports from processing zones.
c Includes Secretariat estimates.

Table II.48

Imports of EDP and office equipment of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	94	111	403	324	327	1.2	1.2
Argentina	120	1191	1034	1217	1418	4.7	3.2
Australia b	2697	5043	6575	7021	8021	7.1	5.2
Belarus	-	91	106	182	243	1.1	0.8
Bolivarian Rep. of Venezuela b	191	388	779	1265	1545	2.7	3.7
Brazil c	469	1962	2027	2719	3472	3.5	2.9
Canada b	5171	12042	12093	12808	13186	5.0	3.5
Chile	144	654	825	962	1060	3.5	2.2
China d	772	10858	35790	40692	45458	4.8	4.8
Colombia	123	420	687	858	1246	3.6	3.8
Costa Rica d	40	175	295	279	333	2.7	2.6
Croatia	...	191	460	536	622	2.4	2.4
Ecuador	20	84	270	278	319	2.3	2.3
Egypt	78	206	263	264	216	1.5	0.8
European Union (27) e	-	152035	201233	228152	223581	5.9	4.0
extra-EU (27) imports	-	66800	88357	100940	99199	7.3	5.1
Guatemala d	25	130 |	176	233	290	2.7	2.1
Hong Kong, China	2278	18341	32184	36690	33112	8.6	8.9
retained imports	...	...	...	...	...	...	...
India	237	1429	3444	4210	4208	2.8	1.9
Indonesia	246	215	514	573	1017	0.5	1.1
Iran, Islamic Rep. of f	...	155	538	491	530	1.1	1.2
Israel	436	1717	1646	1693	1879	4.6	3.2
Japan	5335	27551	27683	26382	23639	7.3	3.8
Kazakhstan f	-	68	197	232	401	1.3	1.2
Korea, Republic of	1813	7711	7047	8028	8881	4.8	2.5
Kuwait f	...	134	293	318	312	1.9	1.3
Malaysia d	686	4450	9676	10207	10806	5.4	7.4
Mexico b, d	...	5651	11238	11581	11267	3.2	4.0
Morocco d	70	195	357	424	456	1.7	1.4
New Zealand	446	734	1207	1171	1289	5.3	4.2
Norway	1046	1710	2477	2612	2921	5.0	3.6
Pakistan	47	204	291	319	280	1.9	0.9
Paraguay	25	114	294	995	925	5.2	12.7
Peru	47	278	352	430	466	3.7	2.3
Philippines f	338	2522	4010	3892	4041	6.8	7.0
Qatar	18	53	192	296	...	1.6	1.8
Russian Federation b, f	-	1347	4275	4924	5761	3.0	2.6
Saudi Arabia	225	381	1055	1391	1997	1.3	2.2
Serbia	...	...	...	331	440	...	2.4
Serbia and Montenegro	...	67	279	...	...	1.8	2.4
Singapore	4352	16682 |	19630	19408	19714	12.4	7.5
retained imports f	3169	7883 |	8263	7981	7442	10.4	6.2
South Africa b	...	1205	2596	2947	3108	4.5	3.9
Switzerland	2823	4568	4605	4460	4596	5.5	2.9
Taipei, Chinese	1574	10310	5457	5050	5194	7.4	2.4
Thailand	1114	3821	5710	6387	7025	6.2	4.6
Tunisia	58	135	241	357	397	1.6	2.1
Turkey f	471	1591	2465	2812	3111	2.9	1.8
Ukraine	-	104	232	233	259	0.7	0.4
United Arab Emirates f	...	1276	4679	5840	6422	3.6	4.9
United States	27499	94193	100534	108520	110632	7.5	5.5
Viet Nam	...	217	793	998	...	1.4	2.2

a Or nearest year.
b Imports are valued f.o.b.
c Beginning 2000, imports are valued f.o.b.
d Includes significant imports into processing zones.
e See the Metadata for information on intra-EU (27) imports.
f Includes Secretariat estimates.

4.3.2. Telecommunications equipment

Table II.49

Imports of telecommunications equipment of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)						United States					
	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**221561**	**100.0**	**10**	**27**	**-7**	**World**	**124749**	**100.0**	**8**	**11**	**7**
Europe	120161	54.2	7	38	21	Asia	84186	67.5	11	9	2
Asia	83654	37.8	19	19	14	North America	34759	27.9	4	25	21
North America	13772	6.2	0	8	81	Europe	4508	3.6	1	19	6
Middle East	1186	0.5	3	63	46	Middle East	823	0.7	4	2	3
CIS	530	0.2	33	66	121	South and Central America	433	0.3	6	26	37
Africa	525	0.2	15	17	22	Africa	29	0.0	12	50	21
South and Central America	282	0.1	17	27	28	CIS	11	0.0	9	17	120
Economy						Economy					
European Union (27)	116600	52.6	7	41	21	China	46767	37.5	24	23	9
China	43504	19.6	32	31	21	Mexico	30806	24.7	10	30	25
Korea, Republic of	14805	6.7	26	12	14	Korea, Republic of	8428	6.8	8	13	15
United States	11765	5.3	0	5	112	Japan	7818	6.3	6	13	8
Japan	8449	3.8	1	7	4	Malaysia	6890	5.5	4	1	34
Above 5	**195123**	**88.1**	**-**	**-**	**-**	**Above 5**	**100709**	**80.7**	**-**	**-**	**-**
Taipei, Chinese	6988	3.2	23	30	42	Taipei, Chinese	6620	5.3	12	39	13
Malaysia	3885	1.8	8	18	15	European Union (27)	4206	3.4	0	20	5
Turkey	2556	1.2	17	1	17	Canada	3953	3.2	12	2	6
Thailand	2073	0.9	10	25	27	Thailand	3537	2.8	13	9	12
Hong Kong, China	1855	0.8	17	2	6	Singapore	1644	1.3	11	4	78
Indonesia	1256	0.6	12	4	19	Indonesia	835	0.7	3	34	4
Canada	1133	0.5	4	10	9	Israel	812	0.7	5	1	7
Mexico	897	0.4	14	25	10	Hong Kong, China	682	0.5	14	1	1
Israel	801	0.4	6	19	1	Philippines	483	0.4	1	26	18
Singapore	789	0.4	8	9	52	Brazil	275	0.2	11	31	50
Switzerland	595	0.3	4	53	50	Norway	254	0.2	23	25	26
Norway	513	0.2	2	2	29	Viet Nam	206	0.2	164	179	90
Philippines	477	0.2	5	14	5	India	168	0.1	29	82	24
Ukraine	439	0.2	41	69	222	Australia	79	0.1	1	11	52
United Arab Emirates	305	0.1	26	75	77	Dominican Republic	70	0.1	111	7	24
Above 20	**219685**	**99.2**	**-**	**-**	**-**	**Above 20**	**124534**	**99.8**	**-**	**-**	**-**

Table II.49 *(continued)*

Imports of telecommunications equipment of selected economies by origin, 2007

(Million dollars and percentage)

China a	Value	Share	Annual percentage change			Japan	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**35737**	**100.0**	**16**	**21**	**1**	**World**	**21885**	**100.0**	**7**	**-2**	**25**
Asia	30639	85.7	26	21	1	Asia	18476	84.4	12	4	22
Europe	3129	8.8	3	28	1	North America	2677	12.2	4	12	52
North America	1853	5.2	3	11	46	Europe	672	3.1	10	0	9
Middle East	103	0.3	2	71	7	Middle East	56	0.3	7	51	44
South and Central America	9	0.0	37	8	63	CIS	3	0.0	...	0	0
Africa	2	0.0	6	0	100	South and Central America	1	0.0	45	67	0
CIS	2	0.0	31	67	60	Africa	0	0.0	...	...	...
Economy						Economy					
China	13393	37.5	43	41	8	China	10623	48.5	21	1	21
Japan	5567	15.6	13	7	11	United States	2276	10.4	6	17	47
Korea, Republic of	5152	14.4	31	17	16	Korea, Republic of	2252	10.3	11	19	15
European Union (27)	3043	8.5	4	29	0	Malaysia	1853	8.5	1	18	27
Taipei, Chinese	1873	5.2	20	12	30	Thailand	1606	7.3	9	0	21
Above 5	**29028**	**81.2**	**-**	**-**	**-**	**Above 5**	**18610**	**85.0**	**-**	**-**	**-**
United States	1422	4.0	5	8	39	Taipei, Chinese	934	4.3	10	21	51
Malaysia	1223	3.4	20	10	17	European Union (27)	642	2.9	10	1	8
Hong Kong, China	921	2.6	8	18	5	Philippines	485	2.2	5	33	15
Thailand	891	2.5	43	14	40	Mexico	281	1.3	28	10	80
Philippines	773	2.2	51	68	16	Indonesia	256	1.2	6	22	3
Singapore	413	1.2	11	29	17	Singapore	151	0.7	11	13	183
Indonesia	318	0.9	33	11	54	Viet Nam	148	0.7	33	75	94
Mexico	286	0.8	70	61	109	Hong Kong, China	148	0.7	15	9	113
Canada	144	0.4	7	0	24	Canada	120	0.5	7	23	119
Israel	102	0.3	2	73	6	Israel	56	0.3	8	50	44
Viet Nam	60	0.2	53	77	251	Norway	21	0.1	10	4	60
Switzerland	48	0.1	14	28	30	Australia	11	0.1	5	4	114
Norway	38	0.1	17	4	60	Switzerland	9	0.0	5	19	24
Australia	26	0.1	5	24	70	Bangladesh	8	0.0	44	37	6
India	14	0.0	46	400	180	Russian Federation	3	0.0	...	50	0
Above 20	**35708**	**99.9**	**-**	**-**	**-**	**Above 20**	**21882**	**100.0**	**-**	**-**	**-**

a In 2007, China reported imports from China accounting for nearly 38 per cent of its telecommunications equipment imports. For further information, see the Metadata.

Table II.50

Leading exporters and importers of telecommunications equipment, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
European Union (27)	174.1	38.3	31.1	7	23	24	13
extra EU (27) exports	53.3	12.4	9.5	6	30	9	4
China a	146.3	6.8	26.1	33	38	30	18
Hong Kong, China	54.7	6.8	9.8	16	14	10	18
domestic exports	1.0	0.2	0.2	9	156	18	849
re exports	53.7	6.6	9.6	16	14	10	16
Korea, Republic of	40.2	5.0	7.2	16	3	1	8
Mexico a	39.8	6.7	7.1	11	22	33	24
United States	38.6	11.5	6.9	2	9	13	12
Japan	34.7	10.6	6.2	2	6	0	3
Singapore	17.7	2.9	3.2	11	8	15	1
domestic exports b	6.4	1.3	1.1	8	10	40	13
re exports b	11.3	1.6	2.0	14	8	3	6
Malaysia a	13.2	4.5	2.4	0	7	7	8
Taipei, Chinese	11.6	2.3	2.1	8	14	1	1
Canada	8.6	4.0	1.5	4	24	18	1
United Arab Emirates b	8.4	0.3	1.5	36	115	25	14
Thailand	6.3	1.4	1.1	7	0	10	2
Israel	4.0	1.5	0.7	1	1	15	11
Indonesia	2.7	1.2	0.5	4	0	4	7
Above 15	**547.1**	**97.2**	**97.6**	-	-	-	-
Importers							
European Union (27)	221.6	38.8	37.7	10	21	27	7
extra EU (27) imports	105.0	14.3	17.9	14	23	9	18
United States	124.7	24.0	21.2	8	18	11	7
Hong Kong, China	48.3	6.9	8.2	13	12	13	12
retained imports	...	...	...	...	...	...	...
China a, c	35.7	4.1	6.1	16	19	21	1
Japan	21.9	4.5	3.7	7	12	2	25
Mexico a, d	21.6	3.1	3.7	13	24	43	14
Singapore	15.8	2.3	2.7	13	8	25	2
retained imports b	4.6	0.8	0.8	10	10	108	19
Canada d	14.2	3.4	2.4	5	9	14	12
Russian Federation b, d	12.5	0.5	2.1	36	31	17	44
India	9.9	0.2	1.7	46	39	28	30
United Arab Emirates b	8.7	0.9	1.5	19	78	2	7
Australia d	8.5	1.6	1.4	8	6	15	11
Korea, Republic of	8.2	1.9	1.4	5	5	13	9
Brazil	5.1	1.0	0.9	8	34	30	16
Malaysia a	4.9	1.1	0.8	5	3	6	8
Above 15 e	**513.5**	**87.6**	**87.4**	-	-	-	-

a Includes significant shipments through processing zones
b Includes Secretariat estimates.
c In 2007, China reported imports of telecommunications equipment from China amounting to $13.4 billion. For further information, see the Metadata.
d Imports are valued f.o.b.
e Excludes retained imports of Hong Kong, China.

Table II.51

Exports of telecommunication equipment of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	...	287964	465392	548129	560370	4.6	4.1
Argentina	3	52	51	90	116	0.2	0.2
Australia	226	838	654	660	712	1.3	0.5
Belarus	-	59	99	46	43	0.8	0.2
Brazil	442	1596	3069	3318	2434	2.9	1.5
Canada	1642	11656	7354	8675	8577	4.2	2.0
China b	2623	19508	94856	123615	146268	7.8	12.0
Costa Rica b	...	9	184	138	43	0.2	0.5
Croatia	...	73	109	124	121	1.7	1.0
European Union (27)	-	110302	161169	199462	174099	4.5	3.3
intra-EU (27) exports	-	74592	104942	148275	120798	4.5	3.3
extra-EU (27) exports	-	35710	56227	51187	53301	4.6	3.1
Hong Kong, China	6806	19618	41868	46210	54719	9.7	15.7
domestic exports	2137	540	91	107	1013	2.3	5.6
re-exports	4669	19078	41777	46103	53707	10.6	16.2
India	31	103	300	457	584	0.2	0.4
Indonesia	105	3500	3026	2898	2702	5.4	2.3
Israel	662	4256	3114	3581	3987	13.6	7.4
Japan	28809	30516	33648	33633	34750	6.4	4.9
Jordan	2	19	109	172	356	1.0	6.3
Korea, Republic of	6273	14364	37746	37300	40234	8.3	10.8
Macao, China	...	4	11	15	40	0.2	1.6
Malaysia b	3209	12965	13412	14383	13190	13.2	7.5
Mauritius b	...	1	268	266	88	0.0	3.9
Mexico b	...	19221	24186	32145	39770	11.6	14.6
Morocco b	...	24	30	31	47	0.3	0.3
New Zealand	41	132	164	146	165	1.0	0.6
Norway	295	652	883	920	1035	1.1	0.8
Pakistan	2	5	74	90	76	0.1	0.4
Philippines b, c	599	1267	970	942	946	3.2	1.9
Russian Federation c	-	137	248	418	385	0.1	0.1
Saudi Arabia	...	20	61	78	114	0.0	0.0
Singapore	6355	8266 |	15584	17968	17709	6.0	5.9
domestic exports c	3820	3770 |	5278	7376	6432	4.8	4.1
re-exports c	2535	4495 |	10306	10592	11276	7.6	7.9
South Africa	...	243	320	360	490	0.8	0.7
Switzerland	672	873 |	1568	1203	1103	1.1	0.6
Taipei, Chinese	4996	6745	11563	11460	11595	4.5	4.9
Thailand	1057	4007	5811	6386	6256	5.8	4.1
Tunisia	21	28	74	202	171	0.5	1.1
Turkey c	238	934	3119	3037	2531	3.4	2.4
Uganda	...	0	16	55	89	0.0	5.5
Ukraine	-	68	95	205	533	0.5	1.1
United Arab Emirates c	...	998	9780	7345	8387	2.0	4.8
United States	9901	32980	30536	34562	38585	4.2	3.3
Viet Nam	...	81	213	331	...	0.6	0.8

a Or nearest year.
b Includes significant exports from processing zones.
c Includes Secretariat estimates.

Table II.52

Imports of telecommunication equipment of selected economies , 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	131	298	1040	794	761	3.3	2.8
Argentina	123	2092	2009	2436	2855	8.3	6.4
Australia b	1383	4862	6648	7658	8474	6.8	5.4
Bangladesh c, d	73	129	428	582	583	1.5	3.1
Bolivarian Rep. of Venezuela b	162	760	1757	3099	3830	5.2	9.1
Brazil e	555	3071	3402	4428	5145	5.5	4.3
Canada b	2972	10062	11136	12746	14237	4.2	3.7
Chile	303	960	1301	1763	2045	5.2	4.3
China f	2539	12413	29362	35534	35738	5.5	3.7
Colombia	218	597	1987	2192	2319	5.2	7.1
Costa Rica f	35	114	223	218	317	1.8	2.4
Croatia	...	210	600	670	803	2.7	3.1
Ecuador	32	110	779	630	599	2.9	4.4
Egypt	132	350	582	568	869	2.5	3.2
El Salvador f	...	207	212	304	447	4.2	5.2
European Union (27) g	-	116357	186782	237220	221561	4.5	4.0
extra-EU (27) imports	-	42909	82081	89187	104961	4.7	5.4
Guatemala f	34	283 |	434	569	540	5.9	4.0
Hong Kong, China	6343	20742	38021	43154	48269	9.7	13.04
retained imports	...	...	...	...	...	...	...
India	173	711	5938	7628	9923	1.4	4.6
Indonesia	490	403	1402	1394	2306	0.9	2.5
Iran, Islamic Rep. of d	...	256	1411	1831	1712	1.8	3.7
Israel	304	1669	1575	1659	1981	4.4	3.4
Japan	2620	13470	18003	17572	21888	3.5	3.5
Jordan	39	131	518	557	832	2.9	6.2
Kazakhstan d	-	169	446	548	818	3.4	2.5
Kenya	105	95	132	208	296	3.1	3.3
Korea, Republic of	1368	5830	6695	7538	8241	3.6	2.3
Macao, China	35	68	285	303	393	3.0	7.3
Malaysia f	1246	3442	4296	4556	4913	4.2	3.3
Mexico b, f	...	9398	13256	18891	21578	5.4	7.7
Morocco f	127	727	684	673	902	6.3	2.8
New Zealand	440	808	1136	1072	1260	5.8	4.1
Norway	576	1425	2189	2618	3168	4.1	3.9
Pakistan	183	158	1793	2124	1793	1.5	5.5
Paraguay	293	107	227	576	755	4.9	10.4
Peru	51	367	660	857	964	5.0	4.8
Philippines d	686	1949	1320	1329	1458	5.3	2.5
Russian Federation b, d	-	1493	7456	8701	12536	3.3	5.6
Saudi Arabia	578	811	2733	3275	3822	2.7	4.2
Singapore	4551	6870 |	13010	16209	15845	5.1	6.0
retained imports d	2016	2374 |	2704	5617	4568	3.1	3.8
South Africa b	...	1859	3289	3784	3818	6.9	4.8
Sri Lanka d	30	155	225	317	357	2.2	3.2
Switzerland	1597	2512	3772	3619	4172	3.0	2.6
Taipei, Chinese	1744	4597	4648	4509	4281	3.3	2.0
Thailand	994	1868	3887	4346	3754	3.0	2.5
Turkey d	403	2993	2971	3391	4489	5.5	2.6
Ukraine	-	188	1032	1044	891	1.3	1.5
United Arab Emirates d	...	2626	9271	9421	8723	7.5	6.6
United States	22727	71769	105887	117054	124748	5.7	6.2
Viet Nam	...	331	876	1355	...	2.1	3.0

a Or nearest year.
b Imports are valued f.o.b.
c Figures refer to fiscal year.
d Includes Secretariat estimates.
e Beginning 2000, imports are valued f.o.b.
f Includes significant imports into processing zones.
g See the Metadata for information on intra-EU (27) imports.

4.3.3. Integrated circuits and electronic components

Table II.53

Imports of integrated circuits and electronic components of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)						United States					
	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**70243**	**100.0**	**-1**	**1**	**-1**	**World**	**27203**	**100.0**	**-8**	**5**	**-3**
Europe	36529	52.0	0	0	4	Asia	21617	79.5	9	10	3
Asia	27553	39.2	4	5	5	Europe	3279	12.1	2	1	12
North America	5377	7.7	7	12	11	North America	1835	6.7	10	24	14
Africa	453	0.6	8	22	2	South and Central America	221	0.8	2	23	17
South and Central America	163	0.2	10	88	57	Middle East	143	0.5	16	47	64
Middle East	121	0.2	2	65	10	Africa	98	0.4	6	8	5
CIS	40	0.1	1	5	9	CIS	10	0.0	5	10	9
Economy						Economy					
European Union (27)	35797	51.0	0	1	3	Taipei, Chinese	4545	16.7	2	19	2
China	5917	8.4	39	51	36	Japan	3676	13.5	12	16	3
United States	5084	7.2	7	13	10	European Union (27)	3170	11.7	2	3	13
Japan	4897	7.0	2	14	5	Malaysia	2910	10.7	11	7	10
Taipei, Chinese	3799	5.4	8	16	18	Korea, Republic of	2530	9.3	15	2	16
Above 5	**55494**	**79.0**	**-**	**-**	**-**	**Above 5**	**16830**	**61.9**	**-**	**-**	**-**
Singapore	3483	5.0	0	10	13	China	2395	8.8	17	21	7
Malaysia	3101	4.4	0	28	9	Philippines	2172	8.0	13	2	12
Korea, Republic of	2713	3.9	1	1	3	Singapore	1746	6.4	9	29	10
Philippines	2209	3.1	7	14	6	Thailand	1261	4.6	2	39	34
Thailand	679	1.0	3	16	5	Canada	925	3.4	11	36	12
Switzerland	410	0.6	6	54	45	Mexico	910	3.3	10	7	16
Hong Kong, China	355	0.5	14	6	20	Indonesia	208	0.8	4	9	22
Morocco	253	0.4	0	9	5	Costa Rica	203	0.7	0	25	18
Norway	188	0.3	27	99	13	Israel	143	0.5	16	47	64
India	183	0.3	29	1	31	Switzerland	105	0.4	5	30	1
Canada	152	0.2	20	1	18	Morocco	94	0.3	6	9	7
Mexico	140	0.2	0	3	26	Hong Kong, China	87	0.3	31	34	37
Costa Rica	139	0.2	9	91	78	India	55	0.2	11	54	8
South Africa	129	0.2	52	25	29	New Zealand	16	0.1	13	8	6
Croatia	117	0.2	86	110	26	Australia	11	0.0	3	41	17
Above 20	**69746**	**99.3**	**-**	**-**	**-**	**Above 20**	**27163**	**99.9**	**-**	**-**	**-**

Table II.53 *(continued)*

Imports of integrated circuits and electronic components of selected economies by origin, 2007

(Million dollars and percentage)

China a						Japan					
	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**145265**	**100.0**	**32**	**28**	**19**	**World**	**24266**	**100.0**	**3**	**16**	**-2**
Asia	129036	88.8	33	26	20	Asia	18627	76.8	6	15	1
North America	8370	5.8	28	45	8	North America	4406	18.2	4	20	11
Europe	4884	3.4	12	20	16	Europe	1001	4.1	0	21	9
South and Central America	2271	1.6	124	94	31	South and Central America	209	0.9	10	40	1
Middle East	348	0.2	97	66	50	Africa	10	0.0	3	117	23
Africa	323	0.2	39	30	13	Middle East	10	0.0	15	50	67
CIS	33	0.0	19	11	20	CIS	3	0.0	...	0	0
Economy						Economy					
Taipei, Chinese	32048	22.1	36	30	18	Taipei, Chinese	6373	26.3	10	29	8
Korea, Republic of	23520	16.2	34	26	16	Korea, Republic of	4849	20.0	8	11	22
Japan	18624	12.8	20	20	21	United States	4194	17.3	4	18	10
Philippines	16049	11.0	57	40	37	China	2227	9.2	21	25	2
Malaysia	14312	9.9	39	14	16	Philippines	1528	6.3	1	6	2
Above 5	**104553**	**72.0**	**-**	**-**	**-**	**Above 5**	**19171**	**79.0**	**-**	**-**	**-**
China	14189	9.8	60	54	24	Malaysia	1428	5.9	5	3	12
United States	7220	5.0	26	48	7	Singapore	1274	5.2	1	17	1
European Union (27)	4748	3.3	11	20	16	European Union (27)	990	4.1	0	21	10
Singapore	4137	2.8	28	10	12	Thailand	631	2.6	6	16	4
Thailand	3205	2.2	29	19	23	Indonesia	214	0.9	1	1	2
Hong Kong, China	2393	1.6	10	24	66	Costa Rica	208	0.9	10	40	1
Costa Rica	2264	1.6	126	95	32	Canada	184	0.8	12	69	19
Mexico	643	0.4	38	12	39	Hong Kong, China	54	0.2	21	32	20
Canada	507	0.3	36	36	5	Viet Nam	38	0.2	77	48	3
Indonesia	415	0.3	35	39	35	Mexico	28	0.1	26	6	20
Israel	348	0.2	103	72	51	Switzerland	11	0.0	6	6	15
Morocco	320	0.2	39	29	14	Morocco	10	0.0	2	107	12
Switzerland	120	0.1	39	17	4	Israel	10	0.0	15	53	59
Australia	71	0.0	52	29	246	India	4	0.0	0	100	0
India	40	0.0	53	13	18	Australia	3	0.0	1	80	43
Above 20	**145173**	**99.9**	**-**	**-**	**-**	**Above 20**	**24257**	**100.0**	**-**	**-**	**-**

a In 2007, China reported imports from China accounting for nearly 10 per cent of its integrated circuits and electronic components imports. For further information, see the Metadata.

Table II.54

Leading exporters and importers of integrated circuits and electronic components, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
Singapore	69.9	11.2	16.9	11	11	26	3
domestic exports a	28.6	5.0	6.9	9	6	41	4
re exports a	41.3	6.2	10.0	12	15	17	2
European Union (27)	63.0	19.1	15.2	1	0	1	0
extra EU (27) exports	27.2	7.2	6.6	3	4	4	5
United States	50.2	20.4	12.1	3	2	10	5
Hong Kong, China	46.8	4.6	11.3	19	16	24	24
domestic exports	0.4	0.8	0.1	22	34	47	46
re exports	46.3	3.7	11.2	22	16	28	25
Japan	44.5	13.8	10.8	1	2	5	7
Taipei, Chinese	41.9	7.1	10.1	10	12	30	7
China b	35.0	1.7	8.5	31	26	43	20
Korea, Republic of	32.7	8.0	7.9	4	12	4	15
Malaysia b	28.1	6.1	6.8	6	1	7	10
Philippines a, b	17.9	5.4	4.3	1	2	13	5
Thailand	9.2	1.9	2.2	7	3	27	11
Canada	2.3	1.1	0.6	6	26	17	6
Mexico b	1.8	1.0	0.4	7	11	3	17
Israel a	1.5	0.6	0.4	2	1	17	1
Costa Rica b	1.4	0.0	0.3	61	203	51	17
Above 15	**399.9**	**98.1**	**96.7**	**-**	**-**	**-**	**-**
Importers							
China b, c	145.1	6.4	29.1	32	28	28	19
European Union (27)	70.2	22.9	14.1	1	2	1	1
extra EU (27) imports	34.4	11.9	6.9	2	8	4	1
Hong Kong, China	60.6	6.2	12.1	17	14	19	22
retained imports	14.3	2.7	2.9	7	12	1	13
Singapore	51.7	9.3	10.4	8	12	19	4
retained imports a	10.4	3.5	2.1	2	1	27	13
Malaysia b	32.5	7.5	6.5	4	5	12	4
Taipei, Chinese	30.9	7.2	6.2	4	7	12	3
Korea, Republic of	28.4	6.2	5.7	5	4	4	15
United States	26.7	15.1	5.3	8	4	5	5
Japan	24.2	6.0	4.8	3	1	16	2
Philippines a, d	20.2	3.3	4.1	10	4	9	12
Mexico b, d	11.1	4.3	2.2	3	2	3	7
Thailand	11.1	2.5	2.2	4	5	6	9
Canada d	3.8	2.5	0.8	10	15	5	7
Brazil	3.7	0.8	0.7	5	20	16	4
Costa Rica b	1.6	0.2	0.3	13	32	19	12
Above 15	**475.5**	**97.0**	**95.3**	**-**	**-**	**-**	**-**

a Includes Secretariat estimates.
b Includes significant shipments through processing zones
c In 2007, China reported imports of integrated circuits and electronic components from China amounting to $14.2 billion. For further information, see the Metadata.
d Imports are valued f.o.b.

Table II.55

Exports of integrated circuits and electronic components of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	...	308432	345118	391461	413468	4.9	3.0
Australia	20	132	232	236	270	0.2	0.2
Belarus	-	33	36	37	47	0.4	0.2
Brazil	79	231	171	160	78	0.4	0.0
Canada	1271	3459	2608	2165	2291	1.3	0.5
China b	128	5352	20413	29209	34965	2.1	2.9
Costa Rica b	...	51	813	1231	1445	0.9	15.4
Croatia	...	3	51	74	116	0.1	0.9
European Union (27)	-	58793	62443	62998	62954	2.4	1.2
intra-EU (27) exports	-	36440	37538	37130	35797	2.2	1.0
extra-EU (27) exports	-	22353	24905	25868	27157	2.8	1.6
Hong Kong, China	2562	14046	30590	37881	46787	6.9	13.4
domestic exports	550	2520	1522	809	440	10.7	2.4
re-exports	2012	11525	29068	37072	46348	6.4	14.0
India	39	72	195	224	299	0.2	0.2
Indonesia	18	739	1025	704	791	1.1	0.7
Israel c	143	1782	1288	1509	1525	5.7	2.8
Japan	13391	42454	39885	41725	44548	8.9	6.3
Korea, Republic of	5364	24688	27488	28486	32736	14.3	8.8
Malaysia b	4321	18729	23759	25509	28091	19.1	15.9
Mexico b	...	3064	2233	2158	1801	1.8	0.7
Morocco b	110	480	626	732	754	6.5	5.1
New Zealand	1	17	58	73	94	0.1	0.3
Norway	11	30	122	205	277	0.1	0.2
Philippines b, c	1053	16663	15005	16973	17866	41.9	35.4
Russian Federation c	-	97	119	157	180	0.1	0.1
Singapore	3675	34436	53866	67861	69934	25.0	23.4
domestic exports c	2844	15433	19380	27418	28601	19.6	18.3
re-exports c	830	19003	34486	40442	41333	32.2	28.9
South Africa	...	25	130	134	136	0.1	0.2
Switzerland	231	677	830	829	759	0.8	0.4
Taipei, Chinese	2435	21767	30086	39213	41922	14.7	17.9
Thailand	901	5877	6538	8311	9238	8.5	6.0
Tunisia	0	19	54	74	65	0.3	0.4
Turkey c	1	11	25	32	29	0.0	0.0
Ukraine	-	10	23	29	26	0.1	0.1
United Arab Emirates c	...	21	430	251	278	0.0	0.2
United States	13991	62824	48240	53044	50157	8.0	4.3
Viet Nam	...	85	242	202	...	0.6	0.5

a Or nearest year.
b Includes significant exports from processing zones.
c Includes Secretariat estimates.

Table II.56

Imports of integrated circuits and electronic components of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	27	34	88	89	46	0.4	0.2
Argentina	62	194	287	307	320	0.8	0.7
Australia b	263	867	863	832	881	1.2	0.6
Belarus	-	45	91	79	85	0.5	0.3
Bolivarian Rep. of Venezuela b	14	41	42	72	117	0.3	0.3
Brazil c	490	2568	3356	3894	3733	4.6	3.1
Canada b	2333	8314	4369	4144	3837	3.5	1.0
Chile	9	67	121	142	75	0.4	0.2
China d	747	21156	95316	121722	145083	9.4	15.2
Colombia	24	31	89	77	50	0.3	0.2
Costa Rica d	10	688	1560	1864	1643	10.8	12.7
Croatia	...	17	68	83	113	0.2	0.4
Egypt	16	36	42	27	79	0.3	0.3
European Union (27) e	-	75316	70162	71071	70243	2.9	1.3
extra-EU (27) imports	-	39219	32698	34087	34446	4.3	1.8
Hong Kong, China	3705	20286	41913	49746	60631	9	16
retained imports	...	...	...	...	...	...	...
India	251	523	968	1136	1289	1.0	0.6
Indonesia	156	87	172	184	199	0.2	0.2
Iran, Islamic Rep. of f	...	120	261	270	179	0.9	0.4
Israel	198	1508	1119	1142	998	4.0	1.7
Japan	3319	19846	21269	24703	24153	5.2	3.9
Korea, Republic of	4560	20470	23871	24713	28415	12.8	8.0
Malaysia d	3812	24513	27921	31299	32480	29.9	22.1
Mexico b, d	...	13961	11565	11946	11082	8.0	3.9
Morocco d	109	291	391	376	469	2.5	1.5
New Zealand	20	75	124	114	122	0.5	0.4
Norway	110	216	227	257	286	0.6	0.4
Pakistan	6	9	66	86	52	0.1	0.2
Philippines f	1021	10678	16652	18079	20246	28.8	34.9
Russian Federation b, f	-	161	797	674	590	0.4	0.3
Saudi Arabia	8	51	70	124	204	0.2	0.2
Singapore	4489	30556 |	41725	49646	51693	22.7	19.6
retained imports f	3659	11553 |	7238	9203	10360	15.3	8.6
South Africa b	...	301	305	381	423	1.1	0.5
Switzerland	377	965	865	891	987	1.2	0.6
Taipei, Chinese	4119	23740	28510	31918	30863	17.0	14.1
Thailand	1313	8366	9521	10130	11061	13.5	7.2
Tunisia	27	35	73	121	147	0.4	0.8
Turkey f	361	937	1541	1743	1509	1.7	0.9
Ukraine	-	36	158	160	239	0.3	0.4
United Arab Emirates f	...	100	502	300	258	0.3	0.2
United States	13139	49581	26721	28128	26694	3.9	1.3
Viet Nam	...	490	660	637	...	3.1	1.4

a Or nearest year.
b Imports are valued f.o.b.
c Beginning 2000, imports are valued f.o.b.
d Includes significant imports into processing zones.
e See the Metadata for information on intra-EU (27) imports.
f Includes Secretariat estimates.

4.4. Automotive products

Table II.57

Exports of automotive products of selected regions and economies by destination, 2007

(Billion dollars and percentage)

	Value	Share in region/economy's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**1182.9**	**100.0**	**100.0**	**100.0**	**100.0**	**11**	**11**	**16**
Europe								
World	**654.5**	**100.0**	**100.0**	**50.3**	**55.3**	**12**	**9**	**18**
Europe	511.8	80.0	78.2	40.2	43.3	12	9	19
North America	53.9	10.3	8.2	5.2	4.6	9	3	2
Asia	31.5	4.3	4.8	2.2	2.7	14	16	24
Commonwealth of Independent States (CIS)	22.6	0.7	3.5	0.3	1.9	42	71	60
Africa	14.7	1.9	2.3	0.9	1.2	15	13	12
Middle East	10.9	1.5	1.7	0.8	0.9	14	-9	21
South and Central America	7.2	1.3	1.1	0.6	0.6	10	17	31
Asia								
World	**264.6**	**100.0**	**100.0**	**19.9**	**22.4**	**13**	**15**	**18**
North America	88.5	49.5	33.5	9.8	7.5	7	17	2
Asia	58.2	19.1	22.0	3.8	4.9	15	2	21
Europe	48.4	18.5	18.3	3.7	4.1	13	10	16
Middle East	24.6	6.0	9.3	1.2	2.1	20	19	40
Commonwealth of Independent States (CIS)	18.2	0.4	6.9	0.1	1.5	72	71	78
South and Central America	13.7	3.9	5.2	0.8	1.2	17	34	45
Africa	12.7	2.5	4.8	0.5	1.1	24	32	31
Japan								
World	**158.6**	**100.0**	**100.0**	**15.3**	**13.4**	**9**	**13**	**14**
North America	65.6	54.5	41.3	8.3	5.5	5	18	1
Asia	30.2	17.1	19.0	2.6	2.6	10	-1	19
Europe	27.5	17.4	17.3	2.7	2.3	9	5	19
Middle East	13.5	5.1	8.5	0.8	1.1	17	12	41
Commonwealth of Independent States (CIS)	9.3	0.2	5.9	0.0	0.8	73	72	53
South and Central America	6.6	3.5	4.1	0.5	0.6	11	20	30
Africa	6.0	2.1	3.8	0.3	0.5	18	26	26
Other economies in Asia								
World	**106.0**	**100.0**	**100.0**	**4.6**	**9.0**	**22**	**18**	**25**
Asia	28.0	25.8	26.5	1.2	2.4	22	5	22
North America	23.0	32.9	21.7	1.5	1.9	15	12	6
Europe	20.9	22.4	19.7	1.0	1.8	20	19	12
Middle East	11.1	8.7	10.5	0.4	0.9	25	29	37
Commonwealth of Independent States (CIS)	8.9	0.8	8.4	0.0	0.8	72	68	114
South and Central America	7.1	5.4	6.7	0.2	0.6	26	56	63
Africa	6.7	3.7	6.4	0.2	0.6	32	38	37
North America								
World	**219.9**	**100.0**	**100.0**	**27.5**	**18.6**	**5**	**9**	**8**
North America	170.7	88.6	77.6	24.4	14.4	3	6	3
Europe	20.9	4.9	9.5	1.3	1.8	15	23	33
Asia	9.4	3.6	4.3	1.0	0.8	8	16	22
South and Central America	8.2	1.7	3.7	0.5	0.7	17	38	33
Middle East	6.3	0.9	2.9	0.3	0.5	23	9	7
Africa	2.7	0.3	1.2	0.1	0.2	30	17	64
Commonwealth of Independent States (CIS)	1.9	0.0	0.9	0.0	0.2	60	45	90

Table II.58

Imports of automotive products of selected economies by origin, 2007

(Million dollars and percentage)

Canada a	Value	Share	Annual percentage change			United States	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**68456**	**100.0**	**5**	**9**	**6**	**World**	**220770**	**100.0**	**4**	**7**	**0**
North America	55143	80.6	4	7	6	North America	99824	45.2	2	5	0
Asia	8887	13.0	11	21	7	Asia	75229	34.1	5	14	0
Europe	4079	6.0	13	21	7	Europe	43750	19.8	6	0	1
South and Central America	337	0.5	17	1	16	South and Central America	1334	0.6	5	4	33
Africa	6	0.0	8	44	33	Africa	563	0.3	20	70	8
Middle East	4	0.0	10	0	20	Middle East	65	0.0	12	24	5
CIS	0	0.0	...	100	...	CIS	5	0.0	8	0	67
Economy						Economy					
United States	50730	74.1	4	9	6	Canada	62806	28.4	1	2	1
Japan	6203	9.1	8	26	7	Japan	56538	25.6	3	16	1
European Union (27)	4057	5.9	13	22	7	European Union (27)	43492	19.7	6	0	1
Mexico	4057	5.9	6	16	13	Mexico	37018	16.8	4	21	3
Korea, Republic of	1555	2.3	17	4	6	Korea, Republic of	11006	5.0	10	6	2
Above 5	**66602**	**97.3**	**-**	**-**	**-**	**Above 5**	**210860**	**95.5**	**-**	**-**	**-**
China	799	1.2	44	28	7	China	4640	2.1	34	32	31
Canada	347	0.5	...	29	12	Taipei, Chinese	1712	0.8	9	2	9
Brazil	309	0.5	16	3	23	Brazil	1020	0.5	6	3	36
Taipei, Chinese	149	0.2	10	5	6	South Africa	559	0.3	20	71	9
Australia	36	0.1	15	12	66	India	452	0.2	20	21	18
India	35	0.1	26	16	21	Thailand	290	0.1	20	38	18
Thailand	27	0.0	38	3	28	Switzerland	143	0.1	2	12	16
Bolivarian Rep. of Venezuela	12	0.0	26	19	44	Australia	135	0.1	16	14	63
Malaysia	11	0.0	26	89	76	Indonesia	129	0.1	13	71	10
Viet Nam	11	0.0	253	19	63	Philippines	103	0.0	10	34	5
Switzerland	10	0.0	9	16	11	Argentina	96	0.0	14	18	16
Turkey	8	0.0	27	21	1	Turkey	85	0.0	16	15	11
Argentina	7	0.0	25	33	12	Bolivarian Rep. of Venezuela	71	0.0	14	9	55
South Africa	6	0.0	8	50	25	Singapore	66	0.0	0	12	2
Honduras	4	0.0	6	28	1	Malaysia	60	0.0	17	11	1
Indonesia	4	0.0	23	20	14	Israel	58	0.0	12	22	9
Singapore	3	0.0	12	58	26	Hong Kong, China	47	0.0	4	16	31
Hong Kong, China	3	0.0	7	33	2	Honduras	40	0.0	18	30	60
Norway	3	0.0	14	85	60	Viet Nam	38	0.0	131	37	57
Sri Lanka	3	0.0	199	27	67	Dominican Republic	32	0.0	21	14	18
Israel	3	0.0	2	12	27	Chile	30	0.0	26	26	195
Chile	2	0.0	32	490	4	Norway	30	0.0	2	83	44
Costa Rica	1	0.0	47	77	170	Costa Rica	23	0.0	35	103	9
Dominican Republic	1	0.0	145	6	1	Pakistan	8	0.0	28	116	113
Philippines	1	0.0	16	3	68	Colombia	7	0.0	19	12	16
United Arab Emirates	1	0.0	...	70	50	Uruguay	6	0.0	15	1053	28
New Zealand	1	0.0	3	100	2	United Arab Emirates	6	0.0	23	54	30
Colombia	0	0.0	52	94	35	New Zealand	5	0.0	30	92	12
Georgia	0	0.0	48	83	1046	Russian Federation	4	0.0	22	100	100
Uruguay	0	0.0	98	...	...	Jamaica	1	0.0	84	4	32
Above 35	**68399**	**99.9**	**-**	**-**	**-**	**Above 35**	**220756**	**100.0**	**-**	**-**	**-**

Table II.58 *(continued)*

Imports of automotive products of selected economies by origin, 2007

(Million dollars and percentage)

Mexico	Value	Share	Annual percentage change			European Union (27)	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**31632**	**100.0**	**6**	**13**	**6**	**World**	**543100**	**100.0**	**12**	**10**	**18**
North America	20007	63.2	3	11	5	Europe	481731	88.7	12	9	19
Asia	4710	14.9	22	47	18	Asia	40945	7.5	10	12	12
Europe	4143	13.1	9	8	10	North America	15944	2.9	14	36	27
South and Central America	2750	8.7	15	2	7	South and Central America	2020	0.4	12	17	7
Africa	15	0.0	...	133	7	Africa	1845	0.3	12	17	8
CIS	3	0.0	...	200	0	CIS	293	0.1	9	15	5
Middle East	2	0.0	...	0	50	Middle East	250	0.0	19	32	61
Economy						Economy					
United States	18117	57.3	2	11	6	European Union (27)	466252	85.9	12	9	18
European Union (27)	4071	12.9	9	8	11	Japan	23620	4.3	6	8	9
Japan	3178	10.0	17	44	12	Turkey	12873	2.4	40	27	32
Brazil	1803	5.7	11	2	20	United States	12278	2.3	12	32	22
Canada	1760	5.6	8	14	6	Korea, Republic of	10557	1.9	16	17	7
Above 5	**28929**	**91.5**	**-**	**-**	**-**	**Above 5**	**525579**	**96.8**	**-**	**-**	**-**
Korea, Republic of	573	1.8	35	114	16	Mexico	3152	0.6	21	70	56
Argentina	537	1.7	42	1	1	China	2427	0.4	45	50	58
China	513	1.6	89	52	56	Thailand	1731	0.3	14	11	30
Bolivarian Rep. of Venezuela	213	0.7	103	26	164	Brazil	1620	0.3	11	15	4
India	174	0.6	62	11	15	Switzerland	1426	0.3	11	8	25
Taipei, Chinese	140	0.4	18	28	27	South Africa	1344	0.2	11	17	2
Chile	129	0.4	0	70	594	India	1210	0.2	29	10	38
Turkey	37	0.1	30	20	39	Norway	833	0.2	9	6	19
Thailand	31	0.1	64	286	31	Taipei, Chinese	759	0.1	18	3	27
Switzerland	20	0.1	1	9	16	Canada	515	0.1	8	11	8
Indonesia	17	0.1	67	159	567	Argentina	365	0.1	12	35	19
South Africa	15	0.0	...	133	7	Tunisia	288	0.1	21	1	28
Costa Rica	12	0.0	96	175	143	Russian Federation	177	0.0	6	22	1
Philippines	9	0.0	44	27	18	Morocco	153	0.0	28	57	107
Malaysia	7	0.0	16	58	42	Croatia	151	0.0	29	1	42
Hong Kong, China	6	0.0	56	8	183	Malaysia	143	0.0	8	47	33
Australia	6	0.0	3	49	13	Australia	135	0.0	7	45	26
Honduras	4	0.0	...	70	14	Indonesia	107	0.0	30	8	3
Singapore	4	0.0	23	79	48	Philippines	98	0.0	23	6	108
Russian Federation	3	0.0	...	200	0	Saudi Arabia	76	0.0	28	90	104
Israel	2	0.0	67	6	43	Belarus	73	0.0	15	6	3
Korea, Dem. People's Rep. of	2	0.0	14	63	529	Israel	64	0.0	14	60	15
Colombia	2	0.0	5	59	32	Bosnia and Herzegovina	57	0.0	35	22	24
Viet Nam	1	0.0	...	60	335	Singapore	55	0.0	23	10	39
Norway	1	0.0	23	28	35	Egypt	47	0.0	63	96	36
						United Arab Emirates	44	0.0	15	31	46
						Gibraltar	44	0.0	24	4	9
						Hong Kong, China	39	0.0	20	34	70
						Ukraine	39	0.0	16	16	37
						Serbia	37	0.0	...	95	48
						Iran, Islamic Rep. of	34	0.0	38	26	256
						Iceland	25	0.0	36	6	73
						Viet Nam	22	0.0	51	8	207
						New Zealand	17	0.0	13	22	29
						Bahrain	14	0.0	8	66	96
Above 30	**31386**	**99.2**	**-**	**-**	**-**	**Above 40**	**542901**	**100.0**	**-**	**-**	**-**

a Imports are valued f.o.b.

Table II.59

Leading exporters and importers of automotive products, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	635.5			49.8	53.7	12	3	9	18
extra EU (27) exports	169.3			12.3	14.3	13	6	11	18
Japan	158.8	19.8	20.8	15.3	13.4	9	6	13	14
United States	108.8	11.9	10.2	11.7	9.2	7	13	11	14
Canada	65.8	6.9	8.9	10.5	5.6	1	5	1	1
Korea, Republic of	49.5	0.1	0.7	2.6	4.2	18	17	14	15
Mexico a	45.3	0.3	1.4	5.3	3.8	6	11	20	6
China a	23.0	0.0	0.1	0.3	1.9	47	59	45	60
Turkey b	15.7	0.0	0.0	0.3	1.3	40	16	25	33
Brazil	13.5	1.1	0.6	0.8	1.1	16	38	9	4
Thailand	12.7	0.0	0.0	0.4	1.1	27	44	24	28
United Arab Emirates b	7.8	...	0.0	0.2	0.7	32	9	30	36
Argentina	5.5	0.1	0.1	0.4	0.5	15	39	37	32
South Africa	5.4	0.1	0.1	0.3	0.5	18	18	14	8
Taipei, Chinese	4.1	...	0.3	0.4	0.3	9	2	1	6
Russian Federation b	3.7			0.2	0.3	21	17	30	24
Above 15	**1155.0**	**-**	**-**	**98.4**	**97.6**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	543.1			41.3	45.6	12	3	10	18
extra EU (27) imports	76.8			5.4	6.4	13	4	18	18
United States	220.8	20.3	24.7	28.7	18.5	4	4	7	0
Canada c	66.8	8.7	7.7	7.8	5.6	5	9	9	6
Russian Federation b, c	32.9			0.4	2.8	46	36	64	65
Mexico a, c	30.1	1.8	0.3	3.4	2.5	6	16	13	6
China a	24.0	0.6	0.6	0.6	2.0	30	6	37	29
Australia c	19.6	1.3	1.2	1.4	1.6	13	14	3	25
Japan	15.4	0.5	2.3	1.7	1.3	6	3	6	11
Turkey b	12.6	...	0.4	1.0	1.1	12	4	7	13
South Africa b, c	12.2	...	...	0.4	1.0	26	30	15	15
Saudi Arabia	12.0	2.7	0.9	0.6	1.0	18	35	6	15
Switzerland	10.0	1.8	1.9	1.0	0.8	7	2	4	15
United Arab Emirates b	8.7	0.4	0.3	0.4	0.7	20	7	20	11
Brazil	8.6	0.3	0.2	0.7	0.7	11	32	27	43
Ukraine	8.0			0.1	0.7	51	34	61	60
Above 15	**1024.8**	**-**	**-**	**89.7**	**86.0**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones
b Includes Secretariat estimates.
c Imports are valued f.o.b.

Table II.60

Exports of automotive products of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	318959 |	576510	919566	1018619	1182867	9.2	8.7
Argentina	200	2108	3047	4166	5479	8.0	9.8
Australia	726	2151	3525	3267	3697	3.4	2.6
Belarus		740	1176	1466	2003	10.1	8.2
Bolivarian Rep. of Venezuela	73	223	340	456	293	0.7	0.4
Brazil	2034	4683	11983	13038	13519	8.5	8.4
Canada	28442	60656	66856	66339	65833	21.9	15.7
Chile	18	203	178	184	346	1.1	0.5
China b	258	1581	9957	14411	23029	0.6	1.9
Colombia	6	226	645	744	1130	1.7	3.8
Côte d'Ivoire	...	11	188	174	185	0.3	2.2
Croatia	...	45	161	145	209	1.0	1.7
Ecuador	1	60	137	345	243	1.2	1.8
European Union (27)		287180	493393	538352	635537	11.7	11.9
intra EU (27) exports		216416	363147	394319	466252	13.0	12.9
extra EU (27) exports		70764	130246	144033	169285	9.0	10.0
Hong Kong, China	354	764	1549	1290	1459	0.4	0.4
domestic exports	27	23	9	14	24	0.1	0.1
re exports	328	741	1540	1276	1435	0.4	0.4
India	198	581	2622	2997	3429	1.4	2.4
Indonesia	22	369	1340	1590	2150	0.6	1.8
Iran, Islamic Rep. of c	...	61	145	229	687	0.2	0.8
Israel	31	31	130	125	319	0.1	0.6
Japan	66195	88082	122903	139161	158762	18.4	22.3
Jordan	19	62	110	114	142	3.3	2.5
Korea, Republic of	2301	15194	37748	43059	49484	8.8	13.3
Malaysia b	121	307	725	920	1122	0.3	0.6
Mexico b	4383	30655	35424	42630	45256	18.4	16.6
Morocco b	28	24	75	115	175	0.3	1.2
Norway	305	459	698	762	907	0.8	0.7
Philippines b	23	583	1538	1543	1784	1.5	3.5
Qatar	32	32	127	121	...	0.3	0.4
Russian Federation c		959	2310	3000	3711	0.9	1.0
Saudi Arabia	229	59	694	1032	1288	0.1	0.6
Singapore	348	678 |	2310	2396	2864	0.5	1.0
domestic exports c	82	90 |	273	262	264	0.1	0.2
re exports c	266	588 |	2037	2135	2600	1.0	1.8
South Africa	249	1708	4352	4970	5369	5.7	7.7
Switzerland	591	772 |	1444	1623	2001	1.0	1.2
Taipei, Chinese	829	2221	3820	3868	4103	1.5	1.7
Thailand	108	2417	7983	9891	12669	3.5	8.3
Tunisia	30	63	280	335	352	1.1	2.3
Turkey c	153	1517	9370	11730	15654	5.5	14.6
Ukraine		145	308	548	933	1.0	1.9
United Arab Emirates c	1	1144	4428	5737	7796	2.3	4.5
United States	32547	67195	85993	95344	108805	8.6	9.4
Viet Nam	...	8	161	303	...	0.1	0.8

a Or nearest year.
b Includes significant exports from processing zones.
c Includes Secretariat estimates.

Table II.61

Imports of automotive products of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Algeria	658	615	2244	2315	3453	6.7	12.5
Argentina	183	2805	4355	5514	7160	11.2	16.0
Australia b	3794	8550	15186	15690	19563	12.0	12.6
Bahrain	152	214	737	623	896	4.6	7.8
Bangladesh c, d	77	191	749	833	928	2.2	5.0
Belarus	-	297	494	911	1339	3.4	4.7
Bolivarian Rep. of Venezuela	426	1451	3059	4666	7238	9.9	17.3
Brazil e	532	4154	4733	6007	8604	7.4	7.1
Canada b	24640	46276	57618	62912	66768	19.3	17.6
Chile	579	1507	3193	3354	4122	8.1	8.7
China f	1796	3798	13545	18580	24029	1.7	2.5
Colombia	416	590	1906	2879	3868	5.1	11.8
Croatia	...	831	1615	1876	2279	10.5	8.8
Ecuador	157	184	1153	1347	1302	4.9	9.6
Egypt	416	514	826	924	1089	3.7	4.0
Ethiopia	114	141	343	701	593	11.2	11.0
European Union (27) g	-	245244	418041	458969	543100	9.5	9.7
extra-EU (27) imports	-	32091	54946	64983	76848	3.5	3.9
Ghana d	...	331	881	780	...	11.1	12.0
Guatemala	117	481	779	874	924	10.0	6.8
Hong Kong, China	994	2195	2429	2394	2796	1.0	0.8
retained imports	666	1455	889	1118	1361	4.2	3.5
India	260	431	1234	1478	2196	0.8	1.0
Indonesia	1523	1870	3140	2481	2909	4.3	3.1
Iran, Islamic Rep. of d	...	770	1596	3036	4329	5.5	9.4
Israel	871	2298	2374	2563	3339	6.1	5.7
Japan	7327	9957	13169	13897	15358	2.6	2.5
Jordan	108	519	856	1001	977	11.3	7.2
Kazakhstan d	-	435	1557	2537	2753	8.6	8.4
Kenya	255	156	368	575	726	5.0	8.1
Korea, Republic of	929	1773	4096	5210	6684	1.1	1.9
Kuwait d	453	1141	2904	2576	3080	15.9	13.0
Lebanon b, d	...	535	864	944	1096	8.6	8.9
Malaysia f	1312	1833	3395	3221	3223	2.2	2.2
Mexico b, f	933	20003	25151	28386	30094	11.5	10.7
Morocco f	317	471	1176	1415	2080	4.1	6.6
New Zealand	1012	1480	3449	2787	3431	10.6	11.1
Norway	1419	2597	5247	5953	7413	7.6	9.2
Oman	429	1109	2061	2723	...	21.6	24.7
Pakistan	390	324	1297	1544	1214	3.0	3.7
Panama	111	332	419	517	773	9.8	11.2
Peru	176	510	618	937	1432	6.9	7.1
Philippines b, d	537	974	1025	1142	1652	2.6	2.8
Qatar	202	409	1365	1027	...	12.6	6.2
Russian Federation b, d	-	2381	12199	20012	32934	5.3	14.7
Saudi Arabia	2839	3815	9843	10437	12024	12.6	13.3
Singapore	1418	2417	3620	3698	4025	1.8	1.5
retained imports d	1152	1829	1583	1563	1425	2.4	1.2
South Africa b, d	...	2401	9267	10616	12245	9.0	15.3
Sudan	...	155	891	1189	...	10.0	14.7
Switzerland	6048	6222	8323	8664	9969	7.5	6.2
Syrian Arab Republic	75	184	780	1018	...	4.8	8.9
Taipei, Chinese	2565	2676	3660	3058	2891	1.9	1.3
Thailand	2651	2084	4322	4231	4793	3.4	3.1
Tunisia	306	595	884	1015	1243	6.9	6.5
Turkey d	1177	5831	11973	11145	12642	10.7	7.4
Ukraine	-	446	3112	4996	8007	3.2	13.2
United Arab Emirates d	964	2384	6502	7825	8688	6.8	6.6
United States	79320	170195	205445	220221	220770	13.5	10.9
Viet Nam	...	294	1177	837	...	1.9	1.9

a Or nearest year.
b Imports are valued f.o.b.
c Figures refer to fiscal year.
d Includes Secretariat estimates.
e Beginning 2000, imports are valued f.o.b.
f Includes significant imports into processing zones.
g See the Metadata for information on intra-EU (27) imports.

4.5. Textiles

Table II.62

Textile exports of selected regions and economies by destination, 2007

(Billion dollars and percentage)

	Value	Share in region/economy's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**238.1**	**100.0**	**100.0**	**100.0**	**100.0**	**6**	**8**	**9**
Asia								
World	**113.8**	**100.0**	**100.0**	**44.0**	**47.8**	**7**	**10**	**9**
Asia	51.6	57.0	45.3	25.1	21.7	4	7	5
Europe	21.1	14.2	18.5	6.2	8.9	12	11	16
North America	17.4	13.2	15.3	5.8	7.3	10	9	0
Middle East	7.4	6.3	6.5	2.8	3.1	8	4	9
Africa	7.3	4.0	6.4	1.8	3.1	15	19	18
South and Central America	5.8	4.5	5.1	2.0	2.4	9	26	28
Commonwealth of Independent States (CIS)	3.2	0.8	2.8	0.3	1.4	29	19	35
China								
World	**55.9**	**100.0**	**100.0**	**10.3**	**23.5**	**19**	**19**	**15**
Asia	21.4	54.8	38.2	5.6	9.0	13	17	11
Europe	10.5	15.6	18.7	1.6	4.4	23	19	21
North America	9.9	15.0	17.7	1.5	4.2	22	16	6
Africa	4.8	5.3	8.5	0.5	2.0	28	30	21
Middle East	3.5	4.1	6.3	0.4	1.5	27	14	12
South and Central America	3.2	3.9	5.6	0.4	1.3	26	33	37
Commonwealth of Independent States (CIS)	2.8	1.3	5.0	0.1	1.2	45	21	36
Other economies in Asia								
World	**57.9**	**100.0**	**100.0**	**33.7**	**24.3**	**1**	**3**	**3**
Asia	30.2	57.6	52.2	19.4	12.7	0	2	1
Europe	10.6	13.7	18.3	4.6	4.5	6	4	11
North America	7.6	12.6	13.0	4.2	3.2	2	3	-7
Middle East	3.9	7.0	6.7	2.4	1.6	1	-3	7
South and Central America	2.6	4.7	4.5	1.6	1.1	1	21	17
Africa	2.5	3.6	4.4	1.2	1.1	4	5	13
Commonwealth of Independent States (CIS)	0.4	0.6	0.8	0.2	0.2	4	8	25
Europe								
World	**92.7**	**100.0**	**100.0**	**39.7**	**38.9**	**6**	**5**	**11**
Europe	69.3	77.3	74.8	30.7	29.1	5	5	10
Asia	5.7	5.8	6.1	2.3	2.4	7	7	8
Africa	5.2	5.4	5.6	2.2	2.2	6	6	16
North America	4.7	6.3	5.0	2.5	2.0	3	0	1
Commonwealth of Independent States (CIS)	4.0	1.8	4.3	0.7	1.7	20	22	17
Middle East	1.8	1.9	2.0	0.8	0.8	6	-2	16
South and Central America	0.7	1.0	0.8	0.4	0.3	3	14	19
North America								
World	**16.9**	**100.0**	**100.0**	**10.0**	**7.1**	**1**	**1**	**-2**
North America	9.9	69.0	58.7	6.9	4.2	-1	-1	-5
South and Central America	3.4	10.2	20.2	1.0	1.4	11	2	5
Asia	1.8	9.3	10.6	0.9	0.8	3	12	0
Europe	1.5	9.9	8.8	1.0	0.6	-1	6	4
Middle East	0.1	1.0	0.9	0.1	0.1	-1	-5	1
Africa	0.1	0.5	0.5	0.0	0.0	1	14	0
Commonwealth of Independent States (CIS)	0.1	0.2	0.4	0.0	0.0	12	-3	-3

Table II.63

Textile imports of selected economies by origin, 2007

(Million dollars and percentage)

Canada a	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**4572**	**100.0**	**1**	**2**	**2**
North America	2537	55.5	1	0	3
Asia	1421	31.1	7	11	11
Europe	502	11.0	3	1	6
South and Central America	48	1.1	1	32	23
Middle East	41	0.9	6	0	0
Africa	21	0.5	8	7	40
CIS	2	0.0	10	50	33
Economy					
United States	2375	51.9	2	2	3
China	793	17.3	18	18	17
European Union (27)	432	9.4	2	0	6
India	197	4.3	8	8	8
Mexico	141	3.1	7	13	1
Above 5	**3938**	**86.1**	**-**	**-**	**-**
Pakistan	97	2.1	0	3	7
Korea, Republic of	78	1.7	7	5	3
Taipei, Chinese	67	1.5	6	9	7
Turkey	53	1.2	7	16	9
Bangladesh	43	0.9	30	26	28
Japan	42	0.9	1	2	5
Indonesia	31	0.7	6	14	4
Israel	30	0.7	17	0	8
Brazil	27	0.6	1	36	50
Canada	20	0.4	...	16	10
Viet Nam	18	0.4	22	17	99
Thailand	17	0.4	4	13	3
Egypt	15	0.3	14	3	47
Switzerland	14	0.3	5	18	10
Iran, Islamic Rep. of	8	0.2	6	4	14
Colombia	6	0.1	7	24	13
Australia	5	0.1	8	14	24
Nepal	4	0.1	16	13	31
Malaysia	4	0.1	4	16	5
New Zealand	4	0.1	14	35	3
Argentina	4	0.1	45	4	63
Hong Kong, China	4	0.1	24	26	5
Uruguay	3	0.1	6	61	73
Sri Lanka	2	0.1	3	71	18
Philippines	2	0.0	3	22	5
Chile	2	0.0	9	55	119
South Africa	2	0.0	12	0	33
Peru	2	0.0	1	35	58
Cambodia	2	0.0	116	43	66
Dominican Republic	2	0.0	18	145	10
El Salvador	1	0.0	11	5	9
Saudi Arabia	1	0.0	9	35	13
Norway	1	0.0	15	28	38
Russian Federation	1	0.0	0	0	0
Tunisia	1	0.0	56	283	108
Above 40	**4553**	**99.6**	**-**	**-**	**-**

United States	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**24089**	**100.0**	**6**	**4**	**3**
Asia	14948	62.1	9	9	4
Europe	4011	16.7	2	3	3
North America	3595	14.9	0	3	3
South and Central America	674	2.8	7	5	6
Middle East	576	2.4	5	3	3
Africa	229	1.0	5	9	7
CIS	56	0.2	6	34	47
Economy					
China	7661	31.8	22	15	10
European Union (27)	3263	13.5	2	2	4
India	2348	9.7	10	11	3
Canada	1842	7.6	1	5	6
Mexico	1753	7.3	2	0	0
Above 5	**16867**	**70.0**	**-**	**-**	**-**
Pakistan	1700	7.1	8	12	11
Korea, Republic of	902	3.7	1	4	7
Turkey	643	2.7	5	11	0
Taipei, Chinese	640	2.7	3	5	0
Japan	594	2.5	1	1	2
Brazil	412	1.7	10	1	9
Israel	333	1.4	5	3	4
Thailand	313	1.3	2	7	1
Indonesia	236	1.0	2	9	2
Egypt	186	0.8	7	7	4
Bangladesh	121	0.5	2	3	3
Iran, Islamic Rep. of	100	0.4	2	10	16
Viet Nam	97	0.4	83	28	18
Dominican Republic	91	0.4	15	4	3
Switzerland	87	0.4	1	13	9
Philippines	60	0.3	11	9	1
Colombia	58	0.2	5	2	7
Hong Kong, China	56	0.2	19	21	10
Malaysia	55	0.2	7	10	17
Bahrain	55	0.2	17	28	84
Nepal	48	0.2	2	1	15
United Arab Emirates	45	0.2	12	68	24
Saudi Arabia	41	0.2	11	7	59
Australia	37	0.2	1	11	1
Sri Lanka	35	0.1	16	8	6
South Africa	34	0.1	0	14	17
New Zealand	23	0.1	1	2	5
Peru	21	0.1	2	0	9
El Salvador	20	0.1	7	5	20
Turkmenistan	19	0.1	28	26	34
Ukraine	18	0.1	21	84	842
Norway	16	0.1	15	35	284
Guatemala	15	0.1	2	16	1
Chile	15	0.1	30	2	59
Cambodia	11	0.0	10	8	29
Above 40	**24007**	**99.7**	**-**	**-**	**-**

Table II.63 *(continued)*

Textile imports of selected economies by origin, 2007

(Million dollars and percentage)

Mexico a	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**5948**	**100.0**	**0**	**-2**	**-5**
North America	4215	70.9	2	4	4
Asia	934	15.7	2	4	13
Europe	533	9.0	13	25	5
South and Central America	245	4.1	14	7	7
Middle East	15	0.3	21	13	7
Africa	4	0.1	22	40	33
CIS	2	0.0	10	50	0
Economy					
United States	4107	69.0	2	4	4
European Union (27)	490	8.2	13	25	1
China	445	7.5	21	10	19
Korea, Republic of	109	1.8	16	3	13
Canada	102	1.7	3	3	21
Above 5	**5253**	**88.3**	**-**	**-**	**-**
Taipei, Chinese	101	1.7	4	2	8
Brazil	91	1.5	29	30	40
India	62	1.0	19	24	32
Colombia	51	0.9	9	26	1
Indonesia	46	0.8	7	23	11
Japan	43	0.7	7	84	27
Pakistan	37	0.6	8	27	1
Turkey	34	0.6	21	48	127
Guatemala	29	0.5	23	1	8
Thailand	28	0.5	8	12	7
Chile	21	0.4	1	10	22
Malaysia	14	0.2	8	32	28
Israel	13	0.2	25	19	11
Dominican Republic	12	0.2	91	47	29
El Salvador	10	0.2	18	0	4
Uruguay	8	0.1	0	1	38
Bangladesh	8	0.1	6	13	18
Switzerland	8	0.1	9	10	5
Hong Kong, China	7	0.1	19	32	16
Philippines	6	0.1	29	42	21
Peru	5	0.1	14	5	17
Viet Nam	5	0.1	33	8	64
Argentina	4	0.1	9	7	15
Costa Rica	4	0.1	3	8	31
Sri Lanka	2	0.0	2	9	142
South Africa	2	0.0	...	0	0
Ukraine	2	0.0	59	42	1
Honduras	2	0.0	27	370	8
Egypt	2	0.0	29	5	52
Nepal	1	0.0	24	36	92
Cambodia	1	0.0	...	47	59
Iran, Islamic Rep. of	1	0.0	5	155	8
Australia	1	0.0	6	46	22
Bolivia	1	0.0	16	140	103
Singapore	1	0.0	20	5	23
Above 40	**5910**	**99.4**	**-**	**-**	**-**

European Union 27	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**84208**	**100.0**	**6**	**7**	**10**
Europe	63630	75.6	5	5	9
Asia	16572	19.7	9	13	17
North America	1432	1.7	2	12	4
Africa	1169	1.4	6	6	17
Middle East	733	0.9	0	3	6
CIS	465	0.6	3	0	1
South and Central America	184	0.2	0	8	4
Economy					
European Union (27)	56894	67.6	5	5	9
China	7428	8.8	21	21	21
Turkey	5092	6.0	13	12	13
India	3165	3.8	8	9	16
Pakistan	2099	2.5	11	13	20
Above 5	**74679**	**88.7**	**-**	**-**	**-**
Switzerland	1309	1.6	1	2	13
United States	1277	1.5	2	12	4
Korea, Republic of	866	1.0	2	9	12
Japan	644	0.8	2	4	8
Indonesia	578	0.7	0	13	9
Taipei, Chinese	470	0.6	5	4	4
Egypt	435	0.5	5	11	14
Thailand	385	0.5	1	4	4
Tunisia	374	0.4	13	10	27
Bangladesh	345	0.4	16	27	25
Israel	320	0.4	5	6	11
Viet Nam	186	0.2	19	33	24
Iran, Islamic Rep. of	171	0.2	8	7	11
Morocco	164	0.2	8	1	22
Malaysia	159	0.2	2	9	9
Norway	155	0.2	4	3	1
United Arab Emirates	119	0.1	11	44	39
South Africa	118	0.1	6	2	5
Belarus	118	0.1	10	2	17
Russian Federation	100	0.1	5	6	25
Brazil	99	0.1	2	13	12
Croatia	96	0.1	5	8	20
Canada	89	0.1	3	25	4
Uzbekistan	73	0.1	3	1	14
Ukraine	72	0.1	7	15	9
Hong Kong, China	67	0.1	1	2	7
Syrian Arab Republic	66	0.1	3	12	9
Mexico	66	0.1	6	12	10
Nepal	55	0.1	8	3	0
Moldova	54	0.1	11	7	20
Sri Lanka	43	0.1	1	31	14
Philippines	40	0.0	4	76	44
Peru	40	0.0	6	15	12
Serbia	40	0.0	...	125	35
Bahrain	31	0.0	5	16	11
Above 40	**83902**	**99.6**	**-**	**-**	**-**

Table II.63 *(continued)*

Textile imports of selected economies by origin, 2007

(Million dollars and percentage)

China b

	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**16644**	**100.0**	**4**	**6**	**2**
Asia	14811	89.0	3	4	0
Europe	1192	7.2	19	20	18
North America	582	3.5	21	30	13
Middle East	22	0.1	24	13	22
South and Central America	15	0.1	33	15	0
CIS	12	0.1	5	20	0
Africa	9	0.1	9	14	13
Economy					
China	3324	20.0	15	18	3
Japan	3153	18.9	1	1	0
Taipei, Chinese	3148	18.9	0	1	2
Korea, Republic of	2386	14.3	1	3	3
Hong Kong, China	1122	6.7	2	0	4
Above 5	**13132**	**78.9**	**-**	**-**	**-**
European Union (27)	1101	6.6	18	18	17
Pakistan	731	4.4	9	22	4
United States	547	3.3	21	28	15
Thailand	255	1.5	15	1	12
Indonesia	191	1.2	1	0	1
India	184	1.1	1	16	12
Malaysia	104	0.6	3	13	8
Viet Nam	67	0.4	23	53	44
Turkey	57	0.3	38	62	40
Singapore	41	0.2	1	10	4
Philippines	38	0.2	36	147	1
Australia	34	0.2	10	5	13
Switzerland	31	0.2	27	60	8
Canada	24	0.1	28	50	4
Macao, China	13	0.1	17	34	56
Mexico	11	0.1	41	88	27
Saudi Arabia	9	0.1	47	71	90
Israel	9	0.1	38	26	30
Brazil	7	0.0	...	13	0
Russian Federation	6	0.0	4	50	0
Cambodia	5	0.0	212	11	23
Bangladesh	5	0.0	32	28	31
South Africa	4	0.0	22	0	33
Belarus	3	0.0	7	8	6
New Zealand	3	0.0	9	7	9
Peru	3	0.0	20	10	52
United Arab Emirates	3	0.0	8	76	18
Uruguay	3	0.0	44	32	7
Korea, Dem. People's Rep. of	2	0.0	33	8	9
Egypt	2	0.0	4	24	29
Norway	2	0.0	3	11	37
Sri Lanka	2	0.0	3	48	26
Ukraine	1	0.0	14	10	22
Mauritius	1	0.0	37	512	34
Nepal	1	0.0	18	8	23
Above 40	**16635**	**99.9**	**-**	**-**	**-**

Japan

	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007
Region					
World	**6302**	**100.0**	**4**	**6**	**2**
Asia	5231	83.0	5	8	4
Europe	746	11.8	0	2	2
North America	261	4.1	4	7	13
Middle East	30	0.5	4	15	0
South and Central America	14	0.2	8	0	36
Africa	12	0.2	3	9	0
CIS	8	0.1	8	0	0
Economy					
China	3444	54.6	8	10	3
European Union (27)	688	10.9	0	2	2
Indonesia	368	5.8	2	1	5
Taipei, Chinese	356	5.6	4	8	9
Korea, Republic of	320	5.1	3	0	2
Above 5	**5175**	**82.1**	**-**	**-**	**-**
United States	247	3.9	5	8	13
Thailand	196	3.1	7	10	23
India	168	2.7	1	5	2
Viet Nam	142	2.3	6	9	2
Malaysia	80	1.3	2	14	24
Pakistan	66	1.0	11	6	7
Turkey	33	0.5	7	19	27
Philippines	32	0.5	2	11	4
Switzerland	24	0.4	1	4	3
Iran, Islamic Rep. of	20	0.3	8	6	19
Bangladesh	13	0.2	0	2	1
Hong Kong, China	13	0.2	1	14	21
Macao, China	13	0.2	19	10	17
Australia	12	0.2	6	33	36
Brazil	9	0.1	9	33	44
Canada	9	0.1	2	2	18
Mexico	6	0.1	6	17	20
United Arab Emirates	5	0.1	62	513	202
South Africa	5	0.1	26	33	25
Israel	5	0.1	10	93	44
Egypt	4	0.1	6	4	7
Peru	4	0.1	6	21	12
Uzbekistan	4	0.1	16	75	35
Russian Federation	3	0.0	17	50	200
Singapore	3	0.0	1	19	1
Sri Lanka	2	0.0	1	7	8
New Zealand	2	0.0	3	48	39
Tanzania	1	0.0	2	3	3
Belarus	1	0.0	25	28	33
Dominican Republic	1	0.0	...	99	4
Nepal	1	0.0	2	3	21
Myanmar	1	0.0	1	8	16
Tunisia	1	0.0	44	5	38
Above 38	**6299**	**100.0**	**-**	**-**	**-**

a Imports are valued f.o.b.

b In 2007, China reported imports from China accounting for 20 per cent of its textile imports. For further information, see the Metadata.

Table II.64

Leading exporters and importers of textiles, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
European Union (27)	80.62			36.2	33.9	5	4	5	9
extra EU (27) exports	23.72			9.9	10.0	6	3	5	10
China a	55.97	4.6	6.9	10.3	23.5	19	23	19	15
Hong Kong, China	13.42	3.2	7.9	8.6	5.6	0	3	1	4
domestic exports	0.46	1.7	2.1	0.8	0.2	12	12	12	13
re exports	12.95	1.6	5.8	7.8	5.4	1	3	1	3
United States	12.39	6.8	4.8	7.0	5.2	2	3	2	2
Korea, Republic of	10.37	4.0	5.8	8.1	4.4	3	4	3	3
Taipei, Chinese	9.72	3.2	5.9	7.6	4.1	3	3	1	0
India	9.45	2.4	2.1	3.6	4.0	8	13	7	7
Turkey b	8.73	0.6	1.4	2.3	3.7	13	10	7	15
Pakistan	7.37	1.6	2.6	2.9	3.1	7	16	5	1
Japan	7.11	9.3	5.6	4.5	3.0	0	3	0	3
United Arab Emirates b	4.02	0.1	0.0	2.0	1.7	4	24	29	36
Indonesia	3.83	0.1	1.2	2.2	1.6	1	13	8	6
Thailand	3.11	0.6	0.9	1.2	1.3	7	8	4	8
Canada	2.32	0.6	0.7	1.4	1.0	1	1	4	2
Mexico a	2.21	0.2	0.7	1.6	0.9	2	3	3	1
Above 15	**217.67**	**-**	**-**	**91.7**	**91.4**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	84.21			34.4	33.7	6	2	7	10
extra EU (27) imports	27.31			9.7	10.9	8	2	11	14
United States	24.09	4.5	6.2	9.6	9.6	6	9	4	3
China a, c	16.64	1.9	4.9	7.7	6.7	4	1	6	2
Hong Kong, China	13.56	5.2	9.4	8.2	5.4	0	2	1	3
retained imports	0.60	3.7	3.8	0.9	0.2	12	14	5	1
Japan	6.30	3.0	3.8	3.0	2.5	4	4	6	2
Turkey b	5.98	0.1	0.5	1.3	2.4	16	6	6	28
Mexico a, d	5.66	0.2	0.9	3.5	2.3	0	5	2	5
Viet Nam b	4.94	...	...	0.8	2.0	20	17	16	24
Canada d	4.46	2.3	2.2	2.5	1.8	1	5	2	2
Russian Federation b, d	4.41			0.8	1.8	19	25	26	22
Korea, Republic of	4.14	0.7	1.8	2.0	1.7	3	5	10	6
United Arab Emirates b	4.10	0.8	0.9	1.2	1.6	10	1	10	15
Brazil	2.28	0.1	0.2	0.6	0.9	12	13	38	42
Morocco a	2.28	0.2	0.3	0.8	0.9	8	1	7	19
Thailand	2.16	0.3	0.8	1.0	0.9	4	8	4	5
Above 15	**172.25**	**-**	**-**	**70.0**	**68.9**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones
b Includes Secretariat estimates.
c In 2007, China reported imports of textiles from China amounting to $3.3 billion. For further information, see the Metadata.
d Imports are valued f.o.b.

Table II.65

Textile exports of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	104354 |	156766	202657	217992	238126	2.5	1.7
Argentina	158	258	212	219	233	1.0	0.4
Australia	153	347	329	312	340	0.5	0.2
Bangladesh b, c	343	393	504	625	718	6.2	5.8
Belarus	-	410	474	504	567	5.6	2.3
Brazil	769	895	1330	1365	1448	1.6	0.9
Canada	687	2204	2464	2369	2316	0.8	0.6
Chile	33	114	120	112	129	0.6	0.2
China d	7219	16135	41050	48683	55968	6.5	4.6
Colombia	133	268	355	383	628	2.1	2.1
Croatia	...	87	107	113	132	2.0	1.1
Egypt c	554	412	592	634	702	8.8	4.3
El Salvador d	38	79	75	80	98	2.7	2.5
European Union (27)	-	56737	70468	73844	80618	2.3	1.5
intra-EU (27) exports	-	41170	50044	52308	56894	2.5	1.6
extra-EU (27) exports	-	15567	20424	21536	23724	2.0	1.4
Guatemala	34	53 |	175	183	202	2.0	2.9
Hong Kong, China	8213	13441	13830	13910	13417	6.6	3.8
domestic exports	2171	1176	604	530	462	5.0	2.6
re-exports	6042	12265	13226	13380	12955	6.8	3.9
India	2180	5570	8285	8837	9446	13.1	6.5
Indonesia	1241	3505	3353	3614	3829	5.4	3.2
Iran, Islamic Rep. of c	510	766	781	766	676	2.7	0.8
Israel	270	490	709	744	764	1.6	1.4
Japan	5871	7023	6905	6934	7108	1.5	1.0
Korea, Republic of	6076	12710	10391	10110	10373	7.4	2.8
Macao, China	136	272	275	242	197	10.7	7.8
Malaysia d	343	1270	1356	1437	1470	1.3	0.8
Mauritius c, d	35	81	75	78	88	5.2	3.9
Mexico d	713	2571	2138	2192	2215	1.5	0.8
Morocco d	203	123	189	242	338	1.7	2.3
Nepal c	82	182	187	157	170	22.7	19.1
New Zealand	135	142	257	262	304	1.1	1.1
Norway	163	173	217	233	258	0.3	0.2
Pakistan	2663	4532	7087	7469	7371	50.2	41.3
Peru	221	128	158	199	250	1.8	0.9
Philippines c, d	132	297	269	239	222	0.7	0.4
Russian Federation c	-	430	465	527	544	0.4	0.2
Saudi Arabia	31	114	296	315	324	0.1	0.1
Singapore	903	907 |	916	911	969	0.7	0.3
domestic exports	141	293 |	234	285	320	0.4	0.2
re-exports	762	614 |	682	626	649	1.0	0.5
South Africa c	167	240	312	306	332	0.8	0.5
Sri Lanka c	25	244	136	154	176	4.5	2.3
Switzerland	2557	1503 |	1567	1593	1761	1.9	1.0
Syrian Arab Republic	555	158 |	228	820	...	3.4	7.5
Taipei, Chinese	6128	11891	9706	9763	9720	8.0	4.1
Tanzania	...	11	27	35	56	1.7	2.8
Thailand	928	1958	2764	2873	3114	2.8	2.0
Tunisia	112	154	326	349	495	2.6	3.3
Turkey c	1440	3672	7076	7585	8731	13.2	8.1
Ukraine	-	127	239	244	290	0.9	0.6
United Arab Emirates c	6	3137	2279	2950	4015	6.3	2.3
United States	5039	10952	12379	12665	12386	1.4	1.1
Viet Nam c	...	299	725	1058	1352	2.1	2.8

a Or nearest year.
b Figures refer to fiscal year.
c Includes Secretariat estimates.
d Includes significant exports from processing zones.

Table II.66

Textile imports of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Argentina	53	653	725	820	1000	2.6	2.2
Australia b	1445	1632	1766	1837	2051	2.3	1.3
Bangladesh c, d	452	1350	1634	1838	1816	15.2	9.8
Belarus	-	256	351	427	487	3.0	1.7
Bolivarian Rep. of Venezuela b	112	286	504	644	1079	2.0	2.6
Bosnia and Herzegovina	...	...	196	241	294	...	3.0
Brazil e	252	1045	1159	1599	2276	1.9	1.9
Cambodia b, d	...	432	1003	1202	1350	22.3	24.5
Canada b	2325	4126	4312	4377	4459	1.7	1.2
Chile	203	431	462	522	563	2.3	1.2
China f	5292	12832	15503	16358	16645	5.7	1.7
Colombia	75	558	726	864	988	4.8	3.0
Costa Rica f	83	184	243	303	318	2.9	2.5
Croatia	...	249	448	484	566	3.2	2.2
Dominican Republic b, d, f	...	1173	914	941	838	12.4	6.1
Egypt d	211	526	924	1047	1234	3.8	4.6
El Salvador d, f	111	325	696	672	694	6.6	8.0
European Union (27) g	-	57422	71642	76314	84208	2.2	1.5
extra-EU (27) imports	-	16222	21531	23924	27314	1.8	1.4
FYR Macedonia	...	27	317	339	425	1.3	8.1
Guatemala f	38	59	1169	1144	873	1.2	6.4
Honduras d	26	501	1169	1191	1362	12.6	15.9
Hong Kong, China	10182	13716	13793	13975	13559	6.4	3.7
retained imports	4140	1451	567	595	604	4.2	1.6
India	240	578	1989	2000	2128	1.1	1.0
Indonesia	785	1251	756	730	785	2.9	0.8
Iran, Islamic Rep. of d	...	298	430	412	375	2.1	0.8
Israel	474	759	755	718	763	2.0	1.3
Japan	4133	4935	5812	6179	6302	1.3	1.0
Jordan	107	172	681	725	670	3.7	5.0
Kenya	17	47	229	249	250	1.5	2.8
Korea, Republic of	1947	3359	3541	3909	4140	2.1	1.2
Kuwait d	168	212	324	343	411	3.0	1.7
Macao, China	619	902	706	618	485	40.0	9.0
Madagascar b, d	20	200	264	314	417	18.2	16.1
Malaysia f	951	1114	987	1063	1184	1.4	0.8
Mauritius d	336	411	251	266	290	19.6	7.4
Mexico b, f	992	5822	6043	5951	5661	3.3	2.0
Morocco f	361	1364	1785	1915	2276	11.8	7.2
New Zealand	396	369	516	506	564	2.7	1.8
Norway	554	509	710	772	927	1.5	1.2
Pakistan	126	130	471	551	579	1.2	1.8
Peru	17	165	324	358	472	2.2	2.3
Philippines d	910	1250	1101	1244	1189	3.4	2.1
Russian Federation b, d	-	1316	2871	3613	4408	2.9	2.0
Saudi Arabia	1312	986	1207	1204	1296	3.3	1.4
Singapore	1778	1275	1037	1101	1174	0.9	0.4
retained imports	1016	661	356	475	525	0.9	0.4
South Africa b	561	570	872	975	1015	2.1	1.3
Sri Lanka d	412	1483	1550	1540	1609	20.7	14.2
Switzerland	1849	1326	1678	1800	2032	1.6	1.3
Syrian Arab Republic	168	399	379	353	...	10.5	3.1
Taipei, Chinese	1013	1460	1117	1141	1167	1.0	0.5
Thailand	898	1630	1986	2059	2160	2.6	1.4
Tunisia	790	1207	1614	1594	1997	14.1	10.5
Turkey d	567	2124	4441	4686	5980	3.9	3.5
Ukraine	-	450	900	916	984	3.2	1.6
United Arab Emirates d	983	2055	3253	3567	4100	5.9	3.1
United States	6730	15985	22538	23498	24089	1.3	1.2
Viet Nam d	...	1379	3435	3988	4940	8.8	8.1

a Or nearest year.
b Imports are valued f.o.b.
c Figures refer to fiscal year.
d Includes Secretariat estimates.
e Beginning 2000, imports are valued f.o.b.
f Includes significant imports into processing zones.
g See the Metadata for information on intra-EU (27) imports.

4.6. Clothing

Table II.67

Clothing exports of selected regions and economies by destination, 2007

(Billion dollars and percentage)

	Value	Share in region/economy's exports		Share in world exports		Annual percentage change		
	2007	2000	2007	2000	2007	2000-07	2006	2007
World	**345.3**	**100.0**	**100.0**	**100.0**	**100.0**	**8**	**12**	**12**
Asia								
World	**181.0**	**100.0**	**100.0**	**46.0**	**52.4**	**10**	**20**	**12**
North America	60.1	39.3	33.2	18.1	17.4	8	14	8
Europe	51.2	23.7	28.3	10.9	14.8	13	41	0
Asia	39.0	29.4	21.5	13.5	11.3	6	10	10
Commonwealth of Independent States (CIS)	14.1	1.9	7.8	0.9	4.1	35	-1	95
Middle East	7.0	2.8	3.9	1.3	2.0	16	4	61
Africa	4.8	1.2	2.7	0.5	1.4	24	40	46
South and Central America	4.7	1.7	2.6	0.8	1.4	17	28	42
China								
World	**115.2**	**100.0**	**100.0**	**18.2**	**33.4**	**18**	**29**	**21**
Asia	32.0	51.8	27.8	9.4	9.3	8	14	13
Europe	28.4	16.8	24.7	3.1	8.2	25	64	-2
North America	27.4	20.7	23.8	3.8	7.9	20	25	20
Commonwealth of Independent States (CIS)	13.7	3.4	11.9	0.6	4.0	41	-2	99
Middle East	5.3	2.6	4.6	0.5	1.5	28	10	87
Africa	4.2	1.6	3.6	0.3	1.2	33	50	54
South and Central America	4.2	3.1	3.6	0.6	1.2	21	31	48
Other economies in Asia								
World	**65.8**	**100.0**	**100.0**	**27.8**	**19.1**	**3**	**9**	**0**
North America	32.7	51.5	49.7	14.3	9.5	2	7	0
Europe	22.8	28.3	34.6	7.8	6.6	6	19	1
Asia	7.0	14.7	10.6	4.1	2.0	-2	-5	-4
Middle East	1.7	2.8	2.6	0.8	0.5	1	-5	11
Africa	0.7	0.9	1.0	0.2	0.2	4	5	12
South and Central America	0.6	0.8	0.9	0.2	0.2	4	13	11
Commonwealth of Independent States (CIS)	0.4	0.9	0.6	0.2	0.1	-3	27	13
Europe								
World	**122.4**	**100.0**	**100.0**	**32.6**	**35.4**	**10**	**7**	**14**
Europe	100.8	82.7	82.4	26.9	29.2	10	6	13
Commonwealth of Independent States (CIS)	6.0	1.8	4.9	0.6	1.8	26	32	36
North America	5.0	7.1	4.1	2.3	1.4	1	-3	4
Asia	4.9	4.4	4.0	1.4	1.4	8	6	14
Middle East	2.3	1.7	1.9	0.5	0.7	11	15	25
Africa	1.4	1.7	1.2	0.6	0.4	4	4	6
South and Central America	0.4	0.5	0.3	0.2	0.1	2	11	29
South and Central America								
World	**12.5**	**100.0**	**100.0**	**5.9**	**3.6**	**1**	**-4**	**0**
North America	10.4	92.9	83.4	5.5	3.0	-1	-6	-7
South and Central America	1.7	5.2	13.5	0.3	0.5	16	22	89
Europe	0.3	1.6	2.2	0.1	0.1	6	0	-2
Asia	0.0	0.1	0.4	0.0	0.0	21	17	37
Africa	0.0	0.0	0.1	0.0	0.0	41	0	38
Middle East	0.0	0.1	0.1	0.0	0.0	4	-58	0
Commonwealth of Independent States (CIS)	0.0	0.0	0.0	0.0	0.0	22	33	0

Table II.68

Clothing imports of selected economies by origin, 2007

(Million dollars and percentage)

Canada a	Value	Share	Annual percentage change			United States	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**7788**	**100.0**	**11**	**16**	**12**	**World**	**84847**	**100.0**	**3**	**4**	**2**
Asia	6123	78.6	13	20	14	Asia	61220	72.2	7	9	7
North America	772	9.9	1	3	1	South and Central America	10120	11.9	1	6	7
Europe	591	7.6	10	9	15	North America	5859	6.9	8	12	15
South and Central America	193	2.5	10	6	4	Europe	3691	4.4	2	8	0
Africa	74	1.0	13	14	10	Africa	2263	2.7	8	3	3
Middle East	25	0.3	1	4	0	Middle East	1618	1.9	1	1	15
CIS	11	0.1	9	27	0	CIS	76	0.1	23	32	61
Economy						Economy					
China	4163	53.5	24	25	19	China	28530	33.6	18	15	17
United States	471	6.0	2	3	2	Mexico	4743	5.6	8	13	15
European Union (27)	453	5.8	8	9	15	Viet Nam	4619	5.4	89	18	35
Bangladesh	452	5.8	23	19	4	Indonesia	4306	5.1	9	27	8
India	350	4.5	5	7	4	India	3505	4.1	7	5	2
Above 5	**5889**	**75.6**	**-**	**-**	**-**	**Above 5**	**45703**	**53.9**	**-**	**-**	**-**
Mexico	296	3.8	11	8	4	Bangladesh	3286	3.9	5	23	5
Cambodia	186	2.4	50	21	45	European Union (27)	2927	3.5	1	4	6
Viet Nam	169	2.2	32	34	27	Honduras	2649	3.1	1	6	3
Indonesia	155	2.0	8	19	15	Cambodia	2559	3.0	17	25	13
Turkey	111	1.4	16	9	10	Thailand	2311	2.7	0	2	4
Thailand	107	1.4	1	2	7	Hong Kong, China	2162	2.5	11	21	27
Pakistan	82	1.1	5	17	1	Philippines	1821	2.1	2	9	14
Malaysia	78	1.0	0	9	7	Sri Lanka	1711	2.0	1	2	7
Philippines	76	1.0	3	6	6	Pakistan	1696	2.0	6	13	4
Hong Kong, China	56	0.7	23	27	16	El Salvador	1523	1.8	1	13	5
Sri Lanka	56	0.7	2	8	0	Guatemala	1517	1.8	0	7	13
Honduras	54	0.7	12	12	7	Malaysia	1422	1.7	0	8	2
Korea, Republic of	49	0.6	19	1	19	Jordan	1194	1.4	59	16	9
Taipei, Chinese	43	0.6	13	19	0	Canada	1116	1.3	8	10	17
El Salvador	28	0.4	14	27	3	Dominican Republic	1083	1.3	11	16	32
Macao, China	25	0.3	6	2	8	Macao, China	1073	1.3	2	4	12
Peru	23	0.3	21	27	1	Nicaragua	994	1.2	16	23	10
Morocco	17	0.2	42	57	27	Taipei, Chinese	965	1.1	12	11	15
Tunisia	16	0.2	35	31	16	Peru	851	1.0	11	5	3
Guatemala	16	0.2	13	30	6	Egypt	738	0.9	8	41	11
Dominican Republic	16	0.2	5	8	24	Korea, Republic of	725	0.9	17	20	31
Haiti	15	0.2	25	5	31	Turkey	624	0.7	8	22	22
Jordan	12	0.2	69	74	32	Haiti	462	0.5	8	10	1
Egypt	12	0.2	4	3	9	Costa Rica	433	0.5	9	3	9
Switzerland	11	0.1	12	25	37	Lesotho	402	0.5	16	0	1
Nicaragua	11	0.1	13	87	23	Colombia	398	0.5	1	12	24
Madagascar	10	0.1	40	24	12	Madagascar	308	0.4	15	14	21
Singapore	8	0.1	6	3	36	Kenya	261	0.3	28	3	6
Japan	8	0.1	0	17	14	Israel	198	0.2	12	17	21
Israel	7	0.1	4	20	5	Singapore	157	0.2	12	7	3
Lesotho	7	0.1	8	20	22	Swaziland	142	0.2	23	16	0
Colombia	7	0.1	8	20	32	United Arab Emirates	130	0.2	14	18	34
Ukraine	7	0.1	16	19	40	Mauritius	121	0.1	10	29	3
Nepal	6	0.1	5	2	10	Japan	112	0.1	0	12	1
Costa Rica	6	0.1	1	20	65	Brunei Darussalam	111	0.1	7	28	11
Above 40	**7676**	**98.6**	**-**	**-**	**-**	**Above 40**	**83885**	**98.9**	**-**	**-**	**-**

Table II.68 *(continued)*

Clothing imports of selected economies by origin, 2007

(Million dollars and percentage)

European Union (27)	Value	Share	Annual percentage change			Japan	Value	Share	Annual percentage change		
	2007	2007	2000-07	2006	2007		2007	2007	2000-07	2006	2007
Region						Region					
World	**162806**	**100.0**	**10**	**10**	**13**	**World**	**23999**	**100.0**	**3**	**6**	**1**
Europe	93939	57.7	10	6	13	Asia	21885	91.2	3	7	1
Asia	57657	35.4	12	18	12	Europe	1740	7.3	2	0	0
Africa	8665	5.3	6	5	14	North America	237	1.0	11	10	22
CIS	980	0.6	5	2	0	Africa	78	0.3	24	44	26
North America	759	0.5	4	11	6	South and Central America	44	0.2	2	11	10
South and Central America	399	0.2	4	10	2	CIS	8	0.0	15	0	60
Middle East	394	0.2	6	0	9	Middle East	7	0.0	0	0	13
Economy						Economy					
European Union (27)	78603	48.3	9	6	12	China	19795	82.5	4	7	1
China	32285	19.8	21	12	24	European Union (27)	1652	6.9	1	0	0
Turkey	12388	7.6	13	3	17	Viet Nam	717	3.0	3	5	11
Bangladesh	6004	3.7	14	32	3	Thailand	271	1.1	1	5	8
India	5719	3.5	14	17	10	Korea, Republic of	258	1.1	17	20	26
Above 5	**134999**	**82.9**	**-**	**-**	**-**	**Above 5**	**22692**	**94.6**	**-**	**-**	**-**
Tunisia	3556	2.2	6	1	14	United States	198	0.8	12	12	24
Morocco	3477	2.1	7	5	16	Malaysia	170	0.7	2	6	6
Hong Kong, China	2340	1.4	3	46	27	India	157	0.7	2	23	10
Indonesia	1689	1.0	0	18	8	Indonesia	134	0.6	7	17	8
Viet Nam	1605	1.0	12	51	19	Myanmar	95	0.4	54	36	33
Pakistan	1547	1.0	9	13	11	Philippines	78	0.3	5	29	11
Sri Lanka	1492	0.9	9	22	16	Taipei, Chinese	61	0.3	8	9	3
Thailand	1324	0.8	4	13	1	Turkey	53	0.2	23	22	3
Switzerland	937	0.6	12	6	25	Hong Kong, China	46	0.2	11	14	29
Malaysia	902	0.6	4	19	7	Tunisia	37	0.2	26	32	21
Cambodia	715	0.4	15	17	3	Bangladesh	30	0.1	8	6	23
Mauritius	656	0.4	1	11	7	Morocco	28	0.1	35	43	46
FYR Macedonia	629	0.4	15	24	43	Mexico	25	0.1	1	13	7
Egypt	570	0.4	12	16	19	Sri Lanka	22	0.1	4	16	8
United States	557	0.3	3	10	5	Switzerland	20	0.1	3	0	5
Croatia	536	0.3	3	5	8	Cambodia	15	0.1	36	63	7
Ukraine	528	0.3	6	3	3	Canada	13	0.1	10	11	16
Korea, Republic of	392	0.2	11	14	22	Peru	13	0.1	13	41	14
Macao, China	383	0.2	6	19	20	Macao, China	13	0.1	1	10	11
Serbia	376	0.2	...	112	35	Croatia	9	0.0	28	19	5
Madagascar	338	0.2	5	29	16	Pakistan	9	0.0	7	9	16
Taipei, Chinese	315	0.2	7	5	3	Brazil	8	0.0	10	25	60
Philippines	275	0.2	3	13	13	Madagascar	6	0.0	26	112	1
Albania	224	0.1	14	16	41	Honduras	6	0.0	3	27	4
Myanmar	219	0.1	3	10	17	Ukraine	4	0.0	13	29	45
Moldova	202	0.1	17	42	21	El Salvador	4	0.0	6	27	19
Bosnia and Herzegovina	179	0.1	10	9	15	Israel	4	0.0	6	2	15
Japan	159	0.1	1	3	20	Mauritius	4	0.0	1	25	30
Lao People's Dem. Rep.	148	0.1	4	5	5	Nepal	3	0.0	25	20	19
United Arab Emirates	140	0.1	7	11	20	Australia	3	0.0	2	2	16
Peru	126	0.1	11	7	22	Colombia	3	0.0	0	7	12
Belarus	117	0.1	1	7	7	New Zealand	2	0.0	6	5	4
Canada	108	0.1	5	3	6	Serbia	2	0.0	...	...	38
Israel	108	0.1	11	5	12	Lao People's Dem. Rep.	2	0.0	25	41	12
Syrian Arab Republic	104	0.1	1	8	6	Moldova	2	0.0	...	85	23
Above 40	**161970**	**99.5**	**-**	**-**	**-**	**Above 40**	**23972**	**99.9**	**-**	**-**	**-**

a Imports are valued f.o.b.

Table II.69

Leading exporters and importers of clothing, 2007

(Billion dollars and percentage)

	Value	Share in world exports/imports				Annual percentage change			
	2007	1980	1990	2000	2007	2000-07	2005	2006	2007
Exporters									
China a	115.2	4.0	8.9	18.2	33.4	18	20	29	21
European Union (27)	103.4	-	-	28.4	29.9	9	3	7	13
extra-EU (27) exports	24.8	-	-	6.5	7.2	10	5	10	19
Hong Kong, China	28.8	12.3	14.2	12.2	8.3	2	9	4	1
domestic exports	5.0	11.5	8.6	5.0	1.4	-9	-11	-7	-26
re-exports	23.8	0.8	5.7	7.2	6.9	8	18	8	10
Turkey b	14.0	0.3	3.1	3.3	4.1	12	6	2	16
Bangladesh b	10.1	0.0	0.6	2.6	2.9	10	19	28	4
India	9.7	1.7	2.3	3.0	2.8	7	26	10	2
Viet Nam b	7.2	...	...	0.9	2.1	22	10	19	29
Indonesia	5.9	0.2	1.5	2.4	1.7	3	16	16	2
Mexico a	5.1	0.0	0.5	4.4	1.5	-7	-2	-13	-19
United States	4.3	3.1	2.4	4.4	1.2	-9	-1	-2	-12
Thailand	4.1	0.7	2.6	1.9	1.2	1	3	4	-4
Pakistan	3.8	0.3	0.9	1.1	1.1	9	19	8	-3
Morocco a	3.6	0.3	0.7	1.2	1.0	6	-6	14	11
Tunisia	3.6	0.8	1.0	1.1	1.0	7	-5	-3	18
Sri Lanka b	3.3	0.3	0.6	1.4	1.0	2	4	6	8
Above 15	**298.1**	**-**	**-**	**79.2**	**86.3**	**-**	**-**	**-**	**-**
Importers									
European Union (27)	162.8	-	-	39.7	45.5	10	5	10	13
extra-EU (27) imports	84.2	-	-	19.2	23.5	11	9	13	13
United States	84.9	16.4	24.0	32.1	23.7	3	6	4	2
Japan	24.0	3.6	7.8	9.4	6.7	3	4	6	1
Hong Kong, China	19.1	1.6	6.2	7.6	5.4	3	8	2	2
retained imports	...	...	...	...	...	...	...	...	...
Russian Federation b, c	14.5	-	-	1.3	4.1	27	23	2	79
Canada c	7.6	1.7	2.1	1.8	2.1	11	14	14	12
Switzerland	5.2	3.4	3.1	1.5	1.4	7	2	5	11
United Arab Emirates b	5.0	0.6	0.5	0.4	1.4	29	7	72	64
Korea, Republic of	4.3	0.0	0.1	0.6	1.2	19	6	29	15
Australia c	3.7	0.8	0.6	0.9	1.0	10	17	5	13
Mexico a, c	2.5	0.3	0.5	1.7	0.7	-5	-2	0	-2
Singapore	2.4	0.3	0.8	0.9	0.7	4	-5	17	-3
retained imports	0.9	0.2	0.3	0.3	0.2	7	7	12	16
Norway	2.3	1.7	1.1	0.6	0.6	9	11	7	16
China a	2.0	0.1	0.0	0.6	0.6	7	6	6	15
Saudi Arabia	1.9	1.6	0.7	0.4	0.5	13	25	13	18
Above 15 d	**323.1**	**-**	**-**	**91.8**	**90.3**	**-**	**-**	**-**	**-**

a Includes significant shipments through processing zones
b Includes Secretariat estimates.
c Imports are valued f.o.b.
d Excludes retained imports of Hong Kong, China.

Table II.70

Clothing exports of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise exports	
	1990	2000	2005	2006	2007	2000	2007 a
World	108129	198158	276822	309593	345301	3.2	2.5
Albania b	...	97	198	225	328	37.6	30.6
Bangladesh b, c	643	5067	7510	9634	10060	79.3	80.8
Belarus		262	330	350	400	3.6	1.6
Bosnia and Herzegovina	...	...	82	152	177	...	4.2
Botswana	...	30	203	141	340	1.1	6.6
Cambodia b	...	970	2231	2513	2893	69.8	70.6
Canada	328	2077	1861	1798	1585	0.8	0.4
China d	9669	36071	74163	95388	115238	14.5	9.5
Colombia	460	520	904	962	1351	4.0	4.5
Costa Rica d	54	660	473	455	379	11.2	4.1
Croatia	...	469	570	538	585	10.6	4.7
Dominican Republic d	782	2555	1905	1734	1367	44.5	18.9
Egypt b	144	710	883	1134	1317	15.1	8.1
El Salvador b, d	184	1673	1856	1814	1830	56.9	46.0
European Union (27)		56240	85471	91433	103368	2.3	1.9
intra EU (27) exports		43286	66438	70535	78603	2.6	2.2
extra EU (27) exports		12954	19033	20898	24765	1.7	1.5
FYR Macedonia	...	318	498	509	635	24.0	18.9
Guatemala	24	49	1506	1557	1390	1.8	20.1
Haiti	63	245	393	432	459	76.9	88.0
Honduras b	64	2275	2790	2613	2693	68.0	48.1
Hong Kong, China	15406	24214	27292	28391	28765	11.9	8.2
domestic exports	9266	9935	7231	6724	4985	42.2	27.5
re exports	6140	14279	20061	21666	23780	8.0	7.2
India	2530	5960	8595	9465	9655	14.1	6.6
Indonesia	1646	4734	4959	5760	5870	7.2	5.0
Japan	568	534	495	485	523	0.1	0.1
Jordan	11	115	1061	1257	1218	6.1	21.4
Kenya	9	9	180	230	241	0.5	5.9
Korea, Republic of	7879	5027	2581	2183	1914	2.9	0.5
Lesotho b	...	161	447	478	557	73.1	69.2
Macao, China	1111	1849	1656	1610	1491	72.8	58.6
Madagascar b	11	309	345	318	497	37.4	41.7
Malaysia d	1315	2257	2479	2842	3159	2.3	1.8
Mauritius b, d	607	948	745	772	887	60.9	39.8
Mexico d	587	8631	7306	6323	5150	5.2	1.9
Moldova		76	171	200	238	16.0	17.8
Morocco d	722	2401	2847	3238	3596	32.3	24.5
Myanmar b	12	800	331	386	...	48.6	9.1
Pakistan	1014	2144	3604	3907	3806	23.8	21.3
Peru	120	504	1057	1204	1406	7.2	5.0
Philippines b, d	1733	2536	2287	2624	2283	6.4	4.5
Serbia	...	...	...	319	445	...	5.0
Serbia and Montenegro	...	130	246	...	...	7.6	4.9
Singapore	1588	1825	1696	1985	1779	1.3	0.6
domestic exports	995	504	234	238	223	0.6	0.1
re exports	593	1321	1462	1747	1556	2.2	1.1
Sri Lanka b	638	2812	2874	3046	3283	51.8	42.4
Swaziland	...	124	256	...	...	13.6	12.0
Switzerland	686	607	1526	1620	1771	0.8	1.0
Syrian Arab Republic	330	129	139	864	...	2.8	7.9
Taipei, Chinese	3987	3015	1561	1393	1254	2.0	0.5
Thailand	2817	3759	4085	4247	4073	5.4	2.7
Tunisia	1126	2227	3124	3018	3571	38.1	23.8
Turkey b	3331	6533	11833	12052	14001	23.5	13.1
Ukraine		417	689	682	718	2.9	1.5
United Arab Emirates b	146	971	1517	1760	2170	1.9	1.3
United States	2565	8629	4998	4876	4297	1.1	0.4
Viet Nam b	...	1821	4681	5579	7186	12.6	14.9

a Or nearest year.
b Includes Secretariat estimates.
c Figures refer to fiscal year.
d Includes significant exports from processing zones.

Table II.71

Clothing imports of selected economies, 1990-2007

(Million dollars and percentage)

	Value					Share in economy's total merchandise imports	
	1990	2000	2005	2006	2007	2000	2007 a
Albania b	...	68	147	173	221	6.3	5.3
Argentina	6	333	156	192	271	1.3	0.6
Australia c	711	1858	3120	3279	3703	2.6	2.4
Bangladesh b, d	14	174	417	330	434	2.0	2.3
Bolivarian Rep. of Venezuela c	101	390	522	736	1443	2.7	3.4
Bosnia and Herzegovina	...	...	167	162	189	...	1.9
Brazil e	59	173	309	442	616	0.3	0.5
Canada c	2388	3690	5975	6817	7604	1.5	2.0
Chile	52	501	794	1003	1169	2.7	2.5
China f	48	1192	1629	1724	1976	0.5	0.2
Colombia	19	80	117	159	258	0.7	0.8
Costa Rica f	17	592	339	311	293	9.3	2.3
Croatia	...	278	420	518	691	3.5	2.7
Ecuador	1	23	133	154	185	0.6	1.4
Egypt b	9	404	297	403	807	2.9	3.0
El Salvador b, f	171	713	244	217	187	14.4	2.2
European Union (27) g	-	83181	131496	144416	162806	3.2	2.9
extra-EU (27) imports	-	40148	65621	74355	84203	4.4	4.3
Guatemala f	5	33 |	188	190	200	0.7	1.5
Honduras b	25	1304	456	423	333	32.7	3.9
Hong Kong, China	6913	16008	18437	18852	19149	7	5
retained imports	...	...	...	...	...	...	...
Iceland	75	88	145	156	184	3.4	2.8
Israel	61	471	683	788	949	1.2	1.6
Japan	8765	19709	22541	23870	23999	5.2	3.9
Jordan	28	61	164	247	296	1.3	2.2
Korea, Republic of	151	1307	2913	3744	4318	0.8	1.2
Kuwait b	206	317	553	567	728	4.4	3.1
Macao, China b	26	214	426	386	473	9.5	8.8
Malaysia f	76	148	283	359	410	0.2	0.3
Mexico c, f	573	3602	2523	2517	2474	2.1	0.9
Morocco f	8	232	283	274	316	2.0	1.0
New Zealand	149	401	703	740	877	2.9	2.8
Norway	1231	1287	1855	1978	2286	3.7	2.8
Peru	1	59	112	134	184	0.8	0.9
Qatar	29	54	138	211	...	1.7	1.3
Russian Federation b, c	-	2688	7928	8103	14505	6.0	6.5
Saudi Arabia	833	813	1458	1649	1939	2.7	2.1
Serbia	...	...	...	222	352	...	1.9
Serbia and Montenegro	...	46	153	...	...	1.2	1.3
Singapore	920	1881 |	2132	2497	2428	1.4	0.9
retained imports	328	560 |	670	750	872	0.7	0.7
South Africa c	108	223	832	1123	994	0.8	1.2
Switzerland	3437	3160	4451	4654	5184	3.8	3.2
Taipei, Chinese	290	978	1092	1223	1117	0.7	0.5
Thailand	29	131	214	276	331	0.2	0.2
Tunisia	191	438	569	550	644	5.1	3.4
Turkey b	16	264	788	1098	1463	0.5	0.9
Ukraine	-	60	389	342	377	0.4	0.6
United Arab Emirates b	514	832	1779	3055	5010	2.4	3.8
United States	26977	67115	80071	82972	84853	5.3	4.2
Viet Nam b	...	450	332	271	426	2.9	0.7

a Or nearest year.
b Includes Secretariat estimates.
c Imports are valued f.o.b.
d Figures refer to fiscal year.
e Beginning 2000, imports are valued f.o.b.
f Includes significant imports into processing zones.
g See the Metadata for information on intra-EU (27) imports.

1. Overview

Table III.1

World trade in commercial services by category, 2007

(Billion dollars and percentage)

	Value	Share				
	2007	2000	2004	2005	2006	2007
Exports						
All commercial services	3290	100.0	100.0	100.0	100.0	100.0
Transportation services	750	23.5	23.1	23.3	22.6	22.8
Travel	855	32.0	28.8	27.7	27.0	26.0
Other commercial services	1685	44.5	48.1	49.0	50.4	51.2
Imports						
All commercial services	3085	100.0	100.0	100.0	100.0	100.0
Transportation services	890	28.8	28.3	29.1	28.9	28.9
Travel	775	29.7	27.7	26.9	25.9	25.2
Other commercial services	1415	41.5	44.0	44.1	45.1	45.9

Note : For more information on asymmetries, see the Metadata, Section II.2.

Table III.2

Growth of commercial services exports by category and by region, 1990-2007

(Annual percentage change)

	World	North America	South and Central America	Europe	CIS	Africa	Middle East	Asia
Commercial services								
1990 95	8	8	9			...	...	...
1995 00	5	7	6	...	...	...	...	4
2000 07	12	7	10	13	21	...	13	13
2005	12	11	20	10	20	...	17	15
2006	12	9	14	11	24	13	17	16
2007	18	13	17	20	27	22	13	19
Transportation services								
1990 95	6	4	7			...	...	11
1995 00	3	3	1	3	...	...	...	3
2000 07	12	6	11	12	16	...	14	12
2005	13	12	20	12	17	...	18	14
2006	9	10	10	7	17	17	11	11
2007	19	12	15	21	20	31	16	20
Travel								
1990 95	9	7	10			9	...	...
1995 00	3	6	7	2	...	6	...	2
2000 07	9	3	7	10	20	14	9	12
2005	7	8	13	5	11	15	18	9
2006	9	5	11	8	24	12	13	16
2007	14	10	12	15	28	17	10	18
Other commercial services								
1990 95	10	12	10			...	...	16
1995 00	7	11	9	...	...	...	...	6
2000 07	14	10	14	16	28	...	15	15
2005	14	12	32	12	35	...	15	19
2006	16	12	20	15	32	10	23	20
2007	20	16	26	22	36	23	12	19

2. Transportation services

Table III.3

World trade in transportation services by region, 2007

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exports							
World	**750**	**100.0**	**100.0**	**12**	**13**	**9**	**19**
North America	91	17.1	12.1	6	12	10	12
South and Central America	21	2.9	2.8	11	20	10	15
Europe	372	47.8	49.6	12	12	7	21
European Union (27)	337	42.5	45.0	12	11	7	21
Commonwealth of Independent States (CIS)	25	2.5	3.3	16	17	17	20
Africa	23	2.2	3.0	...	...	17	31
Middle East	18	2.1	2.4	14	18	11	16
Asia	201	25.4	26.8	12	14	11	20
Imports							
World	**890**	**100.0**	**100.0**	**11**	**14**	**11**	**18**
North America	117	18.4	13.2	6	13	7	4
South and Central America	37	4.8	4.2	9	20	16	22
Europe	351	38.9	39.4	12	10	9	19
European Union (27)	321	35.6	36.0	12	10	10	18
Commonwealth of Independent States (CIS)	19	1.0	2.1	25	28	38	33
Africa	45	3.4	5.0	...	...	16	27
Middle East	49	4.5	5.5	15	24	11	26
Asia	273	29.0	30.7	12	16	13	18

Note : For more information on asymmetries, see the Metadata, Section II.2.

Table III.4

Leading exporters and importers of transportation services, 2007

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
European Union (27)	337.2	42.5	45.0	12	11	7	21
Extra EU (27) exports	163.3	...	21.8	...	12	7	18
United States	77.2	14.5	10.3	6	12	10	13
Japan	42.0	7.4	5.6	7	11	5	12
Korea, Republic of	33.8	3.9	4.5	14	6	8	31
China	31.3	1.1	4.2	36	28	36	49
Hong Kong, China	23.6	3.7	3.2	9	17	10	5
Singapore	23.1	3.4	3.1	10	12	9	10
Norway	18.9	2.8	2.5	10	17	1	18
Russian Federation	11.8	1.0	1.6	19	17	11	17
Canada	11.7	2.2	1.6	6	14	10	9
India	8.8	0.6	1.2	24	31	33	16
Australia	7.2	1.2	1.0	8	7	3	14
Malaysia	7.0	0.8	0.9	14	27	4	66
Egypt	6.9	0.8	0.9	15	18	16	27
Taipei, Chinese	6.8	1.2	0.9	7	12	6	9
Above 15	**650.0**	**87.0**	**86.4**	**-**	**-**	**-**	**-**
Importers							
European Union (27)	321.2	35.6	36.0	12	10	10	18
Extra EU (27) imports	140.1	...	15.7	...	10	11	15
United States	95.7	15.7	10.7	6	12	5	3
Japan	49.0	8.0	5.5	6	3	6	14
China	43.3	2.5	4.9	23	16	21	26
India	31.1	2.1	3.5	20	52	25	23
Korea, Republic of	29.9	2.6	3.4	15	14	15	29
Singapore	25.9	3.1	2.9	11	14	11	13
Canada	18.9	2.2	2.1	11	18	17	12
Thailand	17.9	1.6	2.0	15	33	13	10
United Arab Emirates a	15.6	1.1	1.8	...	26	21	...
Australia	13.1	1.5	1.5	11	11	5	16
Norway	12.9	1.2	1.4	14	14	2	30
Hong Kong, China	12.7	1.5	1.4	11	20	11	10
Malaysia	11.0	1.4	1.2	9	7	14	15
Taipei, Chinese	10.3	1.5	1.2	7	4	7	14
Above 15	**710.0**	**81.6**	**79.4**	**-**	**-**	**-**	**-**

a Secretariat estimate.

Table III.5

Trade in transportation services of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)											
World	**279604**	**100.0**	**9**	**11**	**7**	**World**	**271845**	**100.0**	**10**	**10**	**10**
European Union (25)	139968	50.1	9	11	7	European Union (25)	148125	54.5	9	9	9
United States	40303	14.4	10	19	2	United States	25738	9.5	8	15	2
Switzerland	9305	3.3	10	11	10	Switzerland	7936	2.9	14	17	11
Japan	6616	2.4	2	-1	5	Russian Federation	6613	2.4	27	29	25
China	5665	2.0	17	29	7	China	6385	2.3	21	23	18
Above 5	**201858**	**72.2**	**-**	**-**	**-**	**Above 5**	**194797**	**71.7**	**-**	**-**	**-**
Norway	4632	1.7	5	-5	15	Japan	5712	2.1	3	4	2
Russian Federation	4362	1.6	20	31	10	Norway	5143	1.9	-2	-13	11
Hong Kong, China	3797	1.4	2	7	-3	Hong Kong, China	3791	1.4	10	9	11
Canada	3673	1.3	11	-2	25	Turkey	3711	1.4	17	21	13
Singapore	3445	1.2	16	19	13	Singapore	3168	1.2	7	-2	16
Korea, Republic of	3246	1.2	11	4	18	Korea, Republic of	2817	1.0	10	4	16
Australia	3066	1.1	9	22	-3	Canada	2519	0.9	10	0	22
India	2742	1.0	22	48	0	Egypt	1970	0.7	19	40	1
Brazil	2678	1.0	29	54	8	Brazil	1843	0.7	14	16	12
Turkey	2161	0.8	18	24	12	India	1730	0.6	13	20	7
Above 15	**235658**	**84.3**	**-**	**-**	**-**	**Above 15**	**227201**	**83.6**	**-**	**-**	**-**
United States											
World	**68483**	**100.0**	**11**	**12**	**10**	**World**	**92785**	**100.0**	**8**	**12**	**5**
European Union (25)	21321	31.1	10	12	7	European Union (25)	34895	37.6	10	14	5
Japan	7556	11.0	5	20	-7	Japan	8055	8.7	7	12	3
Canada	6284	9.2	10	9	10	Taipei, Chinese	5458	5.9	11	16	5
Mexico	3522	5.1	19	20	18	Canada	5098	5.5	7	5	8
China	2848	4.2	17	4	30	Korea, Republic of	4671	5.0	7	10	4
Above 5	**41530**	**60.6**	**-**	**-**	**-**	**Above 5**	**58177**	**62.7**	**-**	**-**	**-**
Korea, Republic of	2820	4.1	5	-3	14	China	3899	4.2	7	5	9
Taipei, Chinese	2586	3.8	13	12	14	Hong Kong, China	3261	3.5	27	25	30
Brazil	1484	2.2	20	26	15	Mexico	1882	2.0	-1	-1	0
Hong Kong, China	1361	2.0	21	12	30	Singapore	1669	1.8	8	5	11
India	1119	1.6	85	27	170	Switzerland	1374	1.5	10	17	4
Switzerland	944	1.4	0	-7	7	Norway	1364	1.5	0	0	0
Israel	942	1.4	-2	-14	11	Bermuda	1327	1.4	8	22	-4
Australia	926	1.4	6	11	2	Australia	1277	1.4	8	12	6
Singapore	758	1.1	9	0	18	Israel	944	1.0	0	8	-7
Norway	746	1.1	15	25	5	New Zealand	754	0.8	6	2	10
Above 15	**55216**	**80.6**	**-**	**-**	**-**	**Above 15**	**75928**	**81.8**	**-**	**-**	**-**
Japan											
World	**37648**	**100.0**	**8**	**11**	**5**	**World**	**42835**	**100.0**	**5**	**3**	**6**
European Union (25)	8258	21.9	...	...	1	European Union (25)	9454	22.1	...	...	2
United States	7494	19.9	2	6	-2	United States	5533	12.9	3	12	-4
China	3152	8.4	18	21	14	Singapore	3314	7.7	9	3	15
Korea, Republic of	2718	7.2	15	16	13	Hong Kong, China	3206	7.5	5	13	-2
Hong Kong, China	2582	6.9	3	17	-8	China	2831	6.6	42	63	23
Above 5	**24204**	**64.3**	**-**	**-**	**-**	**Above 5**	**24338**	**56.8**	**-**	**-**	**-**
Singapore	2332	6.2	23	19	28	Korea, Republic of	2769	6.5	8	11	5
Taipei, Chinese	2229	5.9	15	13	18	Taipei, Chinese	1199	2.8	14	30	0
Thailand	1165	3.1	27	28	25	Australia	922	2.2	-14	-16	-12
Australia	640	1.7	-11	-1	-20	Philippines	665	1.6	26	33	19
Indonesia	610	1.6	10	17	3	Thailand	534	1.2	7	8	6
Malaysia	506	1.3	20	18	22	Malaysia	463	1.1	-5	-22	15
Canada	484	1.3	10	12	8	Switzerland	426	1.0	-4	-10	3
Switzerland	397	1.1	15	23	8	Canada	367	0.9	-5	5	-13
Philippines	388	1.0	1	13	-9	United Arab Emirates	334	0.8	108	115	100
United Arab Emirates	277	0.7	1	-18	25	South Africa	316	0.7	22	17	28
Above 15	**33233**	**88.3**	**-**	**-**	**-**	**Above 15**	**32335**	**75.5**	**-**	**-**	**-**

Table III.5 *(continued)*

Trade in transportation services of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
Korea, Republic of a											
World	**25807**	**100.0**	**7**	**6**	**8**	**World**	**23133**	**100.0**	**14**	**14**	**15**
United States	5452	21.1	3	7	-2	United States	5638	24.4	16	2	31
China	4480	17.4	13	17	10	European Union (25)	5493	23.7	16	10	22
European Union (25)	3813	14.8	9	4	15	Japan	2901	12.5	7	9	5
Japan	2495	9.7	4	6	3	China	1947	8.4	28	40	16
Above 4	**16240**	**62.9**	**-**	**-**	**-**	**Above 4**	**15978**	**69.1**	**-**	**-**	**-**
Hong Kong, China											
World	**22423**	**100.0**	**14**	**17**	**10**	**World**	**11616**	**100.0**	**16**	**20**	**11**
United States	4243	18.9	16	17	15	China	2916	25.1	14	19	10
European Union (25)	3528	15.7	12	12	13	European Union (25)	2020	17.4	18	18	17
China	3304	14.7	9	18	1	United States	1209	10.4	22	30	14
Taipei, Chinese	2915	13.0	8	12	4	Japan	945	8.1	16	27	7
Japan	2525	11.3	14	13	14	Singapore	875	7.5	46	24	73
Above 5	**16515**	**73.7**	**-**	**-**	**-**	**Above 5**	**7965**	**68.6**	**-**	**-**	**-**
Australia	1123	5.0	60	87	37	Australia	593	5.1	5	21	-9
Korea, Republic of	739	3.3	1	-12	17	Taipei, Chinese	556	4.8	16	19	13
Canada	616	2.7	21	17	24	Thailand	278	2.4	10	13	7
Malaysia	416	1.9	13	5	21	India	267	2.3	28	40	17
Israel	353	1.6	73	26	137	Korea, Republic of	255	2.2	10	9	11
Singapore	337	1.5	11	64	-24	United Arab Emirates	238	2.0	23	39	8
Switzerland	239	1.1	9	-3	23	Canada	238	2.0	6	10	3
United Arab Emirates	235	1.0	18	65	-16	Malaysia	173	1.5	14	25	4
Thailand	233	1.0	4	-3	12	Philippines	125	1.1	11	25	-2
India	214	1.0	28	105	-20	Indonesia	109	0.9	24	30	18
Above 15	**21020**	**93.7**	**-**	**-**	**-**	**Above 15**	**10797**	**93.0**	**-**	**-**	**-**
Singapore b, c											
World	**20975**	**100.0**	**10**	**12**	**9**	**World**	**22947**	**100.0**	**13**	**14**	**11**
European Union (25)	3205	15.3	6	-2	15	United States	2731	11.9	-1	1	-2
United States	2731	13.0	2	12	-7	European Union (25)	2273	9.9	12	17	7
Japan	1741	8.3	6	3	9	Japan	861	3.8	11	16	7
Australia	1572	7.5	12	15	8	China	696	3.0	-2	9	-12
China	1242	5.9	8	11	5	Hong Kong, China	500	2.2	8	5	12
Above 5	**10492**	**50.0**	**-**	**-**	**-**	**Above 5**	**7061**	**30.8**	**-**	**-**	**-**
Korea, Republic of	693	3.3	8	20	-2	Korea, Republic of	409	1.8	9	15	4
Hong Kong, China	633	3.0	28	36	20	Australia	384	1.7	6	8	5
Above 7	**11817**	**56.3**	**-**	**-**	**-**	**Above 7**	**7854**	**34.2**	**-**	**-**	**-**
Russian Federation d											
World	**10082**	**100.0**	**14**	**17**	**11**	**World**	**6722**	**100.0**	**32**	**32**	**31**
European Union (25)	3190	31.6	9	12	6	European Union (25)	1404	20.9	18	14	22
Switzerland	696	6.9	14	22	7	Ukraine	228	3.4	...	...	20
United States	446	4.4	15	32	0	Belarus	205	3.1	33	14	54
Kazakhstan	397	3.9	94	8	250	Switzerland	155	2.3	11	18	5
China	342	3.4	12	11	12	United States	144	2.1	12	-1	28
Above 5	**5072**	**50.3**	**-**	**-**	**-**	**Above 5**	**2137**	**31.8**	**-**	**-**	**-**
British Virgin Islands	310	3.1	31	51	14	Kazakhstan	102	1.5	24	19	29
Ukraine	299	3.0	...	...	101	British Virgin Islands	99	1.5	124	130	119
Japan	278	2.8	10	27	-5	Uzbekistan	89	1.3	...	...	43
Korea, Republic of	241	2.4	12	8	17	China	87	1.3	43	53	33
Canada	240	2.4	128	2	409	United Arab Emirates	85	1.3	62	65	58
Turkey	200	2.0	6	-7	20	Turkey	85	1.3	25	23	27
Belarus	105	1.0	40	37	42	Korea, Republic of	78	1.2	34	30	39
Azerbaijan	96	0.9	...	...	189	Hong Kong, China	57	0.8	92	271	-1
Uzbekistan	86	0.9	...	...	67	Tajikistan	51	0.8	95	124	70
Panama	81	0.8	25	52	2	Azerbaijan	49	0.7	...	...	48
Above 15	**7007**	**69.5**	**-**	**-**	**-**	**Above 15**	**2918**	**43.4**	**-**	**-**	**-**

a In 2006, trade in transportation services not allocated geographically accounted for 10 per cent of exports and 7 per cent of imports.
b Imports of transportation freight services on goods imports are not allocated geographically.
c In 2006, ASEAN countries accounted for 12 per cent of transportation services exports and 6 per cent of imports.
d In 2006, trade in transportation services not allocated geographically accounted for 10 per cent of exports and 47 per cent of imports.
Note: For more information on asymmetries, see the Metadata, Section II.2.

3. Travel

Table III.6

World trade in travel by region, 2007

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exports							
World	**855**	**100.0**	**100.0**	**9**	**7**	**9**	**14**
North America	147	24.7	17.2	3	8	5	10
South and Central America	38	4.9	4.5	7	13	11	12
Europe	414	46.0	48.3	10	5	8	15
European Union (27)	366	41.8	42.7	9	4	9	15
Commonwealth of Independent States (CIS)	17	1.0	2.0	20	11	24	28
Africa	37	3.1	4.4	14	15	12	17
Middle East	25	2.8	2.9	9	18	13	10
Asia	178	17.5	20.7	12	9	16	18
Imports							
World	**775**	**100.0**	**100.0**	**9**	**8**	**8**	**14**
North America	115	19.7	14.8	4	7	6	9
South and Central America	24	3.5	3.1	7	21	14	26
Europe	389	47.7	50.1	10	7	6	15
European Union (27)	357	44.6	45.9	9	6	5	15
Commonwealth of Independent States (CIS)	29	2.5	3.7	15	13	6	20
Africa	18	1.9	2.4	...	...	17	24
Middle East	40	3.5	5.1	15	18	27	16
Asia	162	21.3	20.8	8	7	8	12

Note : For more information on asymmetries, see the Metadata, Section II.2.

Table III.7

Leading exporters and importers of travel, 2007

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
European Union (27)	366.2	41.8	42.7	9	4	9	15
Extra EU (27) exports	105.0	...	12.3	...	6	10	17
United States	118.8	20.7	13.9	3	8	5	11
China	37.2	3.4	4.3	13	14	16	10
Australia	22.3	2.0	2.6	13	11	6	25
Turkey	18.5	1.6	2.2	13	14	7	10
Canada	15.6	2.3	1.8	5	7	7	6
Thailand	15.6	1.6	1.8	11	5	40	16
Hong Kong, China	13.7	1.2	1.6	13	14	13	18
Macao, China a	13.5	0.6	1.6	...	7	23	...
Malaysia	12.9	1.1	1.5	14	8	18	24
Mexico	12.9	1.8	1.5	7	9	3	6
Switzerland	11.8	1.4	1.4	9	5	5	11
India	11.1	0.7	1.3	18	21	19	24
Russian Federation	9.6	0.7	1.1	16	6	30	26
Japan	9.3	0.9	1.1	11	10	28	10
Above 15	**690.0**	**81.8**	**80.4**	**-**	**-**	**-**	**-**
Importers							
European Union (27)	356.8	44.6	45.9	9	6	5	15
Extra EU (27) imports	129.0	...	16.6	...	5	4	19
United States	81.6	15.6	10.5	3	5	5	6
China	29.8	3.0	3.8	12	14	12	22
Japan	26.5	5.4	3.4	2	2	2	1
Canada	25.1	2.9	3.2	11	14	13	22
Russian Federation	22.3	2.1	2.9	14	14	5	22
Korea, Republic of	20.9	1.7	2.7	17	25	22	11
Hong Kong, China	15.1	2.9	1.9	3	0	6	7
Australia	14.3	1.5	1.8	12	10	4	22
Norway	14.0	1.1	1.8	17	19	15	21
Singapore	11.2	1.1	1.4	14	8	4	8
Switzerland	10.9	1.3	1.4	11	9	12	10
United Arab Emirates a	10.1	0.7	1.3	...	38	43	...
Taipei, Chinese	9.1	1.9	1.2	2	6	1	4
India	8.8	0.6	1.1	19	25	22	20
Above 15	**655.0**	**86.2**	**84.5**	**-**	**-**	**-**	**-**

a Secretariat estimate.

Table III.8

Trade in travel of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)											
World	**319548**	**100.0**	**6**	**4**	**9**	**World**	**309890**	**100.0**	**6**	**6**	**5**
European Union (25)	227152	71.1	6	3	8	European Union (25)	198402	64.0	6	6	6
United States	25168	7.9	7	6	9	United States	20907	6.7	1	2	1
Switzerland	13568	4.2	0	-4	5	Switzerland	8747	2.8	4	5	3
Norway	7608	2.4	23	26	19	Turkey	8067	2.6	2	16	-10
Russian Federation	4051	1.3	18	15	21	Croatia	4282	1.4	12	12	11
Above 5	**277546**	**86.9**	**-**	**-**	**-**	**Above 5**	**240405**	**77.6**	**-**	**-**	**-**
Canada	3636	1.1	14	15	14	Australia	3673	1.2	12	9	14
Australia	3486	1.1	11	12	10	Egypt	3548	1.1	2	10	-6
Japan	3114	1.0	0	-4	4	Thailand	3494	1.1	21	11	32
China	2392	0.7	29	30	29	Canada	3443	1.1	5	2	8
Brazil	1433	0.4	31	33	28	China	3088	1.0	23	43	6
Mexico	1385	0.4	5	-7	19	Norway	2530	0.8	4	10	-2
Turkey	1267	0.4	25	29	20	Russian Federation	2519	0.8	6	7	5
India	1110	0.3	7	-7	22	Morocco	2413	0.8	10	0	21
South Africa	964	0.3	14	30	1	South Africa	2258	0.7	9	8	10
Croatia	928	0.3	10	9	10	India	2104	0.7	7	11	3
Above 15	**297260**	**93.0**	**-**	**-**	**-**	**Above 15**	**269475**	**87.0**	**-**	**-**	**-**
United States a											
World	**106736**	**100.0**	**6**	**8**	**5**	**World**	**76807**	**100.0**	**5**	**5**	**5**
European Union (25)	26474	24.8	5	10	0	European Union (25)	22841	29.7	2	7	-3
Japan	12224	11.5	5	25	-11	Mexico	10281	13.4	4	6	2
Canada	11106	10.4	13	13	13	Canada	7419	9.7	0	-2	2
Mexico	7500	7.0	7	8	6	Japan	3048	4.0	10	13	7
Korea, Republic of	4238	4.0	13	17	9	China	2318	3.0	16	29	5
Above 5	**61542**	**57.7**	**-**	**-**	**-**	**Above 5**	**45907**	**59.8**	**-**	**-**	**-**
India	3860	3.6	13	16	10	India	2190	2.9	39	34	44
China	3236	3.0	22	25	19	Australia	1371	1.8	1	4	-1
Australia	2559	2.4	9	8	11	Hong Kong, China	1183	1.5	7	7	8
Brazil	2128	2.0	17	13	21	Korea, Republic of	1030	1.3	6	11	1
Taipei, Chinese	1585	1.5	5	7	4	Taipei, Chinese	922	1.2	11	18	4
Bolivarian Rep. of Venezuela	1461	1.4	9	2	16	Brazil	788	1.0	5	-1	12
Israel	1059	1.0	8	10	5	Thailand	736	1.0	14	25	5
Switzerland	805	0.8	7	2	13	New Zealand	641	0.8	3	0	6
Hong Kong, China	671	0.6	11	16	7	Argentina	619	0.8	28	17	40
Philippines	636	0.6	5	6	3	Switzerland	581	0.8	16	1	32
Above 15	**79540**	**74.5**	**-**	**-**	**-**	**Above 15**	**55967**	**72.9**	**-**	**-**	**-**
Australia											
World	**17854**	**100.0**	**8**	**11**	**6**	**World**	**11690**	**100.0**	**7**	**10**	**4**
European Union (25)	3778	21.2	6	7	4	European Union (25)	3224	27.6	6	10	2
China	2175	12.2	17	27	8	United States	1589	13.6	8	15	2
New Zealand	1426	8.0	5	14	-3	New Zealand	1087	9.3	2	-1	6
Japan	1327	7.4	-3	4	-10	Thailand	554	4.7	21	11	34
United States	1097	6.1	7	0	14	China	499	4.3	15	22	9
Above 5	**9804**	**54.9**	**-**	**-**	**-**	**Above 5**	**6953**	**59.5**	**-**	**-**	**-**
Korea, Republic of	1085	6.1	22	20	25	Fiji	481	4.1	15	20	10
India	952	5.3	33	47	21	Hong Kong, China	347	3.0	15	21	9
Hong Kong, China	711	4.0	0	6	-5	Canada	336	2.9	6	13	0
Malaysia	676	3.8	2	8	-4	Singapore	319	2.7	12	15	9
Singapore	598	3.3	3	5	1	Malaysia	273	2.3	8	12	4
Indonesia	500	2.8	-2	-5	1	Indonesia	262	2.2	-29	-7	-46
Thailand	421	2.4	5	6	4	Viet Nam	243	2.1	9	14	4
Canada	367	2.1	15	13	17	Japan	223	1.9	5	9	0
Taipei, Chinese	306	1.7	0	9	-8	India	211	1.8	20	24	17
Viet Nam	184	1.0	22	23	20	Philippines	165	1.4	4	3	5
Above 15	**15603**	**87.4**	**-**	**-**	**-**	**Above 15**	**9813**	**83.9**	**-**	**-**	**-**

Table III.8 *(continued)*

Trade in travel of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
Hong Kong, China											
World	**11637**	**100.0**	**14**	**14**	**13**	**World**	**14043**	**100.0**	**3**	**0**	**6**
China	6477	55.7	12	10	13	China	4323	30.8	3	1	5
European Union (25)	815	7.0	19	24	14	European Union (25)	1788	12.7	10	9	12
United States	676	5.8	5	12	-1	United States	1660	11.8	5	2	8
Taipei, Chinese	547	4.7	17	17	17	Australia	1282	9.1	4	3	5
Japan	526	4.5	9	11	6	Japan	1080	7.7	6	-7	20
Above 5	**9041**	**77.7**	**-**	**-**	**-**	**Above 5**	**10133**	**72.2**	**-**	**-**	**-**
Australia	354	3.0	23	29	17	Canada	693	4.9	0	-3	4
Singapore	300	2.6	17	19	15	Thailand	605	4.3	-4	-9	1
Korea, Republic of	265	2.3	30	32	27	Taipei, Chinese	583	4.2	2	4	0
Philippines	209	1.8	18	16	19	Macao, China	422	3.0	8	6	10
Thailand	191	1.6	13	17	9	Singapore	343	2.4	9	28	-7
Malaysia	173	1.5	17	13	22	Korea, Republic of	242	1.7	-18	1	-33
Canada	172	1.5	14	14	14	Malaysia	177	1.3	-1	5	-7
Indonesia	166	1.4	19	15	24	Philippines	171	1.2	-4	-8	1
Macao, China	159	1.4	27	28	27	New Zealand	141	1.0	3	-2	8
India	139	1.2	19	27	12	Indonesia	103	0.7	11	6	17
Above 15	**11169**	**96.0**	**-**	**-**	**-**	**Above 15**	**13613**	**96.9**	**-**	**-**	**-**
Japan											
World	**8470**	**100.0**	**19**	**10**	**28**	**World**	**26876**	**100.0**	**-2**	**-2**	**-2**
China	2154	25.4	...	-27	...	United States	7660	28.5	...	-4	...
Korea, Republic of	1528	18.0	...	38	...	European Union (25)	4167	15.5	...	...	...
Taipei, Chinese	1409	16.6	...	-30	...	Korea, Republic of	2568	9.6	...	-5	...
United States	829	9.8	...	2	...	China	2221	8.3	...	11	...
European Union (25)	746	8.8	...	...	...	Australia	1462	5.4	...	-3	...
Above 5	**6666**	**78.7**	**-**	**-**	**-**	**Above 5**	**18077**	**67.3**	**-**	**-**	**-**
Hong Kong, China	359	4.2	...	23	...	Taipei, Chinese	1122	4.2	...	-3	...
Australia	187	2.2	...	17	...	Thailand	1028	3.8	...	-10	...
Canada	164	1.9	...	17	...	Hong Kong, China	933	3.5	...	-7	...
Thailand	148	1.7	...	69	...	Canada	613	2.3	...	32	...
Singapore	123	1.5	...	60	...	Indonesia	514	1.9	...	-21	...
Malaysia	114	1.3	...	64	...	Singapore	498	1.9	...	4	...
Philippines	101	1.2	...	41	...	Philippines	399	1.5	...	-10	...
Indonesia	72	0.9	...	66	...	Malaysia	291	1.1	...	5	...
India	65	0.8	...	70	...	New Zealand	258	1.0	...	-6	...
Russian Federation	64	0.8	...	47	...	Switzerland	228	0.8	...	-13	...
Above 15	**8062**	**95.2**	**-**	**-**	**-**	**Above 15**	**23962**	**89.2**	**-**	**-**	**-**
Russian Federation b											
World	**7628**	**100.0**	**17**	**6**	**30**	**World**	**18235**	**100.0**	**9**	**14**	**5**
European Union (25)	2786	36.5	6	3	9	European Union (25)	7716	42.3	6	11	1
Ukraine	935	12.3	...	...	32	Turkey	1883	10.3	0	15	-12
United States	462	6.1	13	-8	39	Egypt	1259	6.9	33	33	33
China	400	5.2	19	-6	52	Ukraine	1253	6.9	...	...	-16
Turkey	361	4.7	39	26	54	China	920	5.0	7	6	8
Above 5	**4944**	**64.8**	**-**	**-**	**-**	**Above 5**	**13031**	**71.5**	**-**	**-**	**-**
Kazakhstan	334	4.4	11	21	2	United States	429	2.4	10	8	12
Uzbekistan	322	4.2	...	...	186	United Arab Emirates	414	2.3	8	-1	18
Tajikistan	302	4.0	63	-9	191	Kazakhstan	407	2.2	26	33	19
Azerbaijan	204	2.7	...	...	32	Switzerland	332	1.8	5	2	8
Moldova	200	2.6	...	...	95	Thailand	280	1.5	32	-15	107
Armenia	150	2.0	...	...	55	Israel	267	1.5	4	22	-11
Japan	122	1.6	7	-5	22	Bulgaria	250	1.4	15	9	21
Kyrgyz Republic	114	1.5	57	7	131	Georgia	210	1.2	...	...	24
Belarus	112	1.5	22	-8	61	Japan	173	0.9	-7	-4	-11
Korea, Republic of	95	1.2	7	-1	17	Serbia and Montenegro	160	0.9	66	55	76
Above 15	**6899**	**90.4**	**-**	**-**	**-**	**Above 15**	**15952**	**87.5**	**-**	**-**	**-**

Table III.8 *(continued)*

Trade in travel of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
Korea, Republic of c											
World	**5788**	**100.0**	**-2**	**-4**	**0**	**World**	**18851**	**100.0**	**24**	**25**	**22**
Japan	1901	32.8	13	14	12	United States	5038	26.7	28	33	24
China	956	16.5	13	5	22	Japan	3419	18.1	26	25	27
United States	899	15.5	10	10	11	China	2689	14.3	24	33	15
European Union (25)	464	8.0	3	6	1	European Union (25)	1582	8.4	23	29	17
Above 4	**4219**	**72.9**	**-**	**-**	**-**	**Above 4**	**12727**	**67.5**	**-**	**-**	**-**

a Health-related expenditure and expenditure by seasonal and border workers are not allocated geographically. In 2006, they accounted for 6 per cent of travel exports and 0.5 per cent of imports.
b In 2006, trade in travel not allocated geographically accounted for 1 per cent of exports and 5 per cent of imports.
c In 2006, trade in travel not allocated geographically accounted for 12 per cent of exports and 14 per cent of imports.
Note: For more information on asymmetries, see the Metadata, Section II.2.

4. Other commercial services

Table III.9

World trade in other commercial services by region, 2007

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exports							
World	**1685**	**100.0**	**100.0**	**14**	**14**	**16**	**20**
North America	297	23.5	17.7	10	12	12	16
South and Central America	33	2.0	2.0	14	32	20	26
Europe	918	50.1	54.5	16	12	15	22
European Union (27)	846	45.1	50.2	16	12	15	22
Commonwealth of Independent States (CIS)	24	0.6	1.4	28	35	32	36
Africa	18	1.4	1.1	...	...	10	25
Middle East	34	2.0	2.0	15	15	23	12
Asia	361	20.4	21.4	15	19	20	19
Imports							
World	**1415**	**100.0**	**100.0**	**13**	**11**	**14**	**20**
North America	208	17.7	14.7	10	8	13	13
South and Central America	37	3.2	2.6	10	25	14	16
Europe	720	48.0	50.8	14	11	12	20
European Union (27)	683	45.6	48.2	14	10	13	20
Commonwealth of Independent States (CIS)	43	1.6	3.1	24	19	19	37
Africa	39	2.6	2.8	...	...	15	24
Middle East	44	2.5	3.1	17	15	25	33
Asia	325	24.5	22.9	12	11	17	20

Note : For more information on asymmetries, see the Metadata, Section II.2.

Table III.10

Leading exporters and importers of other commercial services, 2007

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2007	2000	2007	2000-07	2005	2006	2007
Exporters							
European Union (27)	846.4	45.1	50.2	16	12	15	22
Extra-EU (27) exports	398.9	...	23.7	...	12	17	25
United States	260.4	19.7	15.5	10	12	13	17
Japan	75.7	6.0	4.5	10	16	16	10
India	69.8	...	4.1	...	...	38	19
China	53.1	1.6	3.2	26	20	25	46
Hong Kong, China	45.3	3.3	2.7	11	15	17	17
Switzerland	44.3	2.5	2.6	15	18	12	25
Singapore	35.7	1.7	2.1	18	13	13	15
Canada	34.1	3.2	2.0	7	12	6	5
Korea, Republic of	22.0	1.4	1.3	13	18	20	31
Taipei, Chinese	19.0	1.8	1.1	7	-9	19	9
Norway	17.6	0.9	1.0	17	24	34	31
Russian Federation	17.6	0.4	1.0	32	37	35	34
Brazil	13.5	0.9	0.8	13	33	30	33
Israel	13.5	1.3	0.8	7	5	17	6
Above 15	**1570.0**	**91.3**	**93.1**	**-**	**-**	**-**	**-**
Importers							
European Union (27)	683.1	45.6	48.2	14	10	13	20
Extra-EU (27) imports	275.9	...	19.5	...	10	11	22
United States	158.6	12.5	11.2	11	9	15	14
Japan	73.1	8.1	5.2	6	3	17	14
China	56.2	2.0	4.0	24	18	26	35
India	37.3	...	2.6	...	...	43	22
Canada	36.3	3.6	2.6	8	6	8	6
Singapore	33.1	2.0	2.3	16	7	17	16
Korea, Republic of	31.8	2.5	2.2	12	16	16	22
Russian Federation	26.2	0.8	1.8	27	18	23	39
Brazil	18.0	1.2	1.3	14	43	18	21
Saudi Arabia a	17.3	...	1.2	...	...	...	...
Switzerland	16.0	0.6	1.1	22	25	-2	27
Taipei, Chinese	15.9	1.9	1.1	5	5	4	8
Thailand	14.9	1.0	1.0	14	14	38	24
Hong Kong, China	13.2	1.0	0.9	12	12	12	17
Above 15	**1230.0**	**85.2**	**86.9**	**-**	**-**	**-**	**-**

a Secretariat estimate.

Table III.11

Trade in other commercial services of selected economies by origin and destination, 2006

(Million dollars and percentage)

Exports	Value	Share	Annual percentage change			Imports	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)											
World	**695603**	**100.0**	**13**	**12**	**15**	**World**	**567729**	**100.0**	**11**	**10**	**13**
European Union (25)	372499	53.6	12	12	13	European Union (25)	339150	59.7	12	11	14
United States	101275	14.6	10	2	19	United States	101831	17.9	8	8	8
Switzerland	43691	6.3	11	9	12	Switzerland	29753	5.2	6	12	0
Japan	14169	2.0	5	13	-3	Japan	9033	1.6	15	15	16
Singapore	9922	1.4	26	14	38	Norway	5372	0.9	15	14	16
Above 5	**541557**	**77.9**	**-**	**-**	**-**	**Above 5**	**485139**	**85.5**	**-**	**-**	**-**
Russian Federation	9349	1.3	34	44	24	China	4635	0.8	34	22	46
Norway	8452	1.2	9	8	10	Russian Federation	4257	0.7	26	28	24
China	7731	1.1	20	42	1	Singapore	4192	0.7	18	21	16
Canada	5443	0.8	13	12	14	Canada	4138	0.7	12	16	8
Australia	4817	0.7	19	21	18	Hong Kong, China	3962	0.7	19	6	33
India	4614	0.7	68	68	67	India	3046	0.5	37	35	39
Nigeria	4347	0.6	36	33	39	Australia	2377	0.4	11	21	2
Hong Kong, China	4191	0.6	-2	27	-25	Brazil	2031	0.4	29	22	37
Korea, Republic of	4120	0.6	16	23	9	Turkey	1908	0.3	12	7	17
Turkey	3748	0.5	24	12	37	Korea, Republic of	1780	0.3	13	9	17
Above 15	**598371**	**86.0**	**-**	**-**	**-**	**Above 15**	**517464**	**91.1**	**-**	**-**	**-**
United States											
World	**222614**	**100.0**	**12**	**12**	**13**	**World**	**138757**	**100.0**	**12**	**9**	**15**
European Union (25)	90434	40.6	10	7	13	European Union (25)	59783	43.1	14	8	20
Canada	21286	9.6	18	16	20	Bermuda	13499	9.7	0	-11	12
Japan	20810	9.3	10	14	7	Japan	12826	9.2	12	15	8
Switzerland	11193	5.0	12	9	16	Switzerland	11797	8.5	30	38	22
Mexico	11061	5.0	14	22	6	Canada	11069	8.0	12	17	6
Above 5	**154785**	**69.5**	**-**	**-**	**-**	**Above 5**	**108973**	**78.5**	**-**	**-**	**-**
Australia	5478	2.5	20	11	30	India	3869	2.8	70	125	28
Singapore	5228	2.3	7	1	14	Mexico	2621	1.9	11	10	12
China	4641	2.1	21	27	16	Australia	2150	1.5	17	34	3
Bermuda	4297	1.9	6	3	10	Hong Kong, China	1976	1.4	4	0	8
Korea, Republic of	4212	1.9	15	19	10	Singapore	1769	1.3	32	76	0
Brazil	3824	1.7	30	29	30	Brazil	1332	1.0	47	17	85
Hong Kong, China	3181	1.4	21	21	21	China	1044	0.8	25	29	22
Taipei, Chinese	2851	1.3	16	17	16	Israel	984	0.7	9	18	1
India	1573	0.7	24	11	38	Korea, Republic of	739	0.5	23	25	21
Saudi Arabia	1455	0.7	9	11	6	Philippines	653	0.5	22	8	37
Above 15	**191525**	**86.0**	**-**	**-**	**-**	**Above 15**	**126111**	**90.9**	**-**	**-**	**-**
Japan											
World	**69022**	**100.0**	**16**	**16**	**16**	**World**	**64189**	**100.0**	**10**	**3**	**17**
United States	23046	33.4	12	8	16	United States	28274	44.0	10	8	13
European Union (25)	19193	27.8	...	...	14	European Union (25)	14902	23.2	...	...	17
Singapore	6133	8.9	37	27	47	Singapore	2767	4.3	12	3	21
Taipei, Chinese	3956	5.7	16	22	10	China	1970	3.1	15	13	16
Thailand	2398	3.5	49	57	41	Switzerland	1583	2.5	15	7	23
Above 5	**54725**	**79.3**	**-**	**-**	**-**	**Above 5**	**49495**	**77.1**	**-**	**-**	**-**
China	2253	3.3	-7	21	-28	Taipei, Chinese	1322	2.1	-12	-14	-11
Canada	1505	2.2	-4	6	-14	Korea, Republic of	1240	1.9	19	23	15
Korea, Republic of	1328	1.9	10	32	-8	Hong Kong, China	1221	1.9	3	0	7
United Arab Emirates	1228	1.8	31	8	59	Thailand	1088	1.7	38	39	38
Indonesia	1150	1.7	-5	-22	16	United Arab Emirates	1007	1.6	37	-1	89
Switzerland	1038	1.5	5	-20	39	Indonesia	893	1.4	10	5	15
Australia	782	1.1	8	33	-12	Australia	801	1.2	18	5	32
Saudi Arabia	704	1.0	121	...	...	Philippines	561	0.9	19	-5	50
India	516	0.7	26	30	23	Saudi Arabia	556	0.9	22	-41	152
Philippines	498	0.7	-6	6	-17	Canada	503	0.8	4	3	6
Above 15	**65729**	**95.2**	**-**	**-**	**-**	**Above 15**	**58687**	**91.4**	**-**	**-**	**-**

Table III.11 *(continued)*

Trade in other commercial services of selected economies by origin and destination, 2006

(Million dollars and percentage)

	Exports					Imports					
	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
Hong Kong, China a											
World	**38615**	**100.0**	**16**	**15**	**17**	**World**	**11247**	**100.0**	**12**	**12**	**12**
United States	10404	26.9	18	14	22	United States	2620	23.3	9	12	5
European Union (25)	8184	21.2	25	21	29	China	2607	23.2	9	9	9
China	7856	20.3	6	6	5	European Union (25)	2027	18.0	29	25	34
Japan	2115	5.5	17	14	20	Japan	1100	9.8	3	11	-4
Singapore	1367	3.5	16	1	34	Singapore	739	6.6	22	12	32
Above 5	**29926**	**77.5**	**-**	**-**	**-**	**Above 5**	**9093**	**80.8**	**-**	**-**	**-**
Taipei, Chinese	1214	3.1	5	16	-5	Taipei, Chinese	327	2.9	13	15	11
Korea, Republic of	916	2.4	35	27	45	Australia	221	2.0	5	-4	14
Australia	459	1.2	11	5	18	Korea, Republic of	193	1.7	-4	2	-9
Switzerland	451	1.2	8	6	11	Malaysia	192	1.7	42	15	76
Thailand	353	0.9	32	72	1	Switzerland	177	1.6	6	-5	19
Canada	345	0.9	-1	5	-6	Thailand	107	1.0	28	34	23
India	267	0.7	-4	-49	80	Indonesia	99	0.9	12	23	2
Indonesia	260	0.7	44	52	37	Canada	66	0.6	-4	-6	-3
Malaysia	257	0.7	4	14	-5	Philippines	61	0.5	16	20	13
Macao, China	214	0.6	10	46	-17	Macao, China	59	0.5	-2	10	-13
Above 15	**34662**	**89.8**	**-**	**-**	**-**	**Above 15**	**10595**	**94.2**	**-**	**-**	**-**
Singapore b, c											
World	**30913**	**100.0**	**13**	**13**	**13**	**World**	**28414**	**100.0**	**12**	**7**	**17**
United States	5004	16.2	32	21	43	United States	8055	28.3	9	11	6
European Union (25)	4473	14.5	23	20	26	European Union (25)	7881	27.7	30	24	35
Japan	3295	10.7	9	14	4	Japan	2946	10.4	14	-11	45
Hong Kong, China	1967	6.4	9	18	0	Hong Kong, China	1244	4.4	22	13	31
China	1237	4.0	1	5	-3	Australia	770	2.7	8	-4	23
Above 5	**15976**	**51.7**	**-**	**-**	**-**	**Above 5**	**20896**	**73.5**	**-**	**-**	**-**
Korea, Republic of	1221	4.0	3	15	-7	China	649	2.3	7	-11	28
Australia	1131	3.7	24	37	12	Korea, Republic of	433	1.5	15	12	17
Above 7	**18328**	**59.3**	**-**	**-**	**-**	**Above 7**	**21978**	**77.3**	**-**	**-**	**-**
Korea, Republic of d											
World	**16787**	**100.0**	**19**	**18**	**20**	**World**	**26040**	**100.0**	**16**	**16**	**16**
United States	5437	32.4	11	8	14	United States	9170	35.2	17	18	16
European Union (25)	3529	21.0	33	42	24	European Union (25)	4790	18.4	8	12	4
Japan	2031	12.1	3	5	2	China	2842	10.9	20	17	23
China	1269	7.6	28	8	51	Japan	1931	7.4	8	10	5
Above 4	**12266**	**73.1**	**-**	**-**	**-**	**Above 4**	**18733**	**71.9**	**-**	**-**	**-**
Russian Federation e											
World	**13156**	**100.0**	**36**	**37**	**35**	**World**	**18845**	**100.0**	**20**	**18**	**23**
European Union (25)	5924	45.0	33	30	37	European Union (25)	9874	52.4	34	39	29
United States	1743	13.2	30	36	24	Turkey	1987	10.5	45	37	53
Turkey	706	5.4	58	86	35	United States	1911	10.1	5	-19	36
Switzerland	530	4.0	49	69	32	Panama	671	3.6	33	56	13
Kazakhstan	350	2.7	23	16	31	Switzerland	665	3.5	14	2	28
Above 5	**9253**	**70.3**	**-**	**-**	**-**	**Above 5**	**15108**	**80.2**	**-**	**-**	**-**
Ukraine	297	2.3	...	...	18	Ukraine	467	2.5	...	...	31
British Virgin Islands	284	2.2	28	33	23	British Virgin Islands	205	1.1	81	88	76
Japan	212	1.6	56	54	57	Belarus	197	1.0	-1	-3	1
Belarus	177	1.3	23	26	20	Korea, Republic of	155	0.8	151	219	98
India	151	1.1	-3	-12	6	Serbia and Montenegro	153	0.8	-44	-80	59
Panama	138	1.1	89	52	134	Kazakhstan	107	0.6	6	2	9
Korea, Republic of	115	0.9	25	19	32	China	95	0.5	48	5	109
Tajikistan	109	0.8	262	406	159	Israel	88	0.5	44	70	21
China	90	0.7	11	9	13	Canada	88	0.5	42	24	63
Canada	80	0.6	61	2	152	Norway	67	0.4	53	30	79
Above 15	**10908**	**82.9**	**-**	**-**	**-**	**Above 15**	**16729**	**88.8**	**-**	**-**	**-**

a Financial intermediation services are not allocated geographically. In 2006, they accounted for 3 per cent of other commercial services exports and 1 per cent of imports.
b The following transactions are not allocated geographically: financial services exports related to foreign exchange trading and imports of insurance on goods imports.
c In 2006, ASEAN countries accounted for 16 per cent of other commercial services exports and for 5 per cent of imports.
d In 2006, trade in other commercial services not allocated geographically represented 10 per cent of exports and 8 per cent of imports.
e In 2006, trade in other commercial services not allocated geographically represented 5 per cent of exports and 3 per cent of imports.
Note: For more information on asymmetries, see the Metadata, Section II.2.

4.1. Communications services

Table III.12

World exports of communications services by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**70**	**100.0**	**100.0**	**13**	**18**	**19**	**18**
North America	9	20.1	13.4	6	7	13	13
South and Central America	3	5.7	3.9	6	7	12	13
Europe	40	49.1	56.9	16	20	18	17
European Union (27)	37	...	53.3	...	...	19	18
Commonwealth of Independent States (CIS)	2	2.2	2.1	13	14	33	20
Asia	10	18.9	13.7	7	14	22	6

Table III.13

Major exporters and importers of communications services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	37202	62.7	18	1	European Union (27)	36543	68.8	21
	Extra-EU (27) exports	10970	18.5	21		Extra-EU (27) imports	12059	22.7	21
2	United States	6578	11.1	19	2	United States	5163	9.7	0
3	Kuwait a	3398	5.7	162	3	Canada	1955	3.7	-3
4	Canada	2302	3.9	6	4	Hong Kong, China	1072	2.0	-6
5	India	2191	3.7	11	5	Korea, Republic of	1012	1.9	31
6	Indonesia	1103	1.9	10	6	Singapore	979	1.8	10
7	Switzerland	1102	1.9	-7	7	Russian Federation	917	1.7	23
8	Hong Kong, China	834	1.4	-12	8	India	899	1.7	35
9	Russian Federation	803	1.4	22	9	Switzerland	803	1.5	-14
10	China	738	1.2	52	10	China	764	1.4	27
11	Australia	646	1.1	3	11	Japan	732	1.4	19
12	Korea, Republic of	642	1.1	45	12	Malaysia a	653	1.2	-4
13	Malaysia a	641	1.1	4	13	Australia	643	1.2	3
14	Singapore	614	1.0	10	14	Indonesia	571	1.1	15
15	Philippines	575	1.0	10	15	Taipei, Chinese	393	0.7	-22
	Above 15	**59365**	**100.0**	**-**		**Above 15**	**53100**	**100.0**	**-**

a Telecommunications services.

Note : Based on information available to the Secretariat. See the Metadata, Section II.2.

4.1.1 Telecommunications services

Table III.14

Major exporters and importers of telecommunications services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	30161	65.5	20	1	European Union (27)	29978	75.7	24
	Extra EU (27) exports	8225	17.9	23		Extra EU (27) imports	9330	23.6	20
2	United States	6257	13.6	20	2	United States	4557	11.5	1
3	Kuwait	3398	7.4	162	3	Russian Federation	900	2.3	25
4	India	1096	2.4	11	4	Malaysia	653	1.6	4
5	Russian Federation	739	1.6	19	5	Korea, Republic of	613	1.5	...
6	Malaysia	641	1.4	4	6	India	450	1.1	35
7	Philippines	572	1.2	...	7	Australia	403	1.0	2
8	Hong Kong, China	566	1.2	17	8	Hong Kong, China	349	0.9	19
9	Mexico	466	1.0	15	9	Israel	318	0.8	50
10	Korea, Republic of	423	0.9	...	10	Argentina	266	0.7	11
11	Turkey	416	0.9	1	11	Turkey	247	0.6	35
12	Morocco	387	0.8	13	12	South Africa	231	0.6	26
13	Croatia	325	0.7	38	13	Norway	228	0.6	4
14	Norway	320	0.7	6	14	Lebanon	217	0.5	56
15	Lebanon	305	0.7	27	15	Colombia	182	0.5	37
	Above 15	**46070**	**100.0**	**-**		**Above 15**	**39590**	**100.0**	**-**

Note : Based on information available to the Secretariat. As certain major traders in communications services do no report the item telecommunications services separately, they may not appear in the list. Transactions on telecommunications services are often reported on a net rather than a gross basis. See the Metadata, Section II.2.

Table III.15

Exports of telecommunications services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)						United States					
World	**30161**	**100.0**	**19**	**18**	**20**	**World**	**6257**	**100.0**	**16**	**12**	**20**
European Union (25)	21723	72.0	21	23	19	European Union (25)	1610	25.7	8	3	13
United States	2678	8.9	6	3	17	Brazil	740	11.8	162	151	172
Switzerland	792	2.6	4	9	19	Canada	651	10.4	10	14	6
Norway	491	1.6	40	48	32	Mexico	332	5.3	12	12	11
Russian Federation	299	1.0	39	18	64	Bolivarian Rep. of Venezuela	211	3.4	162	318	64
Above 5	**25983**	**86.1**	**-**	**-**	**-**	**Above 5**	**3544**	**56.6**	**-**	**-**	**-**
Canada	188	0.6	10	3	17	Philippines	193	3.1	46	48	43
Australia	172	0.6	9	23	3	Argentina	185	3.0	167	359	56
Turkey	142	0.5	36	32	41	Switzerland	171	2.7	20	33	7
Japan	137	0.5	39	1	63	Korea, Republic of	144	2.3	7	12	2
India	132	0.4	43	23	65	Japan	139	2.2	7	3	11
South Africa	122	0.4	35	12	63	Australia	122	1.9	21	28	14
China	121	0.4	25	6	66	India	107	1.7	12	5	20
Hong Kong, China	117	0.4	26	37	16	China	103	1.6	8	15	2
Brazil	110	0.4	18	1	42	South Africa	80	1.3	14	28	2
Israel	109	0.4	27	17	38	Saudi Arabia	71	1.1	34	28	40
Above 15	**27332**	**90.6**	**-**	**-**	**-**	**Above 15**	**4859**	**77.7**	**-**	**-**	**-**

4.2. Construction

Table III.16

World exports of construction by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**60**	**100.0**	**100.0**	**11**	**16**	**16**	**15**
North America	6	8.7	9.7	13	25	18	40
South and Central America	0	1.3	0.3	12	23	11	5
Europe	31	59.0	53.4	10	3	14	10
European Union (27)	29	...	49.4	...	...	16	9
Commonwealth of Independent States (CIS)	4	1.0	6.0	51	46	37	38
Asia	16	27.4	26.9	11	45	19	12

Table III.17

Major exporters and importers of construction, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	28848	53.0	9	1	European Union (27)	19490	44.7	7
	Extra EU (27) exports	15326	28.1	11		Extra EU (27) imports	8089	18.6	10
2	Japan	8981	16.5	24	2	Japan	6202	14.2	30
3	United States	5468	10.0	42	3	Russian Federation	4603	10.6	14
4	Russian Federation	3050	5.6	38	4	Kazakhstan	3225	7.4	66
5	China	2753	5.1	6	5	China	2050	4.7	27
6	Malaysia	1041	1.9	28	6	Angola	1476	3.4	12
7	Turkey	936	1.7	6	7	Malaysia	1314	3.0	21
8	Singapore	666	1.2	8	8	Azerbaijan	1300	3.0	13
9	Israel	509	0.9	46	9	Indonesia	984	2.3	36
10	Indonesia	456	0.8	6	10	India	906	2.1	36
11	Egypt	430	0.8	14	11	Thailand	581	1.3	85
12	India	403	0.7	60	12	United States	563	1.3	36
13	Thailand	336	0.6	32	13	Iraq	330	0.8	16
14	Norway	330	0.6	30	14	Taipei, Chinese	295	0.7	22
15	Hong Kong, China	268	0.5	14	15	Singapore	262	0.6	8
	Above 15	**54475**	**100.0**	**-**		**Above 15**	**43580**	**100.0**	**-**

Note : Based on information available to the Secretariat. As certain economies do not report this item separately, they may not appear in the list (e.g., Switzerland, Saudi Arabia, United Arab Emirates). See the Metadata, Section II.2.

Table III.18

Exports of construction of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)						Japan					
World	**28848**	**100.0**	**12**	**16**	**9**	**World**	**8981**	**100.0**	**14**	**5**	**24**
European Union (25)	13320	46.2	10	13	7	United Arab Emirates	1491	16.6	49	69	31
United States	1134	3.9	4	4	12	Saudi Arabia	1367	15.2	52	15	172
Nigeria	1099	3.8	25	51	3	Thailand	732	8.1	77	87	68
Russian Federation	902	3.1	9	33	11	Taipei, Chinese	656	7.3	29	36	21
Norway	842	2.9	11	8	13	Indonesia	516	5.7	16	43	24
Above 5	**17298**	**60.0**				**Above 5**	**4763**	**53.0**	**-**	**-**	**-**
Switzerland	757	2.6	8	0	16	Viet Nam	289	3.2	80	162	24
China	600	2.1	5	19	8	European Union (25)	261	2.9	...	...	122
Brazil	415	1.4	94	160	44	Russian Federation	258	2.9	132	313	30
Bolivarian Rep. of Venezuela	412	1.4	117	218	48	United States	255	2.8	52	56	49
Egypt	347	1.2	71	20	146	Iran, Islamic Rep. of	241	2.7	29	102	17
Canada	264	0.9	52	37	68	Singapore	223	2.5	9	26	11
Croatia	239	0.8	16	15	17	China	176	2.0	33	31	35
India	205	0.7	7	16	25	Philippines	134	1.5	18	8	28
South Africa	202	0.7	2	22	23	Malaysia	119	1.3	19	48	5
Singapore	198	0.7	12	7	17	Mexico	71	0.8	7	233	66
Above 15	**20936**	**72.6**				**Above 15**	**6790**	**75.6**	**-**	**-**	**-**
Russian Federation a						Singapore b					
World	**3050**	**100.0**	**39**	**40**	**38**	**World**	**666**	**100.0**	**1**	**-4**	**8**
European Union (25)	1107	36.3	21	2	43	China	90	13.5	32	56	6
Turkey	580	19.0	59	98	28	European Union (25)	31	4.7	25	22	29
United States	241	7.9	17	59	14	United States	29	4.3	24	114	28
Japan	124	4.1	114	144	87	Australia	9	1.3	125	11	353
Tajikistan	96	3.1	...	...	248	Japan	7	1.0	5	31	16
Above 5	**2147**	**70.4**	**-**	**-**	**-**	**Above 5**	**165**	**24.8**	**-**	**-**	**-**

a In 2006, construction not allocated geographically represented 6 per cent of exports.

b In 2006, ASEAN countries accounted for 34 per cent of construction exports.

4.3. Insurance services

Table III.19

World exports of insurance services by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**60**	**100.0**	**100.0**	**16**	**3**	**-10**	**22**
North America	14	28.7	22.8	11	4	14	12
South and Central America	1	4.0	2.3	6	14	30	0
Europe	37	51.2	60.1	19	2	21	28
European Union (27)	31	...	50.1	...	...	26	30
Commonwealth of Independent States (CIS)	1	0.2	0.9	44	52	31	30
Asia	7	11.8	11.9	16	36	3	24

Table III.20

Major exporters and importers of insurance services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	30744	53.6	30	1	United States	33582	33.2	18
	Extra EU (27) exports	18006	31.4	138	2	European Union (27)	26904	26.6	3
2	United States	9276	16.2	19		Extra EU (27) imports	8793	8.7	13
3	Switzerland	5229	9.1	19	3	Mexico	9278	9.2	6
4	Canada	3457	6.0	8	4	China	8831	8.7	23
5	Japan	1576	2.7	80	5	Canada	4871	4.8	6
6	Singapore	1466	2.6	21	6	Japan	4574	4.5	142
7	Mexico	1263	2.2	19	7	Singapore	3082	3.0	21
8	India	1116	1.9	20	8	India	2664	2.6	19
9	China	548	1.0	0	9	Thailand	1791	1.8	8
10	Taipei, Chinese	532	0.9	46	10	Turkey	1140	1.1	28
11	Australia	530	0.9	0	11	Taipei, Chinese	1002	1.0	4
12	Turkey	522	0.9	62	12	Egypt	978	1.0	25
13	Hong Kong, China	417	0.7	1	13	Iraq	885	0.9	6
14	Russian Federation	377	0.7	17	14	Korea, Republic of	854	0.8	17
15	Brazil	324	0.6	142	15	Brazil	755	0.7	8
	Above 15	**57375**	**100.0**	**-**		**Above 15**	**101190**	**100.0**	**-**

Note : Based on information available to the Secretariat. For more information on asymmetries, see the Metadata, Section II.2.

Table III.21

Exports of insurance services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)						United States					
World	**30744**	**100.0**	**-2**	**-26**	**30**	**World**	**9276**	**100.0**	**13**	**6**	**19**
European Union (25)	12627	41.1	18	15	21	European Union (25)	2796	30.1	8	17	2
United States	9150	29.8	...	93	...	Canada	1918	20.7	25	37	14
Argentina	895	2.9	...	232	...	Japan	999	10.8	55	96	23
Switzerland	647	2.1	21	16	26	Bermuda	851	9.2	17	19	68
Japan	592	1.9	34	6	91	Switzerland	367	4.0	132	53	252
Above 5	**23912**	**77.8**	**-**	**-**	**-**	**Above 5**	**6932**	**74.7**	**-**	**-**	**-**
Canada	545	1.8	15	8	33	Mexico	232	2.5	18	9	54
Australia	397	1.3	42	166	24	Australia	158	1.7	14	7	31
South Africa	293	1.0	3	11	15	Korea, Republic of	135	1.5	36	6	95
Norway	264	0.9	3	62	148	Hong Kong, China	135	1.5	63	427	49
Mexico	214	0.7	11	5	18	Taipei, Chinese	76	0.8	22	7	38
Turkey	197	0.6	18	9	52	Brazil	61	0.7	5	1	12
Russian Federation	159	0.5	18	10	54	Chile	54	0.6	3	20	18
Hong Kong, China	158	0.5	12	58	84	China	44	0.5	9	3	15
Singapore	155	0.5	1	49	91	Singapore	44	0.5	8	12	5
Korea, Republic of	140	0.5	16	4	41	Argentina	42	0.5	25	28	22
Above 15	**26434**	**86.0**	**-**	**-**	**-**	**Above 15**	**7912**	**85.3**	**-**	**-**	**-**
Japan						Singapore a					
World	**1576**	**100.0**	**22**	**-18**	**80**	**World**	**1466**	**100.0**	**5**	**-9**	**21**
European Union (25)	527	33.4	...	...	183	Australia	285	19.4	34	49	21
United States	408	25.9	37	61	376	Korea, Republic of	133	9.1	11	35	22
Hong Kong, China	90	5.7	2	8	14	Japan	129	8.8	14	27	2
China	67	4.3	1	7	10	European Union (25)	87	5.9	28	14	44
Taipei, Chinese	47	3.0	6	6	6	China	63	4.3	31	7	60
Above 5	**1140**	**72.3**	**-**	**-**	**-**	**Above 5**	**696**	**47.5**	**-**	**-**	**-**
Australia b						Hong Kong, China					
World	**530**	**100.0**	**2**	**5**	**0**	**World**	**417**	**100.0**	**1**	**1**	**1**
United States	224	42.2	2	5	0	China	108	25.9	34	15	57
European Union (25)	101	19.0	2	5	0	European Union (25)	65	15.6	27	16	36
New Zealand	54	10.1	2	5	0	Korea, Republic of	46	11.0	1	29	21
Singapore	25	4.8	2	5	0	Japan	33	7.9	11	48	50
Japan	17	3.3	2	5	0	Singapore	31	7.4	19	41	0
Above 5	**421**	**79.4**	**-**	**-**	**-**	**Above 5**	**283**	**67.9**	**-**	**-**	**-**
Russian Federation c											
World	**377**	**100.0**	**25**	**34**	**17**						
European Union (25)	155	41.1	23	30	17						
Switzerland	52	13.9	49	59	40						
Kazakhstan	28	7.4	6	49	25						
Ukraine	20	5.2	...	...	5						
Panama	17	4.6	35	51	21						
Above 5	**272**	**72.3**	**-**	**-**	**-**						

a In 2006, ASEAN countries accounted for 28 per cent of insurance services exports.
b In 2006, insurance services not allocated geographically accounted for 21 per cent of exports.
c In 2006, insurance services not allocated geographically accounted for 3 per cent of exports.

4.4. Financial services

Table III.22

World exports of financial services by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**215**	**100.0**	**100.0**	**14**	**25**	**19**	**25**
North America	45	21.9	20.9	14	30	11	19
South and Central America	2	1.0	0.8	10	7	24	24
Europe	134	62.2	62.7	15	23	19	26
European Union (27)	121	...	56.5	...	...	20	28
Commonwealth of Independent States (CIS)	1	0.2	0.4	29	46	40	50
Asia	28	12.5	13.0	15	27	34	30

Table III.23

Major exporters and importers of financial services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	120752	58.6	28	1	European Union (27)	56766	64.1	27
	Extra EU (27) exports	53033	25.7	23		Extra EU (27) imports	21371	24.1	24
2	United States	42814	20.8	19	2	United States	14297	16.2	13
3	Switzerland	11696	5.7	12	3	Japan	2986	3.4	11
4	Hong Kong, China	9268	4.5	48	4	Canada	2864	3.2	22
5	Japan	6151	3.0	22	5	Hong Kong, China	2017	2.3	44
6	Singapore	4064	2.0	34	6	Taipei, Chinese	1390	1.6	1
7	Korea, Republic of	2543	1.2	54	7	India	1316	1.5	15
8	India	2071	1.0	41	8	Switzerland	1281	1.4	25
9	Canada	1897	0.9	19	9	Singapore	972	1.1	34
10	Taipei, Chinese	1232	0.6	19	10	Russian Federation	904	1.0	1
11	Norway	820	0.4	16	11	China	891	1.0	459
12	Australia	756	0.4	1	12	Norway	879	1.0	23
13	Brazil	738	0.4	45	13	Brazil	861	1.0	17
14	South Africa	706	0.3	32	14	Korea, Republic of	547	0.6	133
15	Russian Federation	589	0.3	51	15	Turkey	524	0.6	36
	Above 15	**206095**	**100.0**	**-**		**Above 15**	**88495**	**100.0**	**-**

Note : Based on information available to the Secretariat. For more information on asymmetries, see the Metadata, Section II.2.

Table III.24

Exports of financial services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)						United States a					
World	**120752**	**100.0**	**24**	**20**	**28**	**World**	**42814**	**100.0**	**14**	**10**	**19**
European Union (25)	67631	56.0	26	21	32	European Union (25)	14705	34.3	16	12	20
United States	16707	13.8	17	16	18	Canada	2257	5.3	28	21	35
Switzerland	7975	6.6	22	20	25	Bermuda	2218	5.2	11	7	16
Japan	4906	4.1	31	32	30	Japan	1588	3.7	20	24	16
Russian Federation	1405	1.2	44	30	60	Australia	1020	2.4	31	27	35
Above 5	**98623**	**81.7**	**-**	**-**	**-**	**Above 5**	**21788**	**50.9**	**-**	**-**	**-**
Hong Kong, China	1025	0.8	21	18	25	Switzerland	751	1.8	15	25	6
Australia	981	0.8	33	6	67	Mexico	669	1.6	30	39	21
Norway	978	0.8	18	20	16	Brazil	627	1.5	36	27	45
Canada	969	0.8	33	13	56	Hong Kong, China	625	1.5	52	65	40
Singapore	792	0.7	26	16	36	China	516	1.2	34	14	59
Taipei, Chinese	731	0.6	20	11	31	Korea, Republic of	410	1.0	14	8	21
Korea, Republic of	496	0.4	26	40	13	Singapore	393	0.9	10	7	12
China	482	0.4	32	19	47	Taipei, Chinese	338	0.8	7	5	10
South Africa	415	0.3	9	17	42	Norway	252	0.6	11	14	8
Turkey	363	0.3	13	14	12	Chile	234	0.5	61	11	134
Above 15	**105854**	**87.7**	**-**	**-**	**-**	**Above 15**	**26603**	**62.1**	**-**	**-**	**-**
Hong Kong, China b						Japan					
World	**9268**	**100.0**	**43**	**38**	**48**	**World**	**6151**	**100.0**	**18**	**14**	**22**
European Union (25)	2776	30.0	...	...	66	European Union (25)	2661	43.3	...	...	32
United States	2525	27.2	45	30	61	United States	2410	39.2	20	20	21
Singapore	537	5.8	31	9	57	Hong Kong, China	497	8.1	1	7	7
Japan	426	4.6	24	4	61	Cayman Islands	234	3.8	4	24	42
Korea, Republic of	361	3.9	76	38	123	Singapore	46	0.7	18	43	17
Above 5	**6625**	**71.5**	**-**	**-**	**-**	**Above 5**	**5847**	**95.1**	**-**	**-**	**-**
Singapore c, d						Australia					
World	**4064**	**100.0**	**29**	**24**	**34**	**World**	**756**	**100.0**	**1**	**3**	**-1**
European Union (25)	1041	25.6	36	35	38	European Union (25)	253	33.5	1	3	1
United States	671	16.5	35	21	50	United States	212	28.0	1	4	1
Hong Kong, China	412	10.1	17	10	25	Singapore	64	8.5	2	6	1
Japan	153	3.8	30	30	29	Hong Kong, China	47	6.3	2	4	1
Australia	100	2.5	51	72	33	New Zealand	29	3.8	2	5	1
Above 5	**2377**	**58.5**	**-**	**-**	**-**	**Above 5**	**605**	**80.0**	**-**	**-**	**-**
Russian Federation e											
World	**589**	**100.0**	**48**	**44**	**51**						
European Union (25)	385	65.4	67	74	61						
United States	57	9.8	33	43	23						
British Virgin Islands	20	3.4	50	9	108						
Switzerland	16	2.7	139	172	109						
Ukraine	9	1.4	...	...	15						
Above 5	**487**	**82.7**	**-**	**-**	**-**						

a Transactions between affiliated companies are not allocated geographically. In 2006, they accounted for 13 per cent of financial services exports.
b Financial intermediation services are not allocated geographically. In 2006, they accounted for 15 per cent of financial services exports.
c Financial services exports related to foreign exchange trading are not allocated geographically.
d In 2006, ASEAN countries accounted for 8 per cent of financial services exports.
e In 2006, financial services not allocated geographically accounted for 2 per cent of exports.

4.5. Computer and information services

Table III.25

World exports of computer and information services by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**125**	**100.0**	**100.0**	**17**	**26**	**13**	**18**
North America	14	19.1	11.1	7	8	13	3
South and Central America	1	0.9	1.2	23	30	30	36
Europe	73	54.3	57.6	19	27	8	15
European Union (27)	70	...	55.1	...	...	7	14
Commonwealth of Independent States (CIS)	1	0.2	0.7	47	43	55	57
Asia	30	15.4	23.5	26	36	26	31

Table III.26

Major exporters and importers of computer and information services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	70085	58.3	14	1	European Union (27)	35644	56.4	14
	Extra EU (27) exports	26635	22.2	26		Extra EU (27) imports	11948	18.9	14
2	India a	21461	17.8	...	2	United States	11092	17.6	23
3	United States	10096	8.4	3	3	Japan	3123	4.9	28
4	Israel b	5289	4.4	17	4	India	2199	3.5	40
5	Canada	4034	3.4	3	5	Canada	2020	3.2	13
6	China	2958	2.5	61	6	Brazil	2005	3.2	17
7	Norway b	1376	1.1	53	7	China	1739	2.8	7
8	Australia	1060	0.9	20	8	Norway b	1268	2.0	26
9	Japan	966	0.8	14	9	Australia	935	1.5	16
10	Singapore	633	0.5	11	10	Russian Federation	613	1.0	27
11	Russian Federation	632	0.5	50	11	Korea, Republic of	598	0.9	227
12	Malaysia b	572	0.5	31	12	Indonesia	596	0.9	6
13	Costa Rica	371	0.3	46	13	Malaysia b	518	0.8	37
14	Hong Kong, China	358	0.3	35	14	Singapore	426	0.7	11
15	Argentina	344	0.3	48	15	Hong Kong, China	371	0.6	13
	Above 15	**120235**	**100.0**	**-**		**Above 15**	**63145**	**100.0**	**-**

a Secretariat estimate.
b Computer services.
Note : Based on information available to the Secretariat. As certain economies do not report this item, they may not appear in the list. For more information on asymmetries, see the Metadata, Section II.2.

Table III.27

Exports of computer and information services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)						United States a					
World	**70085**	**100.0**	**11**	**7**	**14**	**World**	**10096**	**100.0**	**7**	**11**	**3**
European Union (25)	43143	61.6	8	8	8	European Union (25)	3975	39.4	6	13	1
United States	8594	12.3	7	9	5	Canada	847	8.4	10	4	17
Switzerland	4866	6.9	3	12	20	Australia	342	3.4	7	8	5
Russian Federation	970	1.4	60	112	20	Japan	292	2.9	5	5	14
Norway	889	1.3	8	6	10	Switzerland	193	1.9	3	38	23
Above 5	**58462**	**83.4**	**-**	**-**	**-**	**Above 5**	**5649**	**56.0**	**-**	**-**	**-**
Japan	837	1.2	1	5	3	Brazil	170	1.7	11	7	16
South Africa	747	1.1	27	17	38	Mexico	168	1.7	4	14	6
Canada	649	0.9	31	42	21	South Africa	147	1.5	17	21	14
Australia	503	0.7	33	46	21	Saudi Arabia	118	1.2	4	10	2
Israel	369	0.5	8	1	17	Singapore	114	1.1	47	85	16
India	356	0.5	36	19	56	China	98	1.0	30	45	17
Turkey	297	0.4	25	7	47	India	96	1.0	10	25	3
Brazil	296	0.4	32	28	35	Korea, Republic of	80	0.8	22	11	33
Singapore	276	0.4	14	22	7	Hong Kong, China	61	0.6	12	41	12
Mexico	243	0.3	19	33	6	Bolivarian Rep. of Venezuela	48	0.5	2	24	26
Above 15	**63035**	**89.9**	**-**	**-**	**-**	**Above 15**	**6749**	**66.8**	**-**	**-**	**-**
Australia b						Japan					
World	**1060**	**100.0**	**6**	**-6**	**20**	**World**	**966**	**100.0**	**-4**	**8**	**-14**
United States	342	32.3	12	9	15	United States	605	62.6	5	2	12
European Union (25)	102	9.6	16	20	70	European Union (25)	127	13.2	...	...	34
Japan	74	7.0	31	5	65	Singapore	85	8.8	18	13	23
New Zealand	58	5.5	...	...	10	Switzerland	48	5.0	44	49	40
Singapore	15	1.4	20	44	1	China	34	3.6	33	49	18
Above 5	**591**	**55.8**	**-**	**-**	**-**	**Above 5**	**900**	**93.1**	**-**	**-**	**-**
Singapore c						Russian Federation d					
World	**633**	**100.0**	**10**	**8**	**11**	**World**	**632**	**100.0**	**57**	**65**	**50**
European Union (25)	192	30.4	95	7	257	European Union (25)	286	45.2	49	31	69
United States	157	24.8	13	15	50	United States	192	30.4	63	83	44
Japan	102	16.1	69	60	79	Switzerland	16	2.5	54	379	50
Australia	84	13.3	78	22	159	British Virgin Islands	14	2.2	136	178	101
Hong Kong, China	55	8.7	1	14	10	Kazakhstan	13	2.1	...	...	85
Above 5	**590**	**93.3**	**-**	**-**	**-**	**Above 5**	**521**	**82.4**	**-**	**-**	**-**
Hong Kong, China											
World	**358**	**100.0**	**21**	**8**	**35**						
China	95	26.5	14	19	9						
United States	67	18.7	12	2	24						
European Union (25)	55	15.4	...	...	10						
Singapore	30	8.4	7	12	30						
Taipei, Chinese	17	4.8	30	10	89						
Above 5	**264**	**73.8**	**-**	**-**	**-**						

a Transactions between affiliated companies are not allocated geographically. In 2006, they accounted for 25 per cent of computer and information services exports.
b In 2006, computer and information services not allocated geographically accounted for 40 per cent of exports.
c In 2006, ASEAN countries accounted for 26 per cent of computer and information services exports.
d In 2006, computer and information services not allocated geographically accounted for 3 per cent of exports.

4.5.1 Computer services

Table III.28

Major exporters and importers of computer services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	60398	59.5	14	1	European Union (27)	32439	61.7	14
	Extra EU (27) exports	22225	21.9	27		Extra EU (27) imports	11081	21.1	14
2	India a	21061	20.7	...	2	United States b	10522	20.0	24
3	United States b	6208	6.1	8	3	India	1979	3.8	61
4	Israel	5289	5.2	17	4	Brazil	1947	3.7	18
5	Canada	3583	3.5	3	5	Canada	1401	2.7	11
6	Norway	1376	1.4	53	6	Norway	1268	2.4	26
7	Australia	1040	1.0	19	7	Australia	915	1.7	16
8	Russian Federation	576	0.6	54	8	Malaysia	518	1.0	37
9	Malaysia	572	0.6	31	9	Russian Federation	476	0.9	26
10	Costa Rica	371	0.4	46	10	Korea, Republic of	311	0.6	...
11	Argentina	342	0.3	48	11	Hong Kong, China	310	0.6	16
12	Hong Kong, China	301	0.3	45	12	Argentina	206	0.4	13
13	Korea, Republic of	182	0.2	...	13	Colombia	132	0.3	20
14	Uruguay	122	0.1	47	14	Syrian Arab Republic	95	0.2	5
15	Sri Lanka	98	0.1	19	15	Philippines	67	0.1	8
	Above 15	**101520**	**100.0**	**-**		**Above 15**	**52585**	**100.0**	**-**

a Secretariat estimate.
b Includes affiliated information services transactions.
Note : Based on information available to the Secretariat. As certain major traders in computer and information services do not report the item computer services separately, they may not appear in the list. For more information on asymmetries, see the Metadata, Section II.2.

Table III.29

Exports of computer services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
European Union (27)						United States a					
World	**60398**	**100.0**	**11**	**7**	**14**	**World**	**6208**	**100.0**	**6**	**4**	**8**
European Union (25)	37876	62.7	8	7	8	European Union (25)	2120	34.1	3	1	6
United States	7959	13.2	8	8	9	Canada	350	5.6	2	3	7
Switzerland	2111	3.5	3	10	4	Australia	162	2.6	4	5	13
Russian Federation	940	1.6	61	116	21	Japan	131	2.1	0	7	7
Norway	819	1.4	6	3	8	Switzerland	86	1.4	1	3	1
Above 5	**49706**	**82.3**	**-**	**-**	**-**	**Above 5**	**2849**	**45.9**	**-**	**-**	**-**
Japan	770	1.3	1	3	5	South Africa	71	1.1	24	24	25
South Africa	722	1.2	28	18	38	Mexico	66	1.1	6	3	16
Australia	393	0.7	29	47	14	China	65	1.0	31	32	30
Israel	345	0.6	8	2	18	Korea, Republic of	64	1.0	30	11	52
India	342	0.6	37	21	56	Brazil	58	0.9	25	8	45
Canada	326	0.5	17	23	11	Singapore	54	0.9	36	24	50
Brazil	288	0.5	32	27	38	India	43	0.7	9	25	4
Turkey	281	0.5	27	5	55	Hong Kong, China	33	0.5	20	74	18
Singapore	253	0.4	15	25	6	Norway	32	0.5	51	121	3
Mexico	234	0.4	19	36	4	Bolivarian Rep. of Venezuela	32	0.5	21	23	88
Above 15	**53659**	**88.8**	**-**	**-**	**-**	**Above 15**	**3367**	**54.2**	**-**	**-**	**-**
Russian Federation b											
World	**576**	**100.0**	**66**	**80**	**54**						
European Union (25)	262	45.5	58	42	76						
United States	184	32.0	68	92	47						
Switzerland	14	2.4	60	469	55						
Kazakhstan	12	2.1	...	...	98						
British Virgin Islands	12	2.1	199	231	171						
Above 5	**484**	**84.0**	**-**	**-**	**-**						

a Transactions between affiliated companies are not allocated geographically. Total exports of computer services include exports of information services between affiliated companies.

b In 2006, computer services not allocated geographically accounted for 2 per cent of exports.

4.6. Royalties and licence fees

Table III.30

World receipts of royalties and license fees by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**155**	**100.0**	**100.0**	**10**	**29**	**12**	**5**
North America	66	53.8	42.9	6	16	8	6
South and Central America	1	0.6	0.5	9	10	10	24
Europe	58	29.0	38.1	16	49	18	1
European Union (27)	50	...	32.5	...	...	15	3
Commonwealth of Independent States (CIS)	0	0.1	0.2	21	35	3	20
Asia	25	14.6	16.2	12	31	11	12

Table III.31

Major economies for receipts and payments of royalties and license fees, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	United States	62378	41.8	5	1	European Union (27)	65066	41.2	7
2	European Union (27)	49852	33.4	3		Extra EU (27) imports	40027	25.4	4
	Extra EU (27) exports	29643	19.9	2	2	United States	26433	16.8	7
3	Japan	20096	13.5	14	3	Japan	15500	9.8	6
4	Switzerland	7681	5.1	11	4	Singapore	10470	6.6	17
5	Canada	3245	2.2	14	5	Switzerland	8860	5.6	6
6	Korea, Republic of	2046	1.4	7	6	Canada	7320	4.6	7
7	Singapore	730	0.5	17	7	China	6634	4.2	25
8	Norway	674	0.5	63	8	Korea, Republic of	4650	2.9	2
9	Australia	621	0.4	12	9	Taipei, Chinese	2321	1.5	29
10	Israel	593	0.4	3	10	Australia	2190	1.4	9
11	Russian Federation	299	0.2	15	11	Thailand	2046	1.3	22
12	Hong Kong, China	259	0.2	6	12	Russian Federation	2002	1.3	26
13	Taipei, Chinese	244	0.2	4	13	Brazil	1664	1.1	18
14	Paraguay	236	0.2	8	14	Hong Kong, China	1357	0.9	5
15	China	205	0.1	30	15	South Africa	1282	0.8	20
	Above 15	**149160**	**100.0**	**-**		**Above 15**	**157795**	**100.0**	**-**

Note : Based on information available to the Secretariat. For more information on asymmetries, see the Metadata, Section II.2.

Table III.32

Receipts of royalties and licence fees of selected economies by origin, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
United States						European Union (27)					
World	**62378**	**100.0**	**7**	**9**	**5**	**World**	**49852**	**100.0**	**9**	**15**	**3**
European Union (25)	24815	39.8	7	5	8	European Union (25)	20101	40.3	8	12	5
Japan	9103	14.6	8	12	4	United States	12322	24.7	10	26	4
Switzerland	6171	9.9	9	4	15	Singapore	3899	7.8	13	16	11
Canada	5078	8.1	12	13	12	Switzerland	2425	4.9	4	1	10
Singapore	2971	4.8	13	6	21	Japan	2098	4.2	2	17	18
Above 5	**48138**	**77.2**	**-**	**-**	**-**	**Above 5**	**40846**	**81.9**	**-**	**-**	**-**
Korea, Republic of	2105	3.4	14	29	0	China	1356	2.7	24	31	18
Mexico	1567	2.5	12	12	11	Korea, Republic of	730	1.5	16	0	33
China	1443	2.3	21	21	22	Australia	554	1.1	2	12	17
Taipei, Chinese	1428	2.3	19	32	7	Norway	487	1.0	5	9	2
Australia	1265	2.0	8	12	4	Canada	400	0.8	18	16	21
Brazil	921	1.5	16	11	20	Mexico	372	0.7	16	39	3
Hong Kong, China	632	1.0	9	2	21	Brazil	368	0.7	6	28	57
South Africa	353	0.6	21	27	16	South Africa	363	0.7	5	5	15
Bermuda	304	0.5	41	2	65	Taipei, Chinese	339	0.7	3	14	25
Norway	303	0.5	29	9	53	Russian Federation	306	0.6	41	80	11
Above 15	**58459**	**93.7**	**-**	**-**	**-**	**Above 15**	**46120**	**92.5**	**-**	**-**	**-**
Japan						Korea, Republic of a					
World	**20096**	**100.0**	**13**	**12**	**14**	**World**	**2046**	**100.0**	**5**	**3**	**7**
United States	8717	43.4	11	8	15	China	747	36.5	28	9	51
European Union (25)	3352	16.7	...	...	16	United States	523	25.6	15	3	29
Thailand	1360	6.8	41	52	30	European Union (25)	264	12.9	14	32	90
China	1172	5.8	29	34	23	Japan	94	4.6	18	9	39
Canada	1006	5.0	8	3	19						
Above 5	**15606**	**77.7**	**-**	**-**	**-**	**Above 4**	**1629**	**79.6**	**-**	**-**	**-**
Singapore b						Australia					
World	**730**	**100.0**	**21**	**26**	**17**	**World**	**621**	**100.0**	**10**	**7**	**12**
Japan	98	13.4	9	25	5	United States	241	38.9	12	2	27
China	88	12.1	139	350	27	European Union (25)	134	21.6	6	3	14
Hong Kong, China	43	5.8	41	60	25	New Zealand	37	6.0	7	23	14
Australia	36	4.9	10	18	2	Japan	29	4.6	177	139	220
United States	32	4.3	17	19	15	China	21	3.4	12	1	25
Above 5	**296**	**40.6**	**-**	**-**	**-**	**Above 5**	**463**	**74.6**	**-**	**-**	**-**
Russian Federation c											
World	**299**	**100.0**	**15**	**14**	**15**						
United States	111	37.1	55	82	32						
European Union (25)	91	30.3	93	78	109						
Ukraine	11	3.8	...	...	30						
Switzerland	11	3.7	154	89	243						
Kazakhstan	7	2.3	31	82	5						
Above 5	**231**	**77.3**	**-**	**-**	**-**						

a In 2006, receipts of royalties and licence fees not allocated geographically accounted for 4 per cent of receipts.
b In 2006, ASEAN countries accounted for 16 per cent of receipts of royalties and licence fees.
c In 2006, receipts of royalties and licence fees not allocated geographically accounted for 10 per cent of receipts.

4.7. Other business services

Table III.33

World exports of other business services by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**680**	**100.0**	**100.0**	**14**	**19**	**16**	**15**
North America	90	16.4	13.2	10	9	17	14
South and Central America	17	2.5	2.5	14	19	39	21
Europe	363	51.0	53.3	15	19	15	13
European Union (27)	344	...	50.5	...	...	15	12
Commonwealth of Independent States (CIS)	9	0.9	1.4	23	25	36	28
Asia	184	26.2	27.0	14	24	18	19

Table III.34

Major exporters and importers of other business services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	343966	53.8	12	1	European Union (27)	310734	59.5	12
	Extra-EU (27) exports	160688	25.1	12		Extra-EU (27) imports	117396	22.5	14
2	United States	74926	11.7	16	2	United States	46782	9.0	18
3	India a	30923	4.8	...	3	Japan	29773	5.7	12
4	Japan	30677	4.8	12	4	India	21453	4.1	51
5	China	28973	4.5	24	5	China	20605	3.9	27
6	Hong Kong, China	26930	4.2	11	6	Korea, Republic of	17705	3.4	14
7	Singapore	22544	3.5	9	7	Canada	12930	2.5	7
8	Canada	14948	2.3	3	8	Singapore	11919	2.3	15
9	Taipei, Chinese	14779	2.3	24	9	Taipei, Chinese	8909	1.7	3
10	Korea, Republic of	10532	1.6	12	10	Brazil	8898	1.7	19
11	Switzerland b	9681	1.5	37	11	Russian Federation	8548	1.6	32
12	Norway	9123	1.4	37	12	Thailand d	7357	1.4	54
13	Brazil	8568	1.3	27	13	Norway	5972	1.1	15
14	Russian Federation	7174	1.1	35	14	Israel c	5557	1.1	18
15	Israel c	6100	1.0	15	15	Hong Kong, China	5519	1.1	13
	Above 15	**639845**	**100.0**	**-**		**Above 15**	**522660**	**100.0**	**-**

a Secretariat estimate.
b Includes construction and computer and information services.
c Includes financial services, and personal, cultural and recreational services.
d Includes financial services, computer and information servicesand personal, cultural and recreational services.
Note : Based on information available to the Secretariat. For more information on asymmetries, see the Metadata, Section II.2.

Table III.35

Exports of other business services of selected economies by destination, 2006

(Million dollars and percentage)

European Union (27)	Value 2006	Share 2006	Annual percentage change 2004-06	2005	2006
World	**343966**	**100.0**	**13**	**15**	**12**
European Union (25)	181431	52.7	13	14	13
United States	46801	13.6	8	6	10
Switzerland	25083	7.3	14	16	12
Russian Federation	5202	1.5	34	42	26
Japan	4930	1.4	8	2	18
Above 5	**263447**	**76.6**	**-**	**-**	**-**
China	4650	1.4	21	60	8
Singapore	4414	1.3	47	14	90
Norway	4100	1.2	12	14	10
India	3156	0.9	98	119	80
Nigeria	2723	0.8	40	28	53
Hong Kong, China	2322	0.7	11	36	42
Canada	2317	0.7	20	18	23
Korea, Republic of	2299	0.7	14	26	3
Turkey	2292	0.7	28	11	47
Australia	1802	0.5	16	14	19
Above 15	**293523**	**85.3**	**-**	**-**	**-**

Japan a	Value 2006	Share 2006	Annual percentage change 2004-06	2005	2006
World	**30677**	**100.0**	**18**	**24**	**12**
European Union (25)	12176	39.7	...	...	7
United States	10477	34.2	11	8	15
Singapore	5356	17.5	47	37	58
Taipei, Chinese	2380	7.8	63	143	10
Korea, Republic of	761	2.5	14	54	16
Above 5	**31151**	**101.5**	**-**	**-**	**-**
China	760	2.5	25	29	57
Switzerland	684	2.2	16	29	90
Australia	464	1.5	5	21	25
Canada	463	1.5	12	13	11
Thailand	260	0.8	54	53	56
India	223	0.7	37	36	38
Philippines	174	0.6	23	7	45
Indonesia	163	0.5	33	48	20
Cayman Islands	112	0.4	38	89	1
Mexico	105	0.3	29	35	23
Above 15	**34560**	**112.7**	**-**	**-**	**-**

Singapore b, c	Value 2006	Share 2006	Annual percentage change 2004-06	2005	2006
World	**22544**	**100.0**	**12**	**14**	**9**
United States	4080	18.1	32	22	43
European Union (25)	3089	13.7	18	18	18
Japan	2807	12.5	7	12	2
Hong Kong, China	1411	6.3	7	20	4
Korea, Republic of	989	4.4	10	39	13
Above 5	**12375**	**54.9**	**-**	**-**	**-**

Korea, Republic of d	Value 2006	Share 2006	Annual percentage change 2004-06	2005	2006
World	**10532**	**100.0**	**14**	**16**	**12**
United States	3712	35.2	10	5	15
European Union (25)	1994	18.9	30	60	5
Japan	1672	15.9	1	0	2
China	437	4.2	28	3	60
Above 4	**7815**	**74.2**	**-**	**-**	**-**

Hong Kong, China	Value 2006	Share 2006	Annual percentage change 2004-06	2005	2006
World	**26930**	**100.0**	**11**	**12**	**11**
United States	7555	28.1	...	...	14
European Union (25)	5002	18.6	...	...	...
Japan	1576	5.9	...	...	...
Taipei, Chinese	943	3.5	...	...	...
Switzerland	341	1.3	...	...	23
Above 5	**15417**	**57.2**	**-**	**-**	**-**

Russian Federation e	Value 2006	Share 2006	Annual percentage change 2004-06	2005	2006
World	**7174**	**100.0**	**35**	**35**	**35**
European Union (25)	3426	47.8	34	36	32
United States	982	13.7	26	19	35
Switzerland	367	5.1	60	92	33
Kazakhstan	235	3.3	19	3	38
British Virgin Islands	200	2.8	25	38	13
Above 5	**5210**	**72.6**	**-**	**-**	**-**

a In 2006, exports of other business services are offset by negative values for merchanting.
b The geographical breakdown includes communications services.
c In 2006, ASEAN countries accounted for 14 per cent of other business services exports.
d In 2006, other business services not allocated geographically accounted for 8 per cent of exports.
e In 2006, other business services not allocated geographically accounted for 6 per cent of exports.

Table III.36

Trade in other business services by category in selected economies, 2006

(Million dollars and percentage)

	Value	Share								
				Miscellaneous business, professional and technical services						
	Total other business services	Merchanting and other trade related services	Operational leasing services	Total	Legal, accounting, management and public relations	Advertising, market research and public opinion polling	Research and development	Architectural, engineering and other technical services	Agricultural, mining and other on-site processing services	Other a
Exporters										
European Union (27)	343966	20.5	4.9	74.6	14.6	6.8	10.3	11.4	2.3	29.3
Extra-EU (27) exports	160688	21.6	3.2	75.2	13.7	5.6	12.2	14.1	2.6	27.2
United States b	74926	3.8	14.8	81.4	17.2	0.8	17.4	6.7	0.8	38.6
India c	30923	4.8	0.5	94.7	25.0	2.3	2.8	23.8	0.3	40.6
Japan	30677	63.1	6.4	30.5	...	...	...	...	...	...
China	28973	68.0	...	32.0	27.0	5.0	...	...	...	...
Hong Kong, China	26930	85.2	0.0	14.8	9.0	2.1	...	0.6	...	3.1
Singapore	22544	60.0	...	...	26.4	1.7	0.6	6.2	...	...
Canada	14948	4.9	2.0	93.1	29.4	2.7	18.8	27.2	...	15.1
Korea, Republic of	10532	22.5	3.9	73.6	6.7	3.2	2.7	2.4	0.2	58.3
Norway	9123	9.5	12.8	77.7	4.8	2.9	5.4	23.5	24.0	17.2
Brazil	8568	11.3	0.9	87.8	16.7	1.9	1.5	35.4	0.0	32.3
Russian Federation	7174	...	5.5	94.5	17.5	25.0	5.8	21.9	3.1	21.2
Australia	4013	14.2	0.7	85.1	14.1	4.4	8.6	23.8	5.4	28.7
Malaysia	3559	22.3	10.4	67.3	...	...	...	...	...	...
Argentina	1987	9.3	8.2	82.4	19.6	10.1	5.9	3.9	...	42.9
Importers										
European Union (27)	310734	15.0	6.4	78.5	13.9	9.7	11.1	8.1	1.5	34.2
Extra-EU (27) exports	117396	16.0	4.7	79.0	16.1	9.2	13.4	8.8	0.9	30.6
United States b	46782	0.0	3.3	96.6	20.2	1.6	19.3	0.6	1.1	53.8
Japan	29773	25.0	1.1	73.5	...	...	...	...	...	...
India c	21453	10.0	4.2	86.1	19.3	4.4	0.9	12.8	0.3	48.4
China	20605	55.0	...	45.3	40.7	4.6	...	...	...	...
Korea, Republic of	17705	32.0	6.7	60.8	7.0	13.5	5.2	3.0	0.6	31.6
Canada	12930	5.0	4.8	89.9	33.7	3.3	9.2	19.8	...	23.9
Singapore	11919	29.0	...	...	33.9	2.5	14.4	8.2	...	...
Brazil	8898	11.0	55.8	33.3	4.5	1.6	0.0	19.2	0.0	8.0
Russian Federation	8548	1.0	8.8	90.1	21.3	11.8	1.6	18.9	19.3	17.2
Norway	5972	6.0	1.0	92.8	4.7	2.9	5.1	9.7	33.2	37.1
Hong Kong, China	5519	49.0	11.4	39.7	25.6	5.9	...	0.7	...	7.5
Australia	2827	5.0	22.7	72.3	9.2	5.1	4.5	13.1	4.4	35.9
Kazakhstan	2374	0.0	16.4	83.5	6.6	0.6	0.3	54.3	18.2	3.4
Croatia	1313	22.0	8.4	69.7	22.0	13.4	4.8	23.2	5.0	1.2

Note : Based on information available to the Secretariat. See the Metadata, Section II.2.

a Covers other services not included elsewhere as well as services between related enterprises n.i.e.

b Market research and public opinion polling are included in "miscellaneous business, professional and technical services, other".

c Secretariat estimates. Exports of "miscellaneous business, professional and technical services, other" includes information technology enabled services.

4.8. Personal, cultural and recreational services

Table III.37

World exports of personal, cultural and recreational services by region, 2006

(Billion dollars and percentage)

	Value	Share		Annual percentage change			
	2006	2000	2006	2000-06	2004	2005	2006
Exports							
World	**35**	**100.0**	**100.0**	**7**	**16**	**0**	**3**
North America	14	43.9	39.5	5	9	0	9
South and Central America	1	1.0	2.1	21	14	26	22
Europe	16	45.1	45.2	7	28	1	1
European Union (27)	14	...	40.7	...	...	0	1
Commonwealth of Independent States (CIS)	0	0.2	1.0	44	37	13	52
Asia	3	7.6	9.1	10	2	7	11

Table III.38

Major exporters and importers of personal, cultural and recreational services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	European Union (27)	14155	43.7	1	1	European Union (27)	16583	61.8	1
	Extra EU (27) exports	5823	18.0	3		Extra EU (27) imports	7053	26.3	6
2	United States a	11078	34.2	9	2	Canada	2216	8.3	17
3	Canada	2284	7.1	10	3	Malaysia	1428	5.3	23
4	Turkey	998	3.1	8	4	Japan	1299	4.8	17
5	Malaysia	864	2.7	45	5	Australia	851	3.2	10
6	Australia	502	1.6	15	6	United States a	845	3.2	9
7	Norway	422	1.3	20	7	Korea, Republic of	671	2.5	41
8	Mexico a	383	1.2	3	8	Norway	588	2.2	16
9	Korea, Republic of	369	1.1	38	9	Russian Federation	542	2.0	23
10	Hong Kong, China	280	0.9	4	10	Brazil	533	2.0	18
11	Russian Federation	232	0.7	24	11	Mexico a	326	1.2	18
12	Argentina	230	0.7	18	12	Singapore	304	1.1	9
13	India	218	0.7	49	13	Bolivarian Rep. of Venezuela	254	0.9	40
14	Singapore	196	0.6	9	14	Taipei, Chinese	199	0.7	34
15	New Zealand	153	0.5	10	15	Argentina a	174	0.6	1
	Above 15	**32365**	**100.0**	**-**		**Above 15**	**26815**	**100.0**	**-**

a Audiovisual and related services.

Note : Based on information available to the Secretariat. See the Metadata, Section II.2.

Table III.39

Exports of personal, cultural and recreational services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006
European Union (27)					
World	**14155**	**100.0**	**0**	**0**	**-1**
European Union (25)	8249	58.3	2	3	1
United States	2341	16.5	8	17	3
Switzerland	859	6.1	16	8	24
Japan	440	3.1	17	93	29
Norway	304	2.1	1	4	3
Above 5	**12192**	**86.1**	**-**	**-**	**-**
Australia	214	1.5	7	2	11
Brazil	96	0.7	3	1	4
Russian Federation	92	0.6	30	119	23
Hong Kong, China	79	0.6	23	53	2
Singapore	74	0.5	64	233	19
Canada	72	0.5	2	7	3
Korea, Republic of	63	0.4	7	15	35
South Africa	54	0.4	7	25	9
Turkey	40	0.3	4	27	27
Mexico	36	0.3	30	54	7
Above 15	**13012**	**91.9**	**-**	**-**	**-**
Russian Federation a					
World	**232**	**100.0**	**19**	**14**	**24**
European Union (25)	95	41.0	18	18	17
Switzerland	27	11.4	11	54	164
United States	22	9.5	18	13	24
Kazakhstan	13	5.7	61	84	41
Gibraltar	13	5.7	1	78	43
Above 5	**170**	**73.3**	**-**	**-**	**-**
Japan					
World	**140**	**100.0**	**39**	**34**	**44**
United States	64	46.0	37	66	14
European Union (25)	28	20.3	...	...	121
Hong Kong, China	12	8.6	155	297	64
Korea, Republic of	11	8.0	16	45	144
Switzerland	9	6.8	4	28	29
Above 5	**125**	**89.6**	**-**	**-**	**-**
Australia					
World	**502**	**100.0**	**9**	**4**	**15**
European Union (25)	99	19.7	7	1	16
United States	70	13.9	...	...	19
New Zealand	50	9.9	...	...	25
Singapore	41	8.2	15	5	40
China	29	5.9	26	18	35
Above 5	**289**	**57.6**	**-**	**-**	**-**
Japan	24	4.7	20	21	20
Hong Kong, China	14	2.7	34	21	44
Malaysia	10	2.0	2	13	19
Indonesia	9	1.7	1	...	...
Canada	8	1.6	68	31	116
India	4	0.9	30	55	11
Korea, Republic of	3	0.6	...	...	16
Above 12	361	71.8			
Singapore b					
World	**196**	**100.0**	**3**	**-3**	**9**
Australia	15	7.8	13	29	1
Korea, Republic of	8	4.3	22	1	51
Hong Kong, China	7	3.8	36	5	58
China	5	2.8	25	47	5
European Union (25)	4	1.8	12	33	15
Above 5	**40**	**20.5**	**-**	**-**	**-**

a In 2006, personal, cultural and recreational services not allocated geographically accounted for 3 per cent of exports.
b In 2006, ASEAN countries accounted for 45 per cent of exports.

4.8.1 Audiovisual services

Table III.40

Major exporters and importers of audiovisual and related services, 2006

(Million dollars and percentage)

Rank	Exporters	Value	Share in 15 economies	Annual percentage change	Rank	Importers	Value	Share in 15 economies	Annual percentage change
1	United States	11078	46.3	9	1	European Union (27)	11974	63.7	8
2	European Union (27)	8887	37.1	9		Extra EU (27) imports	5777	30.7	10
	Extra EU (27) exports	3816	15.9	11	2	Canada	2030	10.8	18
3	Canada	2073	8.7	9	3	Japan	981	5.2	9
4	Mexico	383	1.6	3	4	United States	845	4.5	9
5	Hong Kong, China	258	1.1	5	5	Australia	704	3.7	19
6	Norway	230	1.0	20	6	Russian Federation	459	2.4	21
7	Argentina	215	0.9	17	7	Brazil	387	2.1	23
8	Korea, Republic of	170	0.7	33	8	Norway	378	2.0	13
9	Russian Federation	154	0.6	21	9	Mexico	326	1.7	18
10	Australia	151	0.6	20	10	Korea, Republic of	229	1.2	44
11	China	137	0.6	3	11	Argentina	174	0.9	1
12	Japan	104	0.4	27	12	China	121	0.6	21
13	Ecuador	41	0.2	7	13	Ecuador	116	0.6	9
14	Albania	39	0.2	...	14	Colombia	53	0.3	28
15	Colombia	28	0.1	15	15	Hong Kong, China	35	0.2	3
	Above 15	**23945**	**100.0**	**-**		**Above 15**	**18810**	**100.0**	**-**

Note : Based on information available to the Secretariat. As certain major traders in personal, cultural and recreational services do not report the item audiovisual and related services separately, they may not appear in the list. See the Metadata, Section II.2.

Table III.41

Exports of audiovisual and related services of selected economies by destination, 2006

(Million dollars and percentage)

	Value	Share	Annual percentage change				Value	Share	Annual percentage change		
	2006	2006	2004-06	2005	2006		2006	2006	2004-06	2005	2006
United States						European Union (27)					
World	**11078**	**100.0**	**3**	**-2**	**9**	**World**	**8887**	**100.0**	**-8**	**-7**	**-9**
European Union (25)	6509	58.8	1	2	0	European Union (25)	5031	56.6	5	3	7
Canada	1073	9.7	23	2	54	United States	1831	20.6	12	21	3
Japan	727	6.6	8	3	13	Japan	379	4.3	22	122	33
Australia	501	4.5	12	1	27	Switzerland	351	4.0	35	24	44
Brazil	349	3.2	43	43	43	Norway	247	2.8	3	0	6
Above 5	**9159**	**82.7**	**-**	**-**	**-**	**Above 5**	**7840**	**88.2**	**-**	**-**	**-**
Mexico	302	2.7	10	2	22	Australia	196	2.2	7	9	5
South Africa	116	1.0	2	20	30	Brazil	90	1.0	15	27	5
Korea, Republic of	111	1.0	17	20	71	Singapore	65	0.7	171	489	24
Bolivarian Rep. of Venezuela	100	0.9	6	32	30	Korea, Republic of	54	0.6	6	17	35
Norway	98	0.9	43	17	75	South Africa	48	0.5	9	11	33
New Zealand	92	0.8	11	20	53	Canada	46	0.5	9	7	11
Switzerland	69	0.6	27	9	77	Hong Kong, China	44	0.5	50	104	11
Taipei, Chinese	67	0.6	2	23	34	Russian Federation	37	0.4	8	5	23
Hong Kong, China	48	0.4	7	5	9	Turkey	23	0.3	12	45	41
Singapore	44	0.4	4	12	22	Israel	22	0.2	4	21	17
Above 15	**10206**	**92.1**	**-**	**-**	**-**	**Above 15**	**8465**	**95.3**	**-**	**-**	**-**

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